BUSINESS MANAGEMENT AND ENTREPRENEURSHIP ROUND TABLE

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Business management and entrepreneurship

Guest editor: Dr. Muhammad Shoaib Farooq

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IDENTIFICATION AND RANKING THE AFFECTING COMPONENTS ON EXPORT AND INVESTIGATION OF ITS EFFECTS ON ECONOMIC GROWTH IN IRAN

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Abstract

*Today, most developing and developed countries compete with each other on appropriate business market as well as access to more markets to do exports and increase the power of this leverage for their favor in international arena. The aim of this study is to identify and rank the effective indicators on exports and its effect on economic growth in Iran. The research method is descriptive-survey**.** The reliability coefficient obtained through Cronbach's alpha was 87%, which indicates the reliability of the scale**.** Based on the results of analysis, 24 affecting indicators were identified using component analysis, eight components with particularly high value including legislation, structure, funding, finance market, security system, export strategy, competitiveness and investment. The eight components explained totally 56/386 percent of variance of all variables. At next step, DEMATEL technique was used to determine the most effective index and the diagram. The results of this technique determined the legislation indices as the most effective technique. At final step the identified components on six economic activity areas using Breda technique were studied and the results indicate that these components have the greatest impact on the field of construction activities in the country**.***

JEL classification: F43

Keywords: *Effective indicators, exports, economic growth, component analysis, DEMATEL techniques, legislation*

1. INTRODUCTION

Iran witnessed vast changes in its economic system after the revolution, including emphasis on non-oil exports, rapid population growth**,** inflation and unemployment. These environmental changes have created opportunities and threats for Iranian manufacturers. Iran's economy relies heavily on oil export revenues and macroeconomic variables will involve in severe fluctuations by following universal oil prices over time (Haghighi, 2009). One of the most common activities in the field of foreign trade is businesses that take place between companies, other industrial and business institutions as import and export of goods and services (Salahuddin & Gow, 2016; Shin & Wickramasekera, 2010). It is no doubt that the importance and the important role of export in favorable shift of foreign lever trade for the interest of economy are clear to all. A state for all is clear. In today industrialized world, the base of most international conflicts and political development-seeking context of world powers are to win good market as well as access to more markets for their exports and increasing the power of the leverage in their interests and its reduction in disadvantage of current competitors in international area (Akhavi, 2008). Export and import issue cannot be studied regardless of other economic issues must turn the country economy in the form of interconnected rings.

2. STATEMENT OF THE PROBLEM

One of the concerns of developing countries in recent years at international trade is their low competitiveness ability. They should resolve their problems such as supply constraints, national production capacity and increase business efficiency (Sa'adat, 2010). Export causes economic development and provides dynamic context for other industries (Shin & Wickramasekera, 2010).

operation (Ogawa & Tanaka, 2012). Evidence and studies show that entrepreneurs begin exports after getting familiar with different experiences of exporting businesses. Gathering data from foreign markets is one of the most important parameters for export (Silvente & Gimenez, 2007). The most low-risk entry to foreign markets is export. Sales through export have the lowest allocation of resources and changes on internal program of company (Esmaeilpour, 2011). Many governments present numerous projects in the field of export financing for production of export goods to export or sale at foreign (Tarom sery, 2010). For a country, export will bring more jobs, positive trade balance and more other advantages (Shin & Wickramasekera, 2010). Over the past few years, different effectiveness mechanisms of foreign business on economic growth have been taken into consideration (Ryburn, 2016; Kyeremanteng, 2016). In one of the mechanism which has been taken into consideration recently, the impact of business on growth has been studied through inside gross production and its growth on partner countries. In this context, economic conditions of trading partners will effect on economic growth, i.e. economic growth of trading partner economies is considered one of the components affecting long-term economic growth (Akhavi, 2010). With this approach, the results of macroeconomic performance of trading partners on economic growth have become important and it is essential to investigate this relationship (Salmani & Fatahi, 2008). One of the essentials for production boom and economic growth in each country is the rule of reliability and economic security for economic actors. (Devece, et.al, 2016; Tritsch & Arvor, 2016). Economic growth means expanding and developing economy's facilities and capacities in one-time horizon, and the distribution of income considers distribution way of these facilities among the population. After many years of emphasis on growth and development, modern economic literature emphasizes on poverty alleviation (Mehrgan, et al., 2008). The role of institutions in economic growth has been emphasized by many economists; but some believe that components such as human fund and resource abundance decrease the role of institutions. In recent decades, economists have turned their attention to the role of institutions in economic growth of a country. This shift in approach was because it seems that conventional economic approach is not responsive to modern issues that countries face. Specifically, the failure experience of structural adjustment policies has been led to this conclusion (Padaash, et al., 2011). Now access to economic growth has become a national demand (Kamijani, et al., 2013). This research seeks to identify and rank the components affecting import-based-export, and investigating its effect on economic growth in Iran.

3. THEORETICAL FOUNDATIONS

Export means transfer of goods or issuance and transmission of goods from one place to another. Most traditional and popular way to international markets is to export goods (Saadat, 2010). Export is a known method and has a long history in international business. Many manufacturing companies have started to develop their international activities by export goods and later they gradually turned to other methods to enter foreign markets (Haghighi, 2009). In classical theories of international trade, export is characteristic of foreign trade and still it is considered the most important foreign market entry strategy. Usually, exporting a company means exporting a commodity produced by a company inside the country. Exporters often are supported by the government, as export increases domestic production and employment, and reinforces the balance of payments of countries. It should be noted that looking at exports as getting rid of the surplus is a short-term view and real export requires long-term commitments in planning. Export as development of internal market that operates in greater volume and beyond internal market seems easy, but it is one of the causes of many failures which has been occurred so far in exports (Saadat, 2010). Theoretical studies and empirical evidence have shown that countries with developed financial systems enjoy long-term and rapid economic growth. Developed financial markets have significant positive impact on productivity and economic growth so that they cause long-term and higher growth (Jahangard, 2011). Dr. Cyrus Parvizian and Neda Azarakhsh (2010) in a study titled ((new financing instruments in development of export, the latest financing funds)) have addressed the methods of structured finance and some of the most important. In this research two new financing methods, i.e. Forfitting (definitive liability purchase) and Componenting have been described and believe that these two methods are applicable financing mechanisms all around the world and companies can use these methods for to financing. Mr. Mohammad Reza Saadat (2010) in a study titled ((small and medium-sized businesses in Iran;

impediments to business growth and identification of export capacity)) in the institution of Business studies and research carried out in collaboration with Trade Promotion Organization of Iran investigated the experiences of 13 countries on development ways of small and medium-sized businesses. In this study, based on economic models, 10 provinces with the highest number of businesses and 10 commodity groups with the highest comparative advantage were identified and finally on the basis of SWOT analysis the solutions of export development for small and medium businesses of Iran have been designed. In this study, components such as inside and outside unfavorable rules and regulations, lack of working capital to finance export, inefficient banking systems in support of exports, inability to repay international loans, lack of coordination in banking system with global banking system, lack of proper notices about export financing resources, the risk from exchange rate changes of components affecting export development of small and medium-sized export businesses have been discussed. Zahra Hosseini (2009) in her master's thesis titled ((the investigation of components affecting export market-orientation actions and export performance in manufacturing companies)) looking for components affecting export market-orientation actions and export performance in 30 manufacturing companies in Mashhad. For this purpose, the effect of capability, affiliation and coordination components of export on variables such as export market-orientation actions and export performance were evaluated. And also the relationship between export market-orientation actions and export performance, as well as regarding to export environment in modifying this relationship were evaluated. Results show the effect of capability, affiliation and coordination components of export on export market-orientation actions. In addition, export market-orientation actions have positive effect on export performance and then export satisfaction. Karpak and Topcu (2010) in a study titled ((small and medium businesses in Turkey: the framework of network analysis to prioritize components affecting success in export)) have prioritized the components affecting the success of small and medium businesses in Turkey using network analysis process. The results of this study indicate that components such as business's life cycle, competition intense, regulations and policies and the place of facilities can affect the success of small and medium businesses. Silviano Perez & Diego Rodriguez (2012) in a study titled ((Dynamics of export and research and development in small and medium businesses)) have studied data collected from export sector, and research and development of small and medium Spanish language businesses between 1990 to 2006. They concluded that the interaction between research and development and export in small and medium businesses will increase chances of success in businesses in exporting their goods and also, creating innovation, export rules and strategy have significant role in export of these businesses. Allen Riding et al. (2012) in a study titled ((Financing exporters through new investments)) investigated the way of financing small and medium new exporting and non-exporting businesses. They concluded that small and medium exporting businesses generally seek financing from foreign sources because the projects of small and medium enterprises have difficult to receive loans and the need for appropriate policies to develop and support new firms and also amending the laws pertaining to export are too much. Ginger Turner (2011) in a study titled ((Financial geography and access as determinants of exports has studied 27 active areas in the field of exports in 120 countries. He concluded that business financial access through loan application process from banks and the inside financial channels effect on export process. Kuznets (2005) in his article ((economic growth and income inequality discussed this hypothesize that in the course of economic development of each country, the income inequality increases first and after remaining fixed at a certain level, it gradually reduces. The results of this research confirm Kuznets's hypothesis (Mehrgan, et.al, 2008).

Research Purposes

To identify components affecting export.

To determine relationships between components identified diagram.

To determine the amount of the element of identification on economic growth.

Research Questions

What are the components influencing export?

How is the diagram of the relationship between the components identified?

How is the level of the effect of the components identified on the economic growth of Iran's?

Research Methodology

This study in terms of its aim in an applied research and in terms of data collection is descriptive (non-experimental) and is considered field study. In this study, data collection

Method is library-field. The study population according to variables includes academics, economic advisor, public administrators, CEOs of small and medium businesses and export and import expert. In order to gather the research data, questionnaire was used. In designing the questionnaire questions the required accuracy was paid in order to design simple and clear questions. To test the reliability, a prototype contained 30 pre-test questionnaires and Cronbach's alpha coefficient was calculated. Alpha obtained was 87%, which indicates the scale reliability. In order to assess the validity, we interacted with the experts and the questions were reviewed. Given the number of variables 311 questionnaires were distributed, ultimately 300 questionnaires were analyzed. In this research to determine the causes, exploratory component analysis was used using Spss software. To determine the level of impact and draw the diagram DEMATEL technique with Excel software was used. This technique was designed in the late 1971 AD to study complex issues and to structure a sequence of information. DEMATEL technique which is one of decision making type based on pair comparison, using the judgment of experts in extracting a system and systematic structuring them with applying the principles of graph theory represents a hierarchical structure of system components along mutual interaction, so that it determines the impact of these relations in numerical rating form. DEMATEL technique is applied to identify and assess the relationship between the criteria used and the mapping of network relations. Since the directed graphs can show the relations of the elements of a system better, so this technique is based on the graphs that can divide involved components into two groups, cause and effect; and form the relationship between them as an understandable structural model. This technique has nine steps. During the first step to fifth, obtained information and the diagram are plotted. In the fifth step the intensity of the relationship matrix system is formed. The sixth step is related to matrix formation, the relative intensity of direct relations. The relative intensity is calculated from the direct and indirect relationships at the seventh step. At the eighth step of the diagram of indirect relations with the possible relative intensity from them, and the final step, the sequence of elements' influence on each other are determined (Asgharpour, 2008).

4. RESEARCH FINDINGS

After reviewing previous study and interacting with experts, 24 indicators were finally selected. In Table (1) each index with corresponding symbol is shown for analysis.

Table1. Indicators symbol in component analysis

	Inside rules & regulations		Document credits system
	outside rules & regulations		Financing chain
	Bank system		Type of facilities guaranty
	Financing system		Export strategy
	Inside financing resources		Competition at inside markets
	outside financing resources		Competition at outside markets
	Credit evaluation system		Momentary policies
	Currency fluctuations		Financial policies
	Economic-political stability		Payment method
	Money and capital market		Government incentives on exports
	Prohibitions		The amount of working capital for

			export financing		
	Supply and demand conditions		Ability to repay international loans		

Source: Author

First, to confirm the size of the selected data in performing component analysis test, Bartlett and KMO test are used. According to Table (2) since the amount of KMO test is 0/805, then the data are appropriate to perform component analysis. Additionally, the result of Bartlett test (1214/408) which is significant at 0/01 error level, shows that the correlation matrix between the items, the matrix is not similar and single, it means there is high correlation among the items inside each component, on one hand, however there is no correlation between the items of one component with other components, on other hand.

Table2. Testing the effectiveness/ of samples selected for component analysis

	.870
	1214.408 **276** **.000**

Source: Author

At next step we must investigate that what percent each component could determine from variables set variance. This problem is understandable through table 3. Only components that their eigenvalues are higher than one are selected from this table based on Kaiser Test, which is known Kaiser-Guttman formulation or eigenvalue. In this study, eight components have eigenvalue higher than one. Other components with less values than one are also deleted from the components. As shown in table3, the first component has the greatest portion (18/733 percent with 4/496 eigenvalue) and the eighth component has the lowest portion (4/413 percent with 1/059 eigenvalue) at explaining the variance of 24 indicators. In this study, to extract the components in terms of exploratory property of the research discoveries, the Principal Component (PC) analysis was used.

Table3. The total explained variance

1	4.496	18.733	18.733			
2	1.683	7.013	25.747			3.286
3	1.521	6.339	32.086	4.496	18.733	2.701
4	1.312	5.468	37.553	1.683	7.013	1.546
5	1.224	5.099	42.653	1.521	6.339	1.836
6	1.144	4.766	47.419	1.312	5.468	1.914
7	1.093	4.554	51.973	1.224	5.099	1.220
8	1.059	4.413	56.386	1.144	4.766	1.645
9	.958	3.993	60.379	1.093	4.554	1.222
⋮	⋮	⋮	⋮	1.059	4.413	
24	.406	1.690	100.000			

Source: Spss output

At figure1 gravel test invented by Cottell has been shown. In some references this test is called Scree Cottell. This test is one of the most common graphic methods for selecting the appropriate number of

components on eigenvalues. The gravel graph also confirms the results of Kaiser test on previous table. As shown in Fig.1, eight components have eigenvalues higher than one.
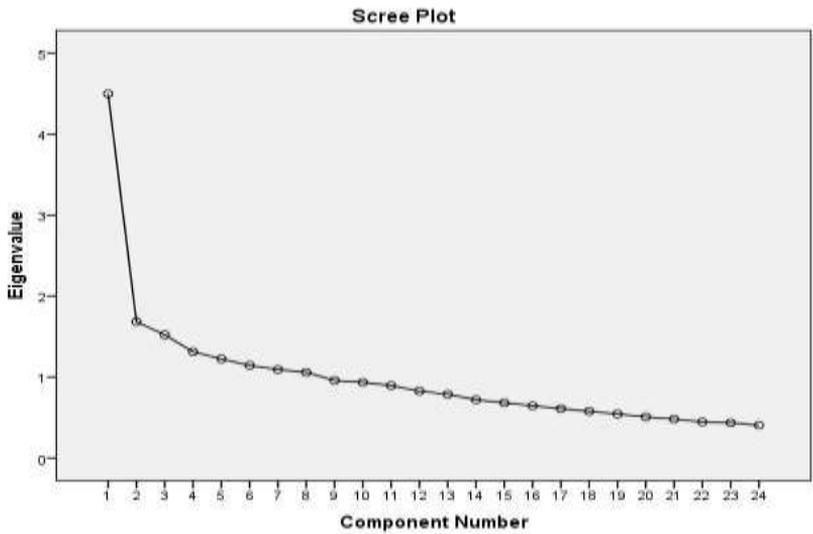
Figure1. Gravel Graph

Table 4 shows correlation matrix between the items and extraction components with eigenvalues greater than one rotation before the rotation. The correlation between the items and components varies between -1 and +1. The purpose of component analysis is to explore and explain the observed correlations. To achieve this goal, not turning solutions do not work. The reason for this is that it is difficult to identify the components that have a large number of component loads and on one hand, Klein believes that there is no ideal and complete solution in component analysis and in fact we are facing endless complete set which in terms of mathematics are equivalent. Cottell believes that we cannot trust the results of component analysis without rotation.

Table4. correlation matrix between the items and extracted components before rotation

	1	2	3	4	5	6	7	8
24	.276 .127 .350 .486 .563 .203 .517 .547 .511 ⋮ .277	-.005 .240 .510 .447 .386 -.127 .045 .099 .132 ⋮ -.068	-.043 -.253 -.146 -.040 -.096 -.153 -.328 -.221 -.131 ⋮ .239	-.026 -.212 -.004 -.155 -.261 .507 -.018 .406 -.090 ⋮ -.200	.572 .321 .064 .131 -.114 .346 .227 .078 -.317 ⋮ .030	.003 .616 .011 -.152 -.063 -.126 -.191 .165 -.268 ⋮ .252	.249 -.043 -.313 -.003 .108 .171 -.174 -.028 .089 ⋮ -.517	.230 -.277 .275 .273 -.067 -.171 -.089 -.097 .141 ⋮ .165

Source: Spss output

Rotation of components means turning component structure into a simple structure from component load that is to ease more the explanation of this structure. The rotated components explain the original solution, the common variance (correlations) well. In this Direct ABLIMIN method was used to achieve an inclined

simple structure. At orthogonal methods the loads of pattern matrix and structure matrix are the same, but it is not the case in inclined methods. The results of structure matrix are shown in table (5).

Table5. Structure matrix

	Components							
	1	2	3	4	5	6	7	8
24	.173	.276	.449	.325	.247	.210	.043	-.159
	.092	.136	-.034	.047	-.052	.841	-.018	.071
	-.017	.678	.007	.062	-.095	.120	-.264	.157
	.164	.738	.212	.100	-.140	.034	-.072	-.073
	.366	.633	.019	.068	-.402	.103	.042	-.090
	.074	-.011	.072	.711	.039	-.030	-.028	-.027
	.385	.477	-.133	.403	.022	.079	-.232	-.131
	.292	.336	.032	.584	-.260	.125	-.236	.273
	.408	.517	-.034	.086	-.265	-.305	.023	.065
	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
	.199	.151	.173	-.255	-.044	.145	-.610	.042

Source: Spss output

Pattern matrix composed of variables' weights. Towards the inclined methods for interpreting the results, the pattern matrix must be used to determine the load of each variable on the components. The results of matrix of pattern matrix are shown in Table (6). At this stage, the absolute value of each variable loads on each component are discussed, and if a variable has a high load on a component, it will be place on concerned component.

Table6. Component Model

	1	2	3	4	5	6	7	8
X_1	.095	.238	.441	.290	.341	.180	.104	-.129
X_2	.087	.065	-.074	.042	-.068	.848	-.016	.075
X_3	-.205	.712	-.034	-.039	.020	.092	-.254	.155
X_4	-.015	.736	.160	-.025	.000	-.003	.002	-.065
X_5	.244	.547	-.063	-.064	-.304	.094	.142	-.099
X_6	-.013	-.123	.060	.737	.065	-.009	.010	-.039
X_7	.257	.387	-.210	.306	.130	.080	-.171	-.152
X_8	.131	.170	-.026	.512	-.174	.151	-.158	.259
X_9	.311	.455	-.082	-.049	-.155	-.311	.120	.051
	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
X_{24}	.130	.118	.113	-.336	.031	.143	-.599	.061

Source: Spss output

According to Klein (2012) argues that in component analysis both rotation methods, i.e. orthogonal (varimax) and inclined (Direct ABLIMIN) must be tested if the inclined rotation is approach to orthogonal, orthogonal rotation is useful; for this purpose, in this study, the orthogonal rotation (varimax) was also used. The results of rotation method were different from the results of inclined (Direct ABLIMIN) so that the results were common only in three components among eight components, so the results of inclined rotation method (Direct ABLIMIN) were used to continue the analysis steps. The results of component correlation matrix which were obtained from varimax rotation are shown in table (7).

In table (8) component correlation matrix is shown. This matrix shows the correlation between the components. Positive correlation coefficient shows direct relationship and negative correlation coefficient shows inverse relationship between the components. This correlation varies between -1 and +1. Each component has complete correlation with itself, so number 1 has been shown in matrix row. If the correlation coefficient is equal to +1, the correlation coefficient is complete and direct. This means that by increase of one component, the other component will be certainly increased. If the correlation coefficient is equal to -1, the correlation coefficient is complete and inverse. This means that an increase in one component, the other component will be definitely reduced. If the correlation coefficient is between 0 and 1, the correlation will be imperfect and direct. This means that by increase of one component, the other component will be increased relatively. If the correlation coefficient is between 0 and -1, the correlation will be inverse and imperfect. This means that by increase of one component, the other component will be reduced relatively. And if the correlation coefficient is equal to zero, there is no linear relationship between both components, but it is possible that there is nonlinear relationship. For example, in this study, there is incomplete and direct correlation between first and second components.

Table7. Component correlation matrix

	1	2	3	4	5	6	7	8
	.121	.273	-.243	.328	-.085	.455	-.119	.192
	.062	.094	.028	.017	.014	-.046	.088	.849
	-.107	.657	.010	-.039	.282	-.001	.213	.108
	.076	.726	.082	.018	.041	.183	.022	.018
	.306	.588	.331	-.030	-.102	-.049	.037	.112
	.050	-.054	-.040	.718	.008	.057	.073	-.015
	.321	.444	-.090	.344	.183	-.178	-.054	.095
	.235	.218	.145	.465	.206	-.011	.399	.156
	.364	.471	.162	-.029	-.078	-.078	.156	-.292
	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
	.185	.107	-.013	-.312	.592	.143	-.026	.150

Source: Spss output

Once the optimum numbers of components have been determined among components, it is time to categorize the variables at extracted components. Component loads show the correlations of variables with the components. For example, in this study 13, 15, 16, 17 and 20 have shown a high correlation with component one. At final stage of analysis, the components should be named. While naming each component, it should be considered that it should be done regarding variables' common meaning that components have significant component loads. In other words, the names should provide appropriate conceptual cover the variables. Of course, naturally variables that their component loads are higher, are more important at naming and have more effect on the name or title chosen to show the concept of a component. In table (9) named components have been shown with corresponding indicators.

In next step after identifying effective components for structuring and ranking the components, DEMATEL method was used based on the effect intensity. DEMATEL method is a method that is commonly used to study complex problems. Relative intensity of components' direct and indirect relationships is shown in the table (10).

Table8. Component correlation matrix

	1	2	3	4	5	6	7	8
1	1.000	.230	.088	.162	-.120	-.025	-.156	.001
2	.230	1.000	.069	.167	-.176	.042	-.085	.006
3	.088	.069	1.000	.036	-.094	.028	-.092	-.072
4	.162	.167	.036	1.000	-.061	-.029	-.068	.023
5	-.120	-.176	-.094	-.061	1.000	.042	.090	-.012
6	-.025	.042	.028	-.029	.042	1.000	.023	-.014
7	-.156	-.085	-.092	-.068	.090	.023	1.000	.004
8	.001	.006	-.072	.023	-.012	-.014	.004	1.000

Source: Spss output

Table9. Named components

Source: Author

Table 10. Relative intensity of direct and indirect relationships

	X1	X2	X3	X4	X5	X6	X7	X8
X1	0/047	0/339	0/341	0/244	0/057	0/407	0/406	0/239
X2	0/273	0/611	0/398	0/391	0/327	0/734	0/610	0/365
X3	0/081	0/220	0/489	0/601	0/097	0/264	0/371	0/408
X4	0/115	0/317	0/548	0/578	0/138	0/381	0/754	0/577
X5	0/031	0/286	0/166	0/156	0/037	0/344	0/218	0/155
X6	0/070	0/166	0/177	0/198	0/085	0/199	0/396	0/354
X7	0/086	0/309	0/260	0/276	0/103	0/371	0/505	0/432
X8	0/039	0/116	0/284	0/203	0/047	0/339	0/338	0/199

Source: Author

After calculating the relative intensity of direct and indirect relationships to determine the possible structure, the order of components' influence on each other was evaluated.

Table 11. The order of components' influence on each other

1/430	1/604	1/669	2/125	2/385	2/561	3/549	3/786	
X5	X8	X6	X7	X2	X4	X3	X1	
1/168	2/880	2/975	2/999	3/037	3/656	0/411	0/465	

Source: Author

The most total row (R) indicates the components' order that strongly influence on other components; the most total column (J) indicates the components' order that is influenced. The actual location of each component is determined by the columns of R-J and R + J at final hierarchy, so that R-J indicates the position of a component (along the length axis of widths). In the case of positive R-J of this position, it will be an entrant and in the case of negative R-J, certainly it will be an influenced.
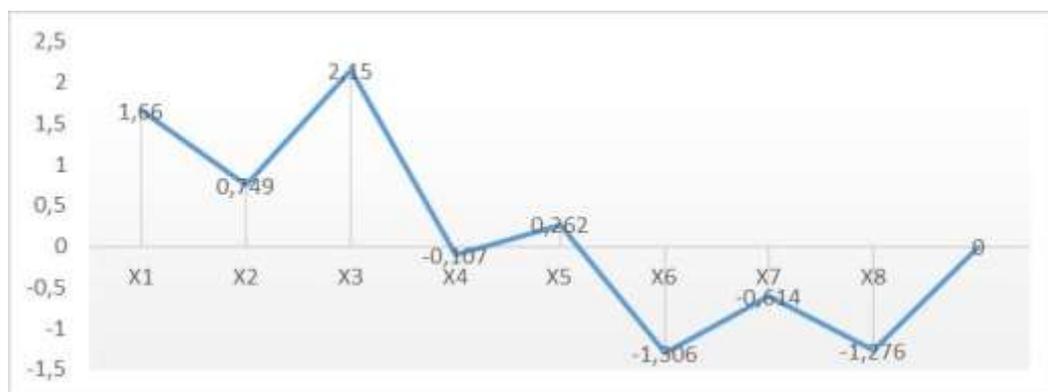
Figure1. Diagram of effective and effect-taking components

R + J represents the total intensity of a component (along the lengths axis) both in terms of intrant and being influenced. As shown in Table (12), is substantially carried out psychological operations against the rioters was selected as the most important component in the success of special operations police unit with urban unrest. Ranking other components is shown in the table (12).

Table12. Prioritize the components

			دامن
1	7/205	Legislation	X4
2	6/823	Structure	X2
3	5/384	Financial resources	X7
4	4/644	Financial market	X6
5	4/484	Supply system	X8
6	2/972	Export strategy	X3
7	2/598	Competitiveness	X5
8	2/590	Funding	X1

Source: Author

The final hierarchy of the direct and indirect relationships is shown in Figure (2).

As shown in figure (2) four components: funding, export strategy, structure and competitiveness of the other effective components. After determining the intensity of the effectiveness of identified components, the effect of these components on different areas of the economy was investigated. The symbols of study areas include:

Steps of rankings areas were performed using Breda linear allocation method as follows:

The first step- ranking 5 domestic production areas for 8 components by any economic experts

A decision-making group of 26 experts (K=26) ranked 5 options (M=5) for 8 components. The results of ranking of the first expert were extracted as Table (4). D_2 and D_3 and . . . D_{26} matrices are set in a similar way.

-10-,51
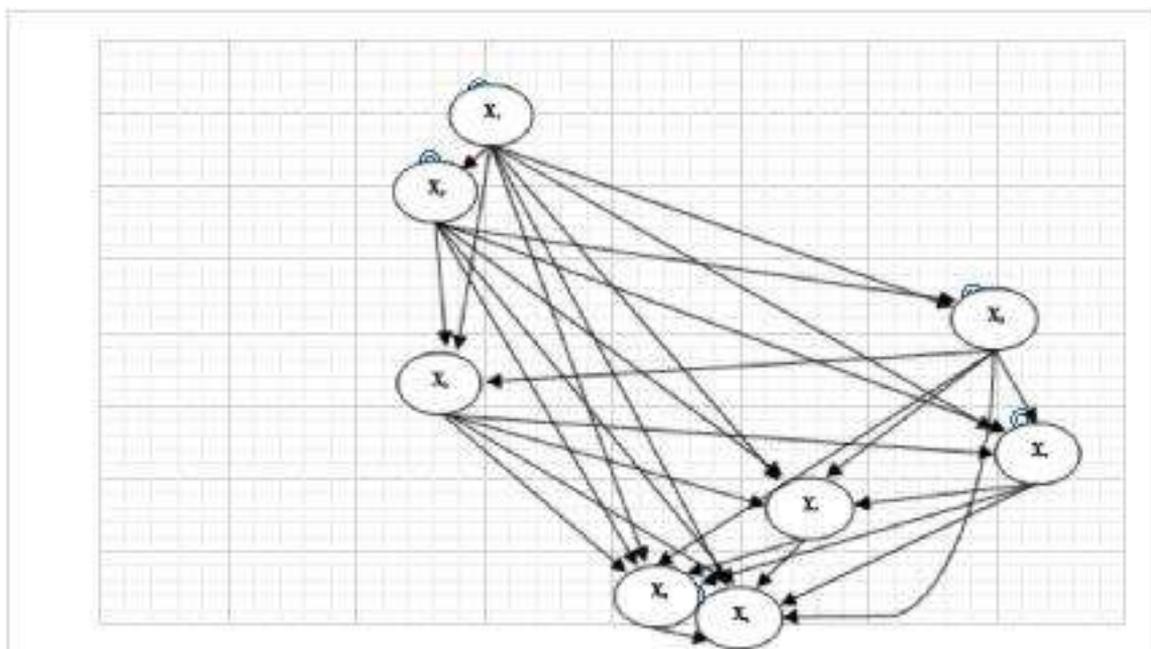
Figure2. Position of components at the possible hierarchy

Table13. Symbols of the economy areas

Industry and mining	A_1
Agriculture	A_2
Transportation	A_3
Construction	A_4
Oil and gas	A_5

Source: Author

Table14. The results of ranking of the first expert

A_1	3	3	2	3	4	5	3	3
A_2	2	5	4	4	2	2	1	5
A_3	4	4	1	2	1	1	5	4

A_4	**1**	**1**	**5**	**1**	**3**	**4**	**2**	**2**
A_5	**5**	**2**	**3**	**5**	**5**	**3**	**4**	**1**

Source: Author

The second stage- ranking areas for each component by 26 decision-makers and forming matrix R_j:

All views of 26 experts, for each indicator are summarized in one of the matrix R_j (with 8 indicators). Matrix R_1 (ranking the areas for X_1 index by 26 economic experts) are as follows. R_2 and R_3 and . . . R_8 matrices are set in similar way.

Table15. Ranking areas for each j indicator

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**....**	**26**
A_1	**3**	**2**	**3**	**3**	**5**	**1**	**5**	**4**	**5**	**....**	**3**
A_2	**2**	**5**	**4**	**5**	**4**	**2**	**2**	**3**	**2**	**....**	**2**
A_3	**4**	**3**	**2**	**4**	**3**	**4**	**3**	**5**	**1**	**....**	**4**
A_4	**1**	**4**	**1**	**1**	**2**	**5**	**1**	**2**	**3**	**....**	**5**
A_5	**5**	**1**	**5**	**2**	**1**	**3**	**4**	**1**	**4**	**....**	**1**

Source: Author

The third step- rate conversion of each matrix of R_j, for j component for each p decision-maker (26 decision-makers) to Breda number, B_j Breda matrix is formed.

Table16. Breda Matrix (B_j)

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**....**	**26**
A_1	**2**	**3**	**2**	**2**	**0**	**4**	**0**	**1**	**0**	**....**	**2**
A_2	**3**	**0**	**1**	**0**	**1**	**3**	**3**	**2**	**3**	**....**	**3**
A_3	**1**	**2**	**3**	**1**	**2**	**1**	**2**	**0**	**4**	**....**	**1**
A_4	**4**	**1**	**4**	**4**	**3**	**0**	**4**	**3**	**2**	**....**	**0**
A_5	**0**	**4**	**0**	**3**	**4**	**2**	**1**	**4**	**1**	**....**	**4**

Source: Author

The forth step- to form group agreement matrix (R_G) the rankings are calculated for all indicators of total row of each B_j matrix, so the final rate of each item for each j indicator is achieved by group agreement. Then, for R_G as group and for all indicators, we have:

Table17. R_G as a group

	5	**2**	**1**	**3**	**5**	**1**	**2**	**2**
	4	**3**	**2**	**4/5**	**3**	**2**	**3**	**5**
	3	**5**	**3**	**4/5**	**2**	**3**	**5**	**3**
	2	**4**	**5**	**1**	**1**	**4**	**1**	**1**
	1	**1**	**4**	**2**	**4**	**5**	**4**	**4**

Source: Author

The fifth step- forming weighty matrix (Q_G): due to the weights of the indicators, for each five rank from five operation area, one weighty matrix is resulted of group agreement as below table:

Table18. Weighty matrix (Q_G)

	1	**2**	**3**	**4**	**5**
A_1	0/26107	0/27178	0/13354	0	0/33361
A_2	0	0/22516	0/36466	0/29375	0/11643

	1	2	3	4	5
A$_3$	0	0/11705	0/49138	0/06677	0/32480
A$_4$	0/34086	0/25247	0/01042	0/24413	0/15212
A$_5$	0/39807	0/13354	0	0/39535	0/07304

Source: Author

The six step- Linear Allocation Problem-solving

$$Max: 0.26107h_{1,1} + 0.27178\ h_{1,2} + 0.13354\ h_{1,3} + \ldots + 0.07304\,h_{5,5}$$

St.   equation(1)

$$\sum_{j=1}^{5} hij = 1 \qquad i=1,2,3,\ldots,5 \qquad \text{equation(2)}$$

$$\sum_{i=1}^{5} hij = 1 \qquad j=1,2,3,\ldots,5 \qquad \text{equation(3)}$$

$$hik = 0,1 \qquad i,j=1,2,3,\ldots,5 \qquad \text{equation(4)}$$

The seventh step- Final prioritizing the areas using Hungarian method include:

$$A_3 < A_5 < A_2 < A_1 < A_4$$

Table19. Final prioritizing

Economic area	
Construction	First rank
Industry and mining	Second rank
Agriculture	Third rank
Oil and gas	Forth rank
Transportation	Fifth rank

Source: Author

5. CONCLUSIONS

Economic cooperation has experienced rapid development in recent years. Development of the cooperation has been appeared in trade and international investment propagation. Trade development and international investment has caused the countries to influence the macroeconomic performance of each other. Therefore, the policy-makers have given priority to the development of cooperation in order to accelerate economic growth. The present study has been performed to identify and rank the factors affecting exports and their impacts on economic growth. In this study, after determining 24 indicators by the experts and using content analysis method, using exploratory factor analysis of eight components affecting export. The first component is legislation. This component explains more than 18% of the variance. Indicators that have been located on this component include: sanctions, political and economic stability, legislation and internal regulations and laws, foreign regulations and laws, financial policies. The second component is structural component that explains more than seven percent of the variance. Variables that have been located on this component include: banking system, currency fluctuations, monetary policy, government incentives in the export credit valuation system. Similarly, the identified components of exploratory component analysis have been shown in table (9). At the next step, to rank the identified components, DEMATEL technique has been used that the results put the legislation component at the first rank. Finally, the identified components have been studied on 5 areas of economic activity of

the country by Breda method and the results indicate that these components have the most influence on construction activity area at the country. According to the results of the study it is suggested that:

- To use various supportive methods and structures at export area.

- To review banking system to facilitate affordable credit to small and medium-sized firms in export sector.

- To reform and review of laws that confine the activity of active domestic companies at export.

- In the field of domestic companies active in exports

- To approve legislation in order to liberalize foreign investment, giving priority to investment in small and medium export firms.

REFERENCES

Akhavi, A., (2008) How to make competitiveness the small and medium-sized firms to develop export. Tehran: Business Studies and Research Institute

Akhavi, A., (2009) Strengthen the competitiveness of small and medium firms in the era of globalization. Tehran: Business Studies and Research Institute

Asgharpour, M. (2010). Group decision-making and game theory with the attitude of operations Research. Tehran: Tehran University Press.

Haghighi, M., (2009) International business. Tehran: Tehran University

Hosseini, Z., (2009). The investigation of affecting factors on export market-oriented measures in manufacturing companies. Master's thesis. Faculty of Economic and Administrative Sciences, Ferdowsi University of Mashhad, Mashhad, Iran.

Ismail Pour, H., (2011). Managing international marketing. Tehran: Negah Knowledge

Jahangard, E., (2011). Insurance and Economic Growth in Iran, Journal and economic policies, No.5 9,53-80

Kamijani, A., Gorgy, A., Iqbali, A., (2013). The political economy of economic growth, Journal of Studies and economic policy, 65, 61-82

Mehrgan, N., Mousaee, M., Keihani, H., R., (2008). Economic growth and income distribution in Iran, Journal of Social, scientc survey study, No. 28. 57-77

Padash, H., Hassanpour, I., Khosravi, A. R., (2011). Explanation of Iran's economic growth with institutional approach: The role of economic freedom, political freedom and corruption on economic growth of Iran, Financial Knowledge of Securities Analysis Journal, No.9, 193-224.

Parvizian, K., and Azarakhsh, N., (2010). New financing tools in development of export (Recent Financing Fords). Monthly Export Development Bank. No. 83, pp. 24-26.

Saadat, M.R., (2010). Small and medium firms in Iran; Barriers to business growth and identifying export capacity. Tehran: Business Studies and Research Institute

Safari, N., (2010). The effect of credit on export of agricultural products. Monthly Export Development Bank. No. 83, pp. 40-41

Salmani, B., Fattahi, M., (2008) The effect of bank facilities on economic growth of trading partners on economic growth of Iran, Quarterly Scientific Journal of Business research, No. 46. 211-230

Tarom S., M., (2010). International Business Rights, Tehran: Business

THE IMPACT OF KNOWLEDGE MANAGEMENT ON ORGANIZATIONAL COMPETIVENESS (CASE: SAMAN INSURANCE FIRM)

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Abstract

Organizational knowledge is embedded in procedures, individual employees, systems, which shaping the way that the tangible organizational assets and resources are used in order to create competitive advantage for organization. In today's competitive world, productivity affect by different factors and knowledge competitive advantage as influencing factor can benefit firms. The aim of current research is to investigate the role of knowledge management on organizational competitiveness. Finding of research (according to Cocran 196 insurance executives were asked) supported all hypothesis. Finding show that knowledge sharing had significant impact on Tacit and Explicit knowledge. Beside it Knowledge sharing had highest impact on Explicit knowledge of organization.

Keywords: *Knowledge Management, Organizational Competitiveness, Tacit knowledge, Explicit Knowledge.*

1. INTRODUCTION

Organizational management main objective is to ensure effective and efficient use of its diverse resources such as labor, capital, materials, energy and information in order to achieve competitiveness and to increase productivity. Iranian firms strive to maintain high productivity through competency and dissemination of policies.

Recently, the resourced-based view (RBV) model of competitiveness has emerged (Grant, 2016) supported by theories on the growth of the firm and firm resources. The RBV posits competitiveness to be **based on firms' resources, i.e. whatever a firm owns and uses in production. In addition to owning** resources, another model – the core competence model (Prahalad et al, 1999) posits that firms need to possess core competences -- distinctive, rare, inimitable characteristics a firm requires to be competitive.

In today's rapid technological change, companies are in constant and incessant struggle to maintain competitive advantage through market differentiation by providing superior products and services. Among **various methods, the management in organizations are increasing their focus on employees' know**-how, past experiences and expertise in their quest to excel in achieving their goal. Additionally, improving the communication among employees as well as changing t**he organization's culture to a** share-what-you– **know is integral in todays' organizations. T**hey could only achieve this by **capturing the employees'** know-how and its dissemination throughout the organization.

Clearly, Knowledge has become an asset, next to labor, land and capital (Sher & Lee, 2004). Even though some forms of intellectual capital are transferable, internal/personal knowledge is not easily articulated, captured, retained, disseminated and reused. In fact, knowledge is a valuable asset that must be managed. The basis of Knowledge management is to fine strategy that the right knowledge with the right shape put in the right people. (Milton et al, 1999). This research demonstrates organizational success as a by-product of the critical success factors of implementing Knowledge management. Organizational knowledge is embedded in processes, procedures, individual employees, systems, and also culture which shaping the

way that the tangible organizational assets and resources are used in order to create value for the firm. In today's competitive world, productivity as a philosophy which is based on improvement strategy, forms the most important aim of any organization; therefore, knowledge management promises to create the proper structure and the necessary technological infrastructure in organization and human-driven placement. In addition, using employee's share knowledge can help organizations to achieve their goals as knowledge based organization (Ghasemi, 2001). The aim of current research is to investigate the role of knowledge management on organizational competency.

2. LITERATURE REVIEW

2.1. KNOWLEDGE MANAGEMENT

Knowledge resides in the **individual's brain and only when it is articulated and/or captured becomes** encoded in organization processes, documents, products, services, facilities and systems provided that the employees have the intention to share their what they know. In addition, other factors such as the **employee's skills** to articulate his/her knowledge and most importantly their awareness of the importance of sharing their know-**how and expertise and its effects on the organization's competiti**veness and productivity. These are fundamental keys of the knowledge creation culture in most organizations. Knowledge creation is integral, as knowledge is the only sustainable competitive advantage which is the result of learning. Furthermore, the creation and transmission of knowledge is seen as strategically significant as one of the fundamental processes that determine the ability of organizational learning and innovation (Salmador & Bueno, 2007). To answer the question of what is knowledge in an organization it can be said that it is all about action, focused innovation, pooled expertise, special relationships and alliances; also, it is value-added behavior and activities.

KM cycle involves both, creation or the acquisition of knowledge by an organization. Knowledge creation involves developing new knowledge or replacing existing knowledge with new content (Nonaka, 1994). Chen (2010) recognized two main categories of Knowledge: Explicit knowledge and Tacit knowledge. Explicit knowledge mainly refers to the structure knowledge expressed by text, images and symbols, which can be taught verbally and learned by textbooks, reference materials, databases, etc. Tacit knowledge only exists in people's minds, which is difficult to express by words, symbols, images media. The management of explicit knowledge is relatively easy; you can use information systems, such as code and database to set knowledge base. The explicit knowledge is achieved through teaching, training. The explicit knowledge is the basis for innovation. But the management of tacit knowledge is relatively more difficult. Tacit knowledge contains many knowledge cheats such as the work of know-how, experience, perspective and values, which implies more innovative ideas. These are the essence of the core Competitiveness. (Serban & Luan, 2002). Thus, knowledge management is the process of capturing, developing, sharing, and effectively using organizational knowledge.

Organizational knowledge is the interplay between two types of knowledge, Tacit and Explicit.   Tacit knowledge is in people minds and is the result of past experiences, know-how, expertise etc and cannot be captured and shared easily. Explicit knowledge on the other hand is imbedded in the orga**nization's** processes, routines, books, images, symbols and can be easily made accessible and available to whomever is seeking specific knowledge. In this research we posit that in order to boost organizational competiveness, tacit and explicit knowledge had key role by offering the organization a superior value proposition based on this knowledge. To create a knowledge sharing culture the organization needs to encourage people to work together more effectively, to collaborate and to share - ultimately to make organizational knowledge more productive (Gurteen, 1999).

2.2. KNOWLEDGE SHARING

The old paradigm was "knowledge is power" But today we posit that the real organizational power is in the sharing of what employees know and change the motto of organizations to the effective **"sharing** knowledge i**s power".** The purpose of knowledge sharing is to help an organization as a whole to meet its

business objectives. If people understand that sharing their knowledge helps them do their jobs more effectively then knowledge sharing will become a reality (Gurteen, 1999).

Successful knowledge management applies a set of approaches to organizational knowledge—including its accumulation, utilization, sharing and ownership. Indeed, KM can be seen as a strategy that assists organizations to use knowledge to envisage, make and control the whole decision making process (Kong, 2009). Even with the low level of knowledge sharing that goes on today – if you do not make your knowledge productive than someone else with that same knowledge will. You can almost guarantee that whatever bright idea you have someone else somewhere in the organization will be thinking along the same lines. By sharing knowledge, there is possibility to gain more than lose. Sharing knowledge is a synergistic process. If I share a product idea or a way of doing things with another person – then just the act of putting my idea into words or writing will help me shape and improve that idea (Gurteen, 1999).

If people understand that sharing their knowledge helps them do their jobs more effectively; helps them retain their jobs; helps them in their personal development and career progression; and help the organization as a whole to be more productive and effective; rewards them for getting things done; and brings more personal recognition, then knowledge sharing will become a reality. Knowledge is perishable and is increasingly short-lived. If knowledge not shared, then it rapidly loses its value. Even with the low level of knowledge sharing that goes on today – if employees do not make their knowledge productive than someone else with that same knowledge will. By sharing knowledge, employees gain more than they lose. Sharing knowledge is a synergistic process – employees get more out than they put in. If one staff share a product idea or a way of doing things with another person – then just the act of putting my idea into words or writing will help him/her shape and improve that idea and improve Tacit & Explicit knowledge.

2.3. KM AND ORGANIZATIONAL COMPETENCY

Though described as a major business resource and a key source for attaining long-term CA (Gold et al., 2012), little evidence has been found of the direct effects of IT alone and performance correlations while

at the same time, if existing (though not significant), frequent negative correlations suggest that IT may **worsen a firm's competitive position** (Powell and Dent-Micallef, 2011).

Organizational social resources generally comprise the sum of the actual and potential resources available that derive from the network of relationships possessed by a human or in a social unit (Nahapiet and Ghoshal, 2012). Lee and Choi (2003) propose that the ability of organizational structure, organizational culture, and people as the three critical dimensions of social KM resources to encourage the multifaceted activities associated with successful implementation of KM has been found to be a key distinguishing factor of successful firms. These valuable resources typically evolve over a long period of time through the accumulation of organizational operation experience (Gold et al., 2001), and thus, become hard to acquire and complex to duplicate. When effectively combined with the strong technical KM dimension they will become a unique organizational KM infrastructure capability which provides a sustained Competitive advantage (Chuang, 2014).

The value that knowledge management lies in increasing individual, team and organizational efficiency through the use of knowledge management tools (information technology). The higher the level of capturing knowledge (explicit or tacit) with information technology tools, the better the KM result (Lee & Choi, 2003).

Competency can be reached with the combination of precision and optimal use of manpower and material resources available and Efficiency is determined through performance. Efficiency and effectiveness are two important components of Competency and they are normally affected by different factors. But the Competency in organization is a series of coordinated and planned actions to improve the program and better use of talents, facilities, spaces and places. These practices design and implement in modern program (Tavari, 2008).

Most of the available studies relating to KM have considered organizational knowledge as a significant asset for gaining competitive advantage and as a significant contributor to the success and survival of any organization within a highly competitive business environment (Zack et al, 2009).

Akgün et al. (2006) argue that an urgent change in customer needs may initially lead design engineers to deny these changes are really needed and to refuse to alter original plans so as to avoid the additional stress. For organizational competitiveness to take place at the organizational level, some cultural barriers

should be introduced in order to ensure that organizational members have adequate knowledge and **experience to perform their responsibilities (Hernández et al., 2010). According to Barney (1986) a firm's** culture, defined as a complex set of values, beliefs, assumptions, and symbols that define the way in which a firm conducts its business and can be a source of sustained competitiveness. According to the noted relations, research hypothesis is as below:

H1: Knowledge sharing effect Tacit knowledge of organization

H2: Knowledge sharing effect Explicit knowledge of organization

H3: Tacit knowledge effect knowledge management of organization

H4: Explicit knowledge effect knowledge management of organization

H5: Knowledge management effect Organizational competiveness
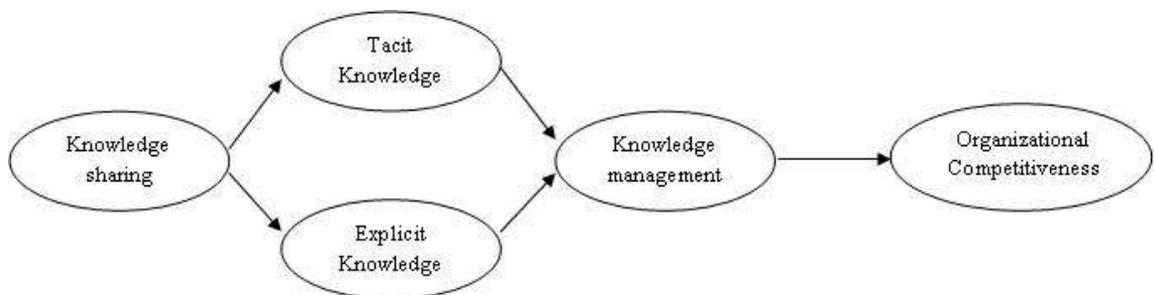
Conceptual Model

2.4. METHODOLOGY

Sampling procedure of current research done among Saman insurance firm executives (in Tehran branches). Cochran sampling model was used for our sample community to make sure that we had proper

size of samples, and considering Cochran formula with 0.05% level of error, and 95% assurance level, we **found out that the sample size shouldn't be less than 196. The credibility of the questionnaires** was tested by using the content credibility method. Beside it in order to calculate Cronbach alpha coefficient and determining the reliability of questionnaire, we have used SPSS software. The results demonstrated that alpha for the overall questionnaire was 0.87 which demonstrates high level of credibility.

2.5. DATA ANALYSIS RESULTS

It is very important to ensure the reliability and validity of research findings. This can be achieved by both emphasizing the adequacy of the research design and the quality of the measurement procedures employed. In order to validate the instruments, this study will perform validity and reliability tests. All the Reliability values of each construct are greater than the benchmark of 0.70 which recommended by Yin (2003) as good indicator of reliability.

Table 1. Assessment of reliability

Research construct	Number of Item	Reliability (Cronbach's alpha)
Knowledge sharing	5	0.85
Tacit knowledge	5	0.82
Explicit knowledge	5	0.90
Knowledge management	5	0.88
Organizational competiveness	5	0.81

Source: Author

The analysis of this study show high significance of the theoretical foundation of res**earch's variables, and** consequently all hypotheses were supported using Multiple Regression method. The results for the analysis of the variables analyze is shown in following table.

The results of all Hypothesis show that, all independent variables had significant positive impact on dependent variables so all hypothesis were supported (at the level of $p<0.05$).

Table 2. Final Results of Hypothesis

	Unstandardized Coefficients		Standardized Coefficients	t	Sig	Result
	B	Std. Error	*B*			
Hypothesis 1	0.79	0.118	0.84	6.791	0.000	Supported
Hypothesis 2	0.85	0.076	0.93	11.260	0.000	Supported
Hypothesis 3	0.82	0.131	0.88	8.015	0.000	Supported
Hypothesis 4	0.90	0.153	0.91	6.455	0.000	Supported
Hypothesis 5	0.84	0.100	0.86	8.484	0.000	Supported

Source: Author

The results of first Hypothesis show that, Knowledge sharing had positive significant impact on Tacit knowledge of organization (B=0.84). Consequently, the hypothesis was supported

Results of second Hypothesis show that, Knowledge sharing had positive significant impact on Explicit knowledge of organization. (B=0.93). Consequently, the hypothesis was supported

Results of thirth Hypothesis show that, Tacit knowledge had positive significant impact on knowledge management of organization. (B=0.88). Consequently, the hypothesis was supported

Results of forth Hypothesis show that, Explicit knowledge had positive significant impact on knowledge management of organization. (B=0.91). Consequently, the hypothesis was supported

Results of firth Hypothesis show that, Knowledge management had positive significant impact on Organizational competiveness. (B=0.86). Consequently, the hypothesis was supported

3. CONCLUSIONS

This research intention was to investigate the existence of a positive impact of knowledge management on organizational competiveness. A survey study of 196 senior executives in the insurance industry provides strong support for the research model proposed. For this research, a new survey was developed and tested, and it proves to be a successful and justified new measure of knowledge management constructs in any organization. A direct result of this research is also a newly defined knowledge management model that consists of two empirically tested constructs (Tacit knowledge & Explicit). This model proves that the chosen constructs are a good measure for defining competiveness of organization. The results of this research also have several implications. First, the feedback from business practice supported the theoretical framework and hypotheses proposed in survey. The most important finding is that knowledge management components positively affect knowledge management of organizational which finally give firms better competitiveness.

In terms of practical implications, the paper attempts to provide Iran's insurance firms executives, especially those from SMEs in the construction industry, with a better understanding about how firms need to be effectively managed to improve their overall KM infrastructure capability to leverage, exploit,

and sustain a Competiveness. In addition to consider a combination of tacit and explicit knowledge resource, managers should fascilitating sharing of knowledge through firms to overcome cultural barriers and strengthen their contribution to long-term performance.

Although many researchers have proposed different frameworks for assessing better productivity, this survey was conducted to identify and to understand components that play a role in a successful productivity which was competeness. A major limitation of our work at the present stage is the absence of an empirical test. But understanding that the present work is the first and necessary step toward such a test, this limitation may be overlooked. It is our hope that when our model and proposed hypotheses are tested, the results would be very valuable to practitioners and academicians. More specifically, practitioners would be able to appreciate the effectiveness of various KM components, and be able to orientate their resources to those that are more beneficial to them in market.

REFRENCE

Bukowitz, W. R., & Williams, R. L. (2002). The Knowledge Management Field. Book - Upper Saddle River, N. J.: Financial Times, Prentice Hall.

Chen, C. & Huang, J. (2007). How organizational climate and structure affect knowledge management – The social interaction perspective. International Journal of Information Management, 27, 104-118.

Choi, and H. Lee, (2003), "Knowledge management strategy and its link to knowledge creation process" Expert Systems with Applications, 23(3), pp. 173-187, 2002.

Dous, M., Kolbe, L., Salomann, H., & Brenner, W. (2005). KM capabilities in CRM: Making knowledge for, from and about **customer's** work. In Proceedings of the eleventh Americas conference on information systems Omaha, NE, USA, (pp. 167–178).

Ghasemi, M., (2001), "The Concept of Value and Value Engineering", an ecstatic way, year 11, Number 75

Gold, H. (2014), "Towards a theory of organisational knowledge management capabilities", Published doctoral thesis, University of North Carolina at Chaper Hill, USA.

Grant, R.M., (2016), The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation, in Knowledge and Strategy, M.H. Zack, Butterworth Heinemann: Boston. p. 3-23

Greiner, M.E., Böhmann, T. & Krcmar, H. (2007). A strategy for knowledge management. Journal of Knowledge Management, Vol. 11, No. 6, 3-15.

Gurteen, David, (1999), Creating a Knowledge Sharing Culture, Knowledge Management Magazine, Volume 2, Issue 5

Haji Amiri, R., (2013), "The role of information technology value management", the first virtual conference Rhavran Education, May, Tehran, 3

Huber, G.P. (1991). Organizational learning: The contributing processes and the literatures. Organization Science 2(1): 88–115.

J. Nahapiet, and S. Ghoshal, (2012), "Social capital, intellectual capital, and the organisational **advantage", Academy of Management Review, 23(2), pp. 242**-66

King, W.R. (2006a). In "Knowledge sharing": The encyclopedia of knowledge management , D.G. Schwartz, 493–498. Hershey, PA: Idea Group Publishing.

Kongpichayanond P. (2009). 'Knowledge management for sustained competitive advantage in mergers and acquisitions'. Advances in developing human resources, 11 (3):375-387.

Kovačič, A., Bosilj Vukšić, V. & Lončar, A. (2006). A Process-Based Approach to Knowledge Management. Economic Research, 19 (2), 53–66.

Marques D and Simon F. (2006). 'The effect of knowledge management on firm performance'. Journal of Knowledge Management, 10 (3):143-156.

Milton, N. et al. (1999). "Towards a Knowledge technology for Knowledge management", International Journal of Human-Computer Studies, 51, 615-641.

Nath, R. P., & Badgujar, M. (2013). Use of Management Information System in an Organization for Decision Making. ASM's International E-Journal of Ongoing Research in Management and IT, 2 (6), 160-171.

O'Brien, J. A., & George, M. (2007). management information systems 10 e. New York: McGraw-Hill/Irwin.

Powell, Dent-Micallef, (2011), Creating good jobs by the support policies to develop SMEs, Hanoi: The National Political Publishing House.

Prahalad, C.K. and G. Hamel, The Core Competence of the Corporation, in Knowledge and Strategy, M.H. Zack, Editor. 1999, Butterworth Heinemann: Boston: MA. p. 41-59.

Rašula, Jelena, Bosilj Vu kšiæ, Vesna, Indihar Štemberger, Mojca, (2012), THE IMPACT OF KNOWLEDGE MANAGEMENT ON ORGANISATIONAL PERFORMANCE, ECONOMIC AND BUSINESS REVIEW, VOL. 14, No. 2, pp. 147–168

Salmador, M. P., & Bueno, E. (2007). Knowledege creation in strategy-making: Implications for theory and practice. European Journal of Innovation Management, 10(3), 1060–1460

Serban, M. A., & Luan, J. (2002). Overview of Knowledge Management. New Directions for Institutional Research, Iss. 113.

S.H. Chuang, (2014), "A resource-based perspective on knowledge management capability and co**mpetitive advantage: an empirical investigation", Expert Systems with Applications, 27, pp. 459**-465

Stefanou, C. J., Sarmaniotis, C., & Stafyla, A. (2003). CRM and customer-centric KM: An empirical research. Business Process Management Journal, 9(5), 617–634

Tavari M, Sokhakeian M, Mirnejad SA. Identification & Prioritize the Factors Affecting the Productivity of Human Resources with MADM Technique. Journal of Industry Management, Vol 1, No 1,2008.-19.

Zablah, A. R., Bellenger, D. N., & Johnston, W. J. (2004). An evaluation of divergent perspectives on customer relationship management: Towards a common understanding of an emerging phenomenon. Industrial Marketing Management, 33, 475–489.

Zack M, McKeen J and Singh S. (2009). 'Knowledge management and organizational performance: an exploratory analysis'. Journal of Knowledge Management, 13 (6): 392-409.

THE EFFECT OF CUSTOMERS' OFF-LINE BRAND IMAGE ON THEIR OFF-LINE AND ON-LINE BRAND USE IN BANKING SERVICE (CASE STUDY: BANK MELLAT)

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Abstract.

The advent of new technologies in communications and their development manifests the necessity to use the online channels of service providers such as internet banking. Hence, the integration of offline and online brand management in banking service is considered as one of the main priorities. This study aimed to investigate the effect of off-line brand image on the customer's use of offline and online brand in banking service. In this regard, the effect of off-line variables including off-line brand belief, off-line brand attitude, off-line brand use and their matching variables in the online environment have been tested by structural equation modeling. The present study is an applied study in terms of purpose and is a descriptive -survey study concerning data collection procedure. The sample size included 380 people who were selected randomly by multi-stage cluster sampling method. The results indicated that off-line brand image affects off-line and on-line brand belief directly and affects customer use of off-line and on-line banking service indirectly.

Also, similar to on -line variables, there was a positive and significant relationship between off-line variables. On-line brand **belief and attitude had a significant impact on customer's off** *-line brand attitude and brand use. By a focus on* **online banking service and their improvement, Bank Mellat can save customers' time and money maximally and create** *a positive image about on-line service in their minds.*

JEL *classification: M30*

Keywords: *Multi-channel banking, Off-line and on-line brand image, Brand belief, Brand attitude, Brand use*

1. INTRODUCTION

Nowadays, the service industry is changing all over the world. New technologies have changed service delivery to customers in many service organizations. It can be stated that the most powerful force to create changes in today's competitive environment is information technology and telecommunications. Many big retailers use multi-chann**el strategies that increase customers' loyalty due to easy access and diversity in** distribution channel. This is while, Internet growth has provided a good opportunity for the emergence of on-line retailers and many traditional retailers tend to use Internet as an accessible, simple and low-cost tool in order to sell and deliver their goods. In this regard, many banks around the world tried to extend their brands from offline environment to online environment and provide electronic services since they know t**heir survival is related to speed of service delivery and awareness of customers' demands. Through** e-banking services, bank customers can do their banking operations in their favorite time and space and banks can also benefit from lower operating costs due to the reduced number of employees and branches. **This study tries to determine the effects of customers' brand image on their off**-line and on-line brand use in Bank Mellat so that managers can take sound decisions about how to use off-line brand image for brand **extension to online environment, strengthen brand position in customers' mind and finally gain sustainable** profitability.

Banking is considered as one of the most important infrastructural services in any community that impacts greatly on the growth and development of economy and the business. The development of information technology and communications, the increasing growth of transactions and e-commerce business globally

and the need for banks to transfer funds have led large banks in developed countries and developing countries to pay attention to different approaches of e-banking such as Internet banking. In many aspects, service delivery in Internet banking is done similar to traditional ways. The main difference is that Internet banking allows customers to access their account information and perform their banking operations and transactions via the Internet regardless of location. By the proposition of Iran's membership in the World Trade Organization and the entry of foreign competitors into financial markets, Iranian banks need to develop their services in line with technological changes and advance their service delivery channels from offline to online environment. However, the transition from traditional banking to e-banking services require**s investment and adoption of changes in banks' structure. To this end, banks need to align their** activities and benefit from brand extension before providing any new service with integrated brand management in both off-line and on-line environments. Unfortunately, in developing countries banks usually try to imitate the banking system of developed countries and provide on-line services. However, they fail to do this completely due to the lack of required investigation and study. In this case, Iranian banks are not an exception. Therefore, for optimal utilization of brand transfer to online channel in banking services, different studies should be done about the mutual effects of services provided in both offline and online environments to investigate the inte**grity of brand management as well as the effects of customers'** off-line brand image on off-line and on-line brand use. Increased competition, changing business environments, globalization and development of information and communication technologies are the important variations that forced the banking and financial service industry to change. The demand for financial services and the behavior of consumers for such services is rapidly changing. By transition of customers from traditional banking to e-banking, new strategies are required in order to attract customers and retain existing customers (Karjalnoto, Koivumaki, Salo,2003) Nowadays, many banks worldwide offer their services electronically. Iran will also be affected by integration of global economy, and there is no choice other than to turn to e-banks in the long run. Meanwhile, the number of customers with technological understanding has been increased who prefer information technology-based service distribution systems rather than to get these services through bank's employees (Joseph, Stone, 2003). The development of Internet use and its popularity among different groups of people in Iran has created potential needs in the field of e-banking services. Obviously, one of the success indicators of Investment in Bank Mellat in the field of information technology and e-banking is the adoption and actual use of these services by customers. Despite many internet banking services provided by this bank, no study has yet done to determine the effects of custome**rs' off**-line brand image on their actual use of online and offline channels. Accordingly, the need **for such research is obvious. This study presents a model that investigates the way Bank Mellat's off**-line brand image affects the use of online and offline channels by customer.

2. LITERATURE REVIEW

2.1. BRAND IMAGERY

Creating a positive brand image requires marketing programs that link favorable, unique and powerful associations with brand in consumer mind. The concept of brand equity from customer's pers**pective doesn't** discriminate between brand association source and method of forming these associations. Power, utility and uniqueness of associations in the minds of consumers are considered important in order to create brand equity. This means that consumer mental associations of brand can be formed in different ways (beyond marketing activities), from personal experience of product to information gained from diverse sources like news, reports, other media tools, even word of mouth advertising or customer perception of the brand, name, logo, manufacturer company and country, distribution network, company location and etc. (Keller, 1993).

Marketers must be able to recognize the impact of these factors and consider them in designing their communication strategies with the audience (Keller, 1993). Consumers form beliefs about various attributes and benefits of brand in their minds. Brand attributes are descriptive features that describe a product or service in the best way. Brand benefits refer to the concept of value and meaning associated with characteristics of each product or service in the minds of individuals. In general, personal experience can create the most significant associations of brand attributes and benefits in the mind and is very effective in consumers' decisions. Mouth of word advertising plays an important role particularly for restaurants, banks,

entertainment centers and other service centers. Figure 4-2 shows how consumers assess the importance of various reasons for choosing a brand (Keller, 1993). Information resources of the company as "advertising activities" often create the least effective associations **in consumers' mind and thus can easily be changed.**

To overcome this problem, the company's marketing communication program tries to extend brand-related information in the minds of consumers and link them with their current knowledge by the use of innovative and new methods. and new is considered appropriate to extend this information his current links. Thus, companies constantly expose consumers to repeated communication activities of the company in order to ensure that recalling information in their minds happens easily and rapidly. However, Star bucks, google, Red Bull and Amazon.com are companies that have been able to create rich and positive image in the minds of consumers without using intensive advertising programs and spending high costs (Keller,1993) argues that brand perceptions and mentality are the base for brand purchase intention and brand value. In today's highly competitive environment, the mentality and distinct image of the product is very important. When products become more complex and market becomes crowded, consumers rely more on the image of

product in their minds than actual attributes of that product. According to Acker, one of the brand perceptions that can be used to differentiate **one's own products from others** is Customer benefit (Aaker,1991).

On the other, Marketers can use the positive brand perception of consumer to increase their market share, prepare attractive advertisements and direct their future products. However, the problem is that brand **perceptions are remained in consumers' memory rather than in the mind of market leade**rs.

Although no approach has been detected about identifying and measuring brand perceptions and mentality, a point of view accepted by most experts is **Keller's a**ssociative network memory model (Keller,1993) considers brand image and brand awareness (brand recall and recognition) to be the two components of brand knowledge by consumers. He classifies brand associations (and therefore brand image) into three categories:

1. **Attributes**: attributes are descriptions that describe a brand. For example, what a consumer thinks about a brand or what relationship he/she has with its purchase or consumption. Keller distinguishes between non-product-related attributes (price, packaging, user imagery, usage imagery; the last two can also produce brand personality attributes) and product-related attributes (quality, product function).

2. **Benefits**: benefits are personal values given by a consumer to the attributes of a brand. In fact, attributes are benefits a consumer thinks, consumer can obtain from a brand consumption. These benefits are classified into: **Functional** (often linked to physiological needs), **Experiential** (what it feels like to use the product), and **Symbolic** (a need for social approval or self-esteem).

3. **Brand attitudes, defined as consumers' overall evaluations of a** brand (Karjaluoto, Mattila, Pento, 2002).

2.2. ONLINE BRAND IMAGERY

Website awareness and website image as two important factors in the quality of online brand websites. The website image is related to customer perception of website. Also, this perception can be associated with advertising tool, verbal communication, website design (browsers, reliability, quality of information provided, the personalization and perceived value, download speed and easy access to website), corporate features (support, security, privacy, reliability and product features) by marketers (Wi-Suk, 2005).

2.3. BANK BRAND IMAGE

In the banking industry, the concept of retailing refers to a type of banking in which bank transactions are directly done with customers rather than with other institutions and banks. In this type of banking, checking and savings accounts, mortgages and loans, credit cards are used. According to this definition, the concepts of brand extension in multi-channel retailers can be extended to banks, which offer different services through online and offline channels. In the last two decades, technological innovations have created a new environment in the banking sector. Increased competition in the financial service sector has led managers to pay increasing attention to banking strategies that distinguish their service from other financial institutions.

Therefore, banks spend million dollars annually for advertising and communication campaigns in order to achieve a privileged position in the minds of customers.

Since the services offered by banks are easy to duplicate, thus service differentiation is a very difficult task. In addition, while banks invest their budget annually in positioning and creating distinctive image, but they fail to do this. Strong brand image is a good option to reduce perceived risk and gain acceptable competitive advantages. Creating a strong brand image about a bank causes the increase of customer preferences to use banking services and their loyalty and competitive advantage for the bank. Research on the image of banking industry shows that this concept has multiple dimensions such as brand belief, brand attitude and brand use Mandel, Lachman, Orgler, (1981), as cited by (Bravo, Montaner, Pina, 2010). Van Heerden, Puth (1995) emphasized on the importance of dynamism, reliability and stability in the services provided as well as factors affecting identity. In another study conducted by LeBlanc, Nguyen (1996) service delivery, physical environment, availability of services, employees were identified as factors affecting financial institutions brand. And also compared bank brand image in traditional banking and internet banking and found that among indicators affecting bank brand image are new dimensions such as honesty to carry out banking operations via the Internet, availability and data security. Generally, most studies on bank brand image have focused on customer's perception of bank and variables like the way to provide service (attractiveness and innovation in service delivery and service variety), availability (easy and rapid use, welfare factors) and reputation (honesty and commitment) are the most important variables mentioned in the literature review (LeBlanc, Nguyen,1996).

3. RESEARCH HYPOTHESES

3.1. MAIN HYPOTHESIS

Offline brand **image of bank Mellat's customers** has a signifant effect on their offline and online brand use.

3.2. ALTERNATIVE HYPOTHESES:

H1: offline brand image has a signifant effect on offline brand belief.

H2: offline brand image has a signifant effect on online brand belief.

H3: offline brand belief has a signifant effect on online brand attitude.

H4: offline brand belief has a signifant effect on online brand attitude.

H5: online brand belief has a signifant effect on offline brand attitude.

H6: online brand belief has a signifant effect on online brand attitude.

H7: offline brand attitude has a signifant effect on offline brand use.

H8: offline brand attitude has a signifant effect on online brand use.

H9: online brand attitude has a signifant effect on online brand use.

H10: online brand attitude has a signifant effect on offline brand use.

3.3. RESEARCH CONCEPTUAL MODEL
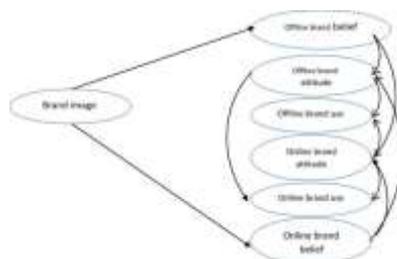
Figure 1. Conceptual model

4. RESEARCH MYTHOLOGY

This research is a descriptive -survey – correlational study. It is descriptive since it occurs naturally and no **experimental manipulation doesn't occur. Since it gathers a detailed description of existing situation so that** to use them for improving or moderating the situation and provides reasonable plans to make the situation better, it is a survey study. This study aims to investigate the relationship between variables and their impact on each other, thus it is a correlational study. Also, the current study is an applied study concerning purpose since it has applicative results. The population included all customers of Bank Mellat in Tehran city, who used the services provided in different branches and online banking services of this bank. Bank Mellat has 316 branches which are equally distributed in six regions. A first, regions 1 and 5 were selected randomly, which were included a total of 110 branches of Bank Mellat in Tehran province, among which 10 branches (five branches in each region) were selected randomly. In each branch, respondents were selected (N=380) by an employee who was responsible for online banking affairs of customers. To gather primary data, the questionnaire was used, which was distributed among participants. At last, 205 questionnaires were collected, among which 195 questionnaires were used for analysis (return rate=54 percent). To survey respondents, five-points Likert scale was used. the questionnaire included closed questions and were prepared in two sections: section 1 included offline brand questions (bank branches) and section 2 included online brand questions (bank website). These two sections were prepared to measure research variables in the model. Table 1 indicates the questions related to each variable. In order to measure the reliability of research tool, 40 questionnaires were distributed among customers and Alpha Cronbach coefficient was calculated for the questions of each construct. The calculated value was higher than 0.7 for all constructs, which indicates the questionnaire is reliable (Table 2). To measure construct validity, confirmatory factor analysis was used through Lizeral software package.

Table 1. Variables, Questions and Resources related to them

Variable		Questions	Reference
Independent variable			
Offline brand image		12-13-14	(Bravo, Montaner, Pina, 2010; Khosrow, 1384)
Mediator variables			
Offline brand belief	How to present service	1-2-3	(Bravo, Montaner, Pina, 2010; Khosrow,1384)
	Accessibility	4-5	(Bravo, Montaner, Pina, 2010)
	Bank employees	6-7-8	(Bravo, Montaner, Pina, 2010)
	Bank environment	9-10	(Bravo, Montaner, Pina, 2010)
Offline brand attitude		18-19-20	(Adis, Kim, 2013; Chang, Chen, 2008)
Online brand belief	Service delivery online	1-2-3	(Wi-Suk,Lennon,2009)
	accessibility	4-5	(Cheng, Patterson, 2007)
	Interactivity	6-7-8	(Morgan-Thomas,Veloutsou,2013; Smith, 2005)
	Website environment	9-10	(Wi-Suk, 2005)
	general perception of the web	11-12-13-14-15	(Wi-Suk, 2005)
	Website security	16-17-18	(Lin, Lee, 2012)
Online brand attitude			(Jung, Kim, Kim, 2014)
Depended variables			

Variable	Questions	Reference
Offline brand use	15-16-17	(Birgelen, Joong, Ruyter,2006)
Online brand use	18-19-20	(Jung, Kim, Kim, 2014)

Source: Author

4.1. DATA ANALYSIS

Table 2. Standard values and t values (significance level) of research variables

Variable	Row	Offline brand image	Standard values	T-Values
Offline brand belief	1	The public are informed about services provided by Bank Mellat branches desirably.	0.81	12.78
	2	The time to receive the services of Bank Mellat branches is desirable.	0.8	12.56
	3	A variety of services are presented to customers by Bank Mellat branches.	0.76	11.67
	4	The access to Bank Mellat branches is easy.	0.(0)	13.21
	5	Bank Mellat has extensive branches across Iran.	0.85	12.47
	6	The behavior of Bank Mellat employees with customers is friendly.	0.79	12.36
	7	The employees of Bank Mellat branches are professional in doing their duties.	0.72	10.89
	8	The employees of Bank Mellat branches are well-dressed with good appearance.	0.69	10.35
	9	The beauty of Bank Mellat branches is desirable.	0.78	12.35
	10	The cleaning of Bank Mellat branches is desirable.	0.95	16.51
	11	The facilities within Bank Mellat branches (Water coolers, chairs, etc.,) are desirable.	0.67	10.31
Offline brand imagery	12	Bank Mellat always meets my future needs by offering new services through branches.	0.63	8.26
	13	Bank Mellat always complies with its own commitments for customers.	0.92	12.15
	14	The performance of Bank Mellat branches is desirable.	0.68	9.16
Offline brand use	15	Bank Mellat branches are my first choice to conduct all banking affairs.	0.88	15.35
	16	I will use Bank Mellat branches in the future for all banking affairs.	0.9	15.73
	17	I will recommend opening an account in Bank Mellat branches to others.	0.93	16.60
Offline brand attitude	18	My attitude to use the services of Bank Mellat is desirable.	0.85	12.45
	19	In my opinion, referring to Bank Mellat branches for banking affairs is essential.	0.8	10.69
	20	I feel that referring to Bank Mellat branches for banking affairs is pleasant.	0.87	11.61
Online	1	Bank Mellat's website contains full	0.8	13.37

Variable	Row	Offline brand image	Standard values	T-Values
brand belief		information about the services provided.		
	2	Bank Mellat website is regularly updated.	0.89	15.66
	3	Navigation within Bank Mellat's website is easy. (navigation means to search different pages in order to find the desired information)	0.86	14.89
	4	The download of Bank mellat 's website is good.	0.81	13.22
	5	Signs on the bank Mellat 's website shows where we are at any time.	0.92	15.92
	6	Bank Mellat's website allows interaction between customers and bank.	0.77	12.29
	7	Reference instructions and help texts make easy to use bank Mellat's website.	0.80	13.03
	8	Interbank transactions with other banks through bank Mellat's website is possible	0.58	8.60
	9	Website environment of bank Mellat (colored texts, images) is appealing	0.77	12.05
	10	Website Layout of bank Mellat has facilitated its use.	0.82	13.07
	11	By different Internet browsers, the website of Bank Mellat can be easily accessed.	0.70	10.92
	12	**The use of bank Mellat's website has** facilitated banking affairs.	0.77	12.59
	13	I can do banking transactions better by using the website of Bank Mellat.	0.82	13.68
	14	Bank Mellat uses advanced information technology to meet my future needs.	0.84	14.36
	15	**Using bank Mellat's website does not** require much mental effort	0.64	9.76
	16	**In bank Mellat's website, the necessary** security mechanisms (authentication, access rights, etc.) are used	0.80	11.71
	17	I'm sure my account transactions on bank **Mellat's website cannot be hacked by** other people.	0.58	8.25
Offline brand use	18	**I will use bank Mellat' s website in the** future.	0.91	16.32
	19	I will continuously use the website of bank Mellat for banking affairs.	0.93	17.11
	20	**I would recommend Bank Mellat's** website to others.	0.91	16.11
Offline brand attitude	21	In general, my attitude to the website of Bank Mellat is desirable.	0.86	16.32
	22	The use of bank **Mellat's website is** pleasant	0.82	13.30
	23	**In my opinion, the use of bank Mellat's** website for banking affairs is essential.	0.80	11.56

Source: Author

According to Table 3, the calculated values for model fit indexes of research variables were acceptable1. Thus, questions are matched with their own constructs. Therefore, the relationship between constructs or hidden variables is supported.

Table 3. Model fit indexes of research variables

Variable	χ^2 /df	RMSEA	GFI	NFI	CFI	RMR
Offline brand belief	2.171	0.078	0.9	0.95	0.92	0.91
Online brand belief	2.175	0.078	0.91	0.96	0.94	0.9
Offlinebrand use-attitude	2.3725	0.079	0.9	0.91	0.93	0.92
Online brand use-attitude	1.665	0.059	0.93	0.94	0.95	0.9
Offline imagery	2.45	0.057	0.94	0.91	0.9	0.93
Structural model	2.00	0.043	0.92	0.91	0.92	0.9

Source: Author

Normal distribution of data was examined by Kolmogorov-Smirnov test and significance levels for all variables was more than 0.05. Therefore, the null hypothesis of this test indicating the normal distribution of data for each of the variables, was accepted. Also, sample adequacy for analysis was appropriate using Bartlett test and KMO index (0.875). To study model fitness with the realities of Iran National bank, a questionnaire was used as data collection tool. For this end, five-point Likert scale was used. At first, data were entered into Excel software, then the causal relationships between variables in the proposed conceptual model was tested by the use of structural equation modeling (SEM) in LISREL 8.8 software. Table 3 indicates the structural model has good fitness. In other words, the observed data are consistent with conceptual model to a large extent. Therefore, this model is reliable to test research hypotheses and could also be the basis for future studies.
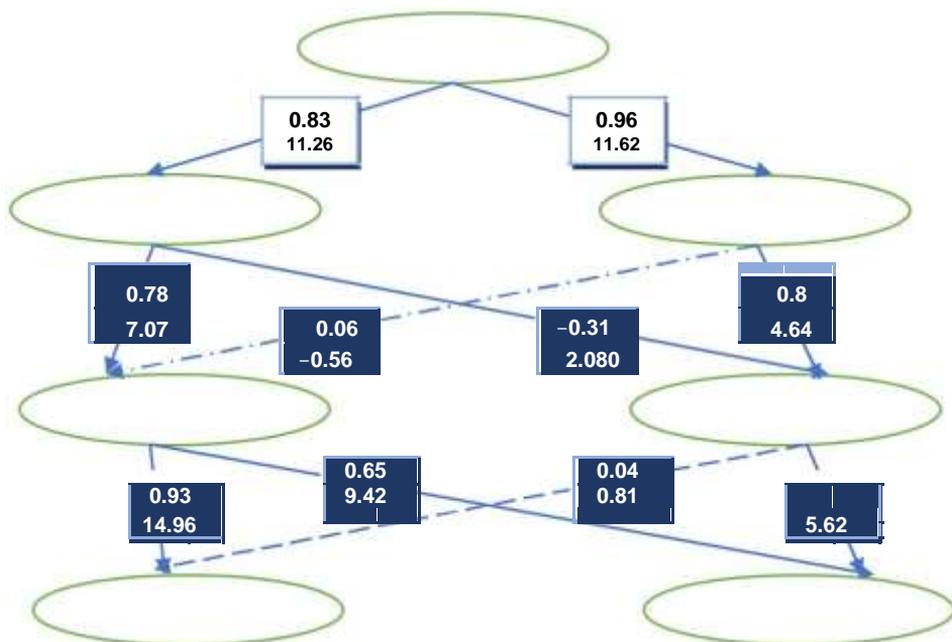
Figure 2. The results of structural equation modeling

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1 . **χ2/df < 3, RMSEA < 0.08, GFI & NFI & VFI > 0.90, RMR< 0.05**

5. CONCLUSIONS

In this study, we tried to investigate the relationship between offline brand image of Bank Mellat and use of services provided by branches (offline brand) and Internet banking (online brand). Research model included 10 hypotheses which were tested by structural equation modeling and LISREL software. In addition, 8 hypotheses were supported and 2 hypotheses were rejected. The results indicated that off-line brand image affects off-line and on-line brand belief directly and affects customer use of off-line and on-line banking service indirectly. In research conceptual model, similar to online variables, there is a positive and significant relationship between offline variables. Although online brand belief and online brand attitude affects offline brand use and offline brand attitude significantly, their mutual relationship has not been supported.

• **H1: offline brand image has a significant impact on offline brand belief.**

The first hypothesis related to the effect of offline brand image on offline brand belief is supported (R^2=0.96, α= 11.62). Offline brand image has a positive and significant impact on offline brand belief. In other words, a good offline brand image improves offline brand belief. This is in line with the study results of (Wi-Suk, Lennon,2009).

• **H2: offline brand image has a signi**ficant impact on online brand belief.

The second hypothesis related to the effect of offline brand image on online brand belief is supported (R^2=0.96, α= 11.62). Offline brand image has a positive and significant impact on online brand belief. In other words, a good offline brand image improves offline brand belief. This is in line with the study results of ((Wi-Suk, Lennon,2009).

• **H3**: offline brand belief has a significant impact on offline brand attitude.

The third hypothesis related to the effect of offline brand belief on offline brand attitude is supported (R^2=0.80, α= 4.64). this means that a good offline brand belief improves offline brand attitude. This is in line with the study results of (Wi-Suk, Lennon, 2009).

• **H4: off**line brand belief has a significant impact on online brand attitude.

The fourth hypothesis related to the effect of offline brand belief on online brand attitude is rejected (R^2=-0.06, α= -0.56) . this result is in contrast with the results obtained from (Wi-Suk, Lennon, 2009) study. **In fact, offline brand belief of Bank Mellat doesn't have any significant impact on online brand attitude.** The entry of Bank Mellat in private banking requires competitive advantage so that it can distinguish its services from other banks and modify and change the negative image of customers concerning bank services as state-owned bank. In this regard, Bank Mellat has tried to obtain competitive advantage in Internet banking and modify change the negative image of customers. As the results indicates offline brand belief of Bank **Mellat didn't have any impact on the variables of online brand use by customers.**

• **H5: online brand belief has a significant impact on offline brand attitude.**

The fifth hypothesis related to the effect of online brand belief on offline brand attitude is supported (R^2=-0.33, α= -2.08). Offline brand belief has a negative impact on online brand attitude.

Thus, it can be stated that the negative impact of online brand belief on offline brand attitude of customers in Bank Mellat is insignificant. Therefore, Bank Mellats should moderate this negative impact by improving **customers' offline image and attitude as well as creating** a good sense of service use in their branches.

• **H6: online b**rand belief has a significant impact on online brand attitude.

The sixth hypothesis related to the effect of online brand belief on online brand attitude is supported (R^2=0.78, α= 7.07). Online brand belief has a positive and significant impact on online brand attitude. In other words, a good online brand belief improves online brand attitude. This is consistent with the study results of (Wi-Suk, Lennon, 2009).

• **H7: offline brand attitude has a significant impact on offline brand use.**

The seventh hypothesis related to the effect of offline brand attitude on offline brand use is supported (R^2=0.35, α= 5.62). Offline brand attitude has a positive and significant impact on offline brand use. In other words, a favorable offline brand attitude increases offline brand use and service use in the different branches of Bank Mellat. This is consistent with the study results of (Wi-Suk, Lennon, 2009).

• **H8: offline brand attitude has a significant impact on online brand use.**

The eighth hypothesis related to the effect of offline brand attitude on online brand use is rejected (R^2=0.04, α= 0.81). Offline brand attitude **didn't have any** impact on online brand use.

• **H9: online brand attitude has a significant impact on online brand use**.

The ninth hypothesis related to the effect of online brand attitude on online brand use is supported (R^2=0.93, α= 13.14). Online brand attitude has a positive and significant impact on online brand use. In other words, a favorable online brand attitude increases online brand use and website service use. This is consistent with the study results of Wi-Suk,Lennon (2009) and Sung Joon (2002).

• **H10: online brand attitude has a significant impact on offline brand use.**

The tenth hypothesis related to the effect of online brand attitude on offline brand use is supported (R^2=0.65, α= 9.42). Online brand attitude has a positive and significant impact on offline brand use. In other words, a

to improve custom rs' atti udes and e cour ge them to use Inter et banking continuously while re omme d

nline bank s rvic s to others by   ffering favorable se vi es in el   tronic services and b ing pi n
infieldofinterbanking.Inadditin,theankcanusetheposivebenfitsfonlinebrdbeliefimprovecustoerattitudswardtraditoalbankingandcreateintegrationinprovidingo-lineandonservices.

5.1. IMPLICATIONS

According to r sults, off- **ne**   **atti ude did 't** ff t **cus**   **r's** itude and use of
onbankingservics.Accordingly,itseemsthatBkMllatisnotapprprilynteratedforsrvicedelivbothonlineandofflneenvirnments.Thus,itissuggtdtomanagersofthesebnkstobnefitfromrealinteetsofofflinebrandextesiontoonlineenvirnentbyintegratighmdmagmentinbothnlindofflnenvronmets.

Res arch results indic es that Ba k M lat's off ne mage affects ff ine   nd   ine brand bel ef, off a   online b and attitude and finally offline and online brand use. Th refore, it is sugg sted to Bank Mellat mang rs   take acti ns for b auti ying the phys cal nv ronment f bra   ches. Also, providing pleasa t, friendly and helpful in   act on with customers, off ring   nova ve services in line with cust m   eds, re ucing cust m r wai ing times t branches nd bu lding trust cus omer in   rder to use Bank Mellat **services can improve   mage of bank offline bra   d this in turn can incr se cust m   use of** services provi   in nline a d offl environments.

According to r sults, the fact   employees is recognized   the ost import nt   ctor affecting ba k   . Th ef re, it s recomm nded   at c ntinued training f empl yees in order   me t p ofes ional dut s as well as g od   d friendly intera tion with customers be   the ce ter of hum res urce progr ms. Having   l yees w th che rful appearance who try to inf rm customers about ba   k futu e plans and servic   hrough esta lishi g   friendly   la io ship wi h customer and trying to cr ate friendly mosph re can be a useful tool to cr te com itm nt in cust   er and improve the r brand image of Bank Mellat nline br nd.

with customers' needs in he min mum waiting time within the branch can be another way to improv lineth

Mellat isn't in good situation.

causes customers don't experience a good feeling when they refer to bank

The results show that web security is the most important factor in online brand belief. In this regard, Bank **Mellat should build customers' trust by updating and testing security systems as well as providing** appropriate promotional messages. Web interactivity has been proposed as the second factor affecting online brand belief in Bank Mellat. Thus, to improve the online brand belief of customers in Bank Mellat, it is suggested that bank can create the opportunity for more interaction with customers within website through updating website content and receive their opinions and wants so that to improve website interactivity and **customers' use.**

In addition, improving interbank interactions through website, providing useful instructions concerning the **favorable use of website and even assigning a page for different subjects by an attention to customers'** interests are recommended to improve online brand belief of customers in Bank Mellat. According to table 47-4, the factor of **Web Site Special Services of Bank Mellat (customers' club) is ranked in the lowest level** among other factors affecting online brand attitude. Thus, it is recommended that Bank Mellat use this factor for more interaction with customers. Establishing advertising campaigns aimed at encouraging customers to join the club and providing special services to customers through club can be an effective method to create a more favorable attitude to the website and a more favorable image of Bank Mellat online brand.

6. SUGGESTIONS FOR FURTHER STUDIES

- Repeating this study in public and private banks to compare results and generalize to banking service.

- Identifying factors affecting the integration of brand management in both online and offline environments in multi-channel marketing.

- Studying the relationship between other elements of brand like brand identity, brand awareness and brand image in both online and offline environments.

- Studying the relationship between brand's perceived quality and perceived risk, customer service or product in multi-channel marketing.

- Measuring performance satisfaction in off-line environment on online brand attitude and use.

- Identifying customer preferences to purchase from online and offline environments and their differences.

7. LIMITATIONS OF THE STUDY

In this study, data were collected by a questionnaire which itself is inherently limited.The present study was conducted only in Bank Mellat as a case study, thus we should be cautious when generalizing findings to banking services. This study was conducted in the field of banking services, thus for its generalizability, the presented model must be re-examined in other organizations.

REFERENCES

Aaker, D.A. (1991). Managing Brand Equity. New York: Free Press.

Adis, A. A., Kim, H. J. (2013). The Mediating Role of Brand Recall and Brand Attitude in Influencing Purchase Intention in Advergames. Asia Marketing Journal, 15(3), 117–140.

Birgelen., M, Joong, A, Ruyter, K. (2006)." Multi-channel service retailing: The effects of channel performance satisfaction on behavior intention" Journal of Retailing., Vo1. 30, NO 86., PP367-376

Bravo, R., Montaner, T, Pina, G. M, (2010). " Corporate brand image in retail banking: development and validation of a scale", The service Industeries Journal, Vo1. 30, N0. 8, PP1200-1220

Chang., H., Chen, W., (2008). "The impact of online store environment cues on purchase intention Trust and perceived risk as a mediator", Online Information Review, Vo132, NO.6, PP 818-841

Cheng, H., Patterson, P., (2007). "Iconic one commerce website" Ergonomic Journal., NO 38, PP 65-69 Christodoulides., G; De Chernatony., L; Furrer., O; Shiu., E; Abimbola., T, (2006)" Conceotualizing and Measuring the Equity of Online Brands" Journal of Marketing Management, Vo122, NO7, PP 799-825

Joseph, M., Stone, G., (2003)."An empirical evalution of US bank customer perception: the impact of new technology on service delivery in the banking sector", International of Retail and Distribution Management, Vol31, NO 4, PP 190-200

Jung, N. Y., Kim, S., Kim, S. (2014). Influence of consumer attitude toward online brand community on revisit intention and brand trust. Journal of Retailing and Consumer Services, 21(4), 581–589. https://doi.org/10.1016/j.jretconser.2014.04.002

Karjalnoto, H., Koivumaki, T., Salo, J., (2003). "Individual Differences Private Banking: Empirical Evidence from Finland", Proceedings of 6th Hawaii International Conference System Sciences

Karjaluoto, H. Mattila, M., Pento, T., (2002), "Factors underlying attitude formation toward online banking in Finland", International journal of bank marketing, Vol20, NO6, PP261-272

Keller, K. L. (1993). "Conceptualizing, Measureing and Managing Customer-based brand equity", Journal of marketing, Vol57, PP1-22

Khosrow, D. (1384). comparative study of customer satisfaction among Parsian Bank and Export Bank in Tehran. **Master's** thesis

LeBlanc, G., Nguyen, N. (1996). Cues used by customers evaluating corporate image in service firms: An empirical study in financial institutions. Corporate Communications: An International Journal, 1(2), 30–38.

Lin, M.-Q.,Lee, B. C. Y. (2012). the Influence of Website Environment on Brand Loyalty: Brand Trust and Brand Affect as Mediators. International Journal of Electronic Business Management, 10(4), 308–321. Retrieved from http://esc-web.lib.cbs.dk/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=85717280&site=ehost-live&scope=site

Mandel, L., Lachman, R., Orgler, Y. (1981). Interpreting the image of banking. Journal of Bank Research, 11(Summer), 96–104.

Morgan-Thomas, A., Veloutsou, C. (2013). Beyond technology acceptance: Brand relationships and online brand experience. Journal of Business Research, 66(1), 21–27. https://doi.org/10.1016/j.jbusres.2011.07.019

Smith C., (2005). "e Marketing excellence: the heart of e Business" third edition, Elsevior Butterworth Heinemann.

Sung Joon., Y., (2002). "The Antecedent and Consequence of Trust in Online-Purchase Decision" Journal of Interactive Marketing., Vol6, NO2., PP47-63

van Heerden, C.H., Puth, G. (1995). Factors that determine the corporate image of South African banking institutions: An exploratory investigation. International Journal of Bank Marketing, 13(3), 12–17.

Wi-Suk. K., (2005), "A model of reciprocal effect of multichannel retailers offline and online brand image", Dissertation for PHD, Ohio State University.

Wi-Suk. K., Lennon, S., (2009). "Reciprocal Effects Between Multichannel Retailers' Offline and Online Brand Image", Journal of Retailing, Vol85, NO3, PP 376-390.

Wi-Suk. K., Lennon, S., (2009). "What induces online loyalty? Online versus offline brand images", JOURNAL of Business Research, Vol62, PP 557-564

STUDYING THE IMPACT OF FINANCIAL LEVERAGE AND FINANCIAL PERFORMANCE INDICATORS ON DIVIDEND POLICY OF ACCEPTED COMPANIES IN THE TEHRAN STOCK EXCHANGE

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Abstract

The main purpose of this research is studying the impact of financial leverage and financial performance indicators on dividend policy of accepted companies in the Tehran Stock Exchange. The statistical sample is included 102 companies and the research period is from 2011 to 2015. The dependent variable is included dividend policy, independent variables of financial leverage, economic value added, market value added, return on assets ratio and the ratio of market value to book value, and control variables are included company size and systematic risk. Information gathering method in the Theoretical Foundations section is library method, and data have been extracted in the test section of the hypotheses from the financial statements and the Tehran Stock Exchange website. The data analysis method is also multiple correlation and regression test. The results of the research are shown financial leverage has a reciprocal and significant effect on dividend policy. Also, financial performance indicators on dividend policy have direct and significant impact.

1. INTRODUCTION

Dividend policies are one of the elementary finance companies that are analyzed by complex financial models and one of the issues that most financial experts face with it (Backer et al., 2012). It is believed that dividend dividends are considered as a good predictor of future financial performance of firms. It suggests that analyzing dividend and its changes over time can provide useful information about company financial performance and ability. It will provide investors with a view to create a future cash flow (Miton, 2012).

Financial scholars such as Miller and Rock (1985) and John and Williams (1985) and other scholars have shown that dividend adjustments lead to future changes in the company's expected critique and value (Omran et al., 2011). Profit sharing represents the distribution of profits among shareholders of a company that is approved by the annual general meeting of the company and paid to shareholders. Distribution decisions are one of four important financial decisions; three other important decisions are decisions on working capital management, investment and financing. According to Terang and Hinny, 2010 dividend, provides information to stakeholders about the company's financial performance. The results Phong, Zechariah and Tan (2007) showed that the investments made by the company, profitability and cash dividends will determine the company's future, also affects the distribution of profits on the company's capital costs and leverage. In adopting these related decisions, the goal is to maximize shareholder wealth (Demestze, Vilaluna., 2010). Shareholders of manufacturing companies as shareholders of other companies are expected to receive a profit on their investment. Larsherr (2000) believes that the decline in profit sharing is seen as a bad news for investors, which generally occurs after a steady decline in profits.

Shareholders generally have a positive view of dividing profits and consider it necessary; Shareholders generally have a positive view of dividing profits and consider it necessary; in some areas, due to the short-term view of investing, profit is first divided and then raised to capital, which is one of the problems of the capital market (Malliani, 2012). The present study tries to examine the effect of financial leverage and financial performance indicators on dividend policy of accepted companies on Tehran Stock Exchange.

2. EXPRESS THE NECESSITY AND IMPORTANCE OF THE SUBJECT

When a company makes a regular announcement of profits, investors believe that continuity and stability of operations are considered by the company as a continuation of the normal operation of the company. For this reason, company management is trying to make use of a stable pay policy, and, in the event of a company profit reduction, is maintained or even increased dividend yield at the previous level. This issue highlights the importance of dividend policy and the psychological impact of dividend dividends on firm value, stock prices, and shareholders' expectations (Zhu Wange, 2012).

Dividend is one of the oldest and most common ways of transferring returns from companies to shareholders. The management of the company must always decide on the maintenance or distribution of all or part of the dividends. If dividend-based decisions are effective, it can change the value of the company (Mehrani, 2004). Companies need to maintain share profits just as much as their investment opportunities. If there are not enough investment opportunities that can provide predicted returns beyond expected returns, Unused resources should be paid as profit share (Hajian, 2006). A company can change the rate of payment of a dividend on the stockholders' wealth (Ameri, 2007). Investors are looking for criteria for choosing the best option for investing in optimal allocation of their resources and investment in companies. One of the criteria considered by market capital activists, financial performance and financial leverage ratio is the corporate risk mitigation criterion. Therefore, this necessity is felt which will examine the impact of financial performance and financial leverage on corporate dividend policy.

3. RESEARCH HYPOTHESES

1. Financial leverage has a significant effect on dividend policy.
2. Financial performance indicators have a significant effect on dividend policy:

    2.1. Economic value added has a significant effect on dividend policy.

    2.2. Market value added has a significant effect on dividend policy.

    2.3. The rate of return on assets has a significant effect on dividend policy.

    2.4. The ratio of market value to book value has a significant effect on dividend policy.

The regression equations for testing hypotheses are as follows:

$$1) DIV = \alpha_0 + \beta_1 FL + \beta_2 SIZE + \beta_3 BET + \varepsilon$$

$$2) DIV = \alpha_0 + \beta_1 EVA + \beta_2 SIZE + \beta_3 BET + \varepsilon$$

$$3) DIV = \alpha_0 + \beta_1 MVA + \beta_2 SIZE + \beta_3 BET + \varepsilon$$

$$4) DIV = \alpha_0 + \beta_1 MV/BV + \beta_2 SIZE + \beta_3 BET + \varepsilon$$

In which: DIV= Dividend policy, EVA= Economic value added, MVA= market value added, MV/BV= Ratio of market value to book value, SIZE = company size, BET = systematic risk.

3.1. DEFINITION OF VARIABLES

Independent variables in this study, financial leverage and financial performance metrics (economic value added, market value added, return on assets, market value added to book value) and dependent variable are also policies for dividing profits. Company size variables and systematic risk are also control variables**.**

1. Dividend policy: Dividing profits is one of the most important issues in financial management; because dividends represent the major cash payments of companies and one of the most important decisions of managers. The manager must decide how much of the company's profits will be distributed, and how much it will be reinvested in the company in the form of accumulated profits. Despite the fact that dividend payments directly benefit shareholders, the company's ability to accumulate profits to exploit growth opportunities is affected (Backer and Pawl, 2005). In this study, it is used of dividend cash Flow Rate (DPS) to profit per share (EPS) to measure the dividend variable of the company

2. Financial leverage: These ratios determine the ratio of financial resources used by the entity in terms of debt or equity, and in fact, is examined how to combine them, in this study, to measure the company's financial leverage, long-term debt is used to divide the total amount of debt over assets (Sinai and Nissi, 2003).

3. Economic value added: A positive EVA means that the rate of return on capital is greater than the cost of capital, in the end, the EVA is greater than zero, ie, the creation of (increasing) the value of the shareholders (Pinto, 2001). The economic added value first introduced by Stern Stewart is calculated as follows:

$$EVA=NOPAT-(WACC*Capital)$$

In which: NOPAT = net operating profit after tax, WACC = average cost of capital, capital = capital

4: market value added: equals the total market value of the owners' equity and its market value. In order to obtain market value added, the difference between the average market value of the owners' equity over the year and the average book value of capital's rights are used. The average value of the book value of the owners 'equity is the total amount of the owners' equity at the beginning and the end of the period, divided into two (Hejazi, Arefi, 2004).

5. Return on Assets: The ratio of return on assets is actually indicated to what extent profitability of the company is related to its total assets (Lee, 2008). The return on assets is derived from the division of net income into the total assets of the company.

6. The ratio of the market value to the book value, or the result of dividing the stock price by the book value of each share, gives a new criterion on the basis of which the stock can be multiplied by its book value. The P / B ratio is the result of dividing the company's market value into a book value.

7. Size of the company: There are various criteria for measuring the size of the company, which are: total assets, sales volume and total number of employees. In this study, the logarithm of the total assets is used to measure the "firm size" variable.

8. Systematic **Risk: The firm's sensitivity coefficient (β) has been used to measure the**

company's systematic risk. Simply, the systematic risk of each share determines the rate of return that a shareholder should expect to acquire (Pee noe, 2002). The beta coefficient **(β) is equal to the yield** covariance of the share with the return on the portfolio of the market, divided by the variance of the portfolio of market securities (Kay Raleigh, Si Braun, 2005). In this study, in order to calculate the beta coefficient, the new method is used.

4. THEORETICAL RESEARCH FRAMEWORK

The result	Year	Scholar
There is a positive and significant relationship between performance / return on sales and dividend profit ratio	2016	Habibi et al.
There is a meaningful relationship between the ROA and Q tobin performance measures and dividend profit ratio, that means, performance improvement can lead to increased dividend yields	2015	Mashayekh, Abdollahi
There is a positive direct correlation between cash returns with stock prices, positive reciprocal correlation, and between earnings per share and cash income.	2014	Horsand
There is a significant relationship between firm performance and dividend, regardless of industry type	2013	Etemadi, Challaki
There is a significant correlation between the size of the company and the ratio of profit sharing, as well as between the ratio of dividend and profit quality. Firms with sufficient liquidity tend to be more likely to distribute profits	2007	Ameri
It is expected that companies with significant financial facilities do not have a strong desire to distribute benefits due to the need for financial resources.	2006	Hajian
If a company has a high (lower) gain, its cash returns are high (low), and it is expected that the more immaterial ownership will be, the more profits will be distributed.	2005	Jahankhani, Qorbani
Factors that affect profit-sharing policies include: accrued profit as a source of financing, composition of capital structure, shareholder needs, legal constraints	2002	Mohammadi
In emerging markets, companies that have strong performance, dividend payments are lower, and vice versa (inversely).	2015	Mithun
1. There is a meaningful relationship between operating cash flows and cash dividend rates. 2. There is a meaningful relationship between operating profit and the rate of dividend distribution. 3. There is a meaningful relationship between operating cash flows, operating profit and cash dividend ratios. 4. There is a meaningful relationship between earnings per share (EPS) and cash income per share (DPS).	2014	Chen et al.
According to the low rates of bank facilities compared to the company's capital cost of borrowing and financing, if debt is greater, the firm's flexibility in dividend is more(inversely).	2012	Shifret et al.
By increasing the degree of financial leverage, the average cost of capital decreases and therefore the value of the company (the value of the ordinary stock market) will increase and vice versa.	1995	Durand
Since, if the financial and operational leverage of a company is greater, its beta coefficient is also higher; therefore, it is considered that the beta of the company as another variable is another variable that has an inverse relationship with the distribution of profits. It is also expected that the more property is distributed, the more profit will be distributed	1992	Rozoph

Source: Author

4.1. THE CONCEPTUAL MODEL OF THE PROJECT
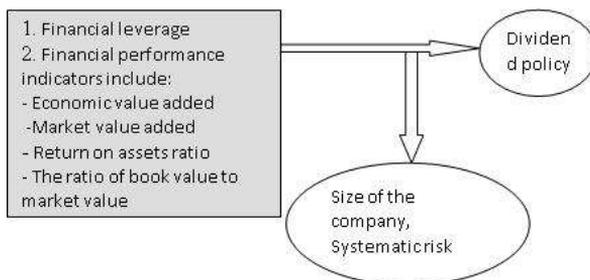
Figure 1. Conceptual Model of Research (Rouzof, 1992)

4.2. RESEARCH METHODOLOGY

This study is an applied research in terms of purpose because it has studied the relationship of variables in the securities market, it seeks to explain relationships and offer suggestions to improve market efficiency. In addition, this study is descriptive correlational research, among the types of research, correlation is a regression analysis in terms of purpose.

The statistical population of the study is accepted companies on Tehran Stock Exchange. Due to some disagreements among members of the community, these conditions are considered for selecting companies: 1. The financial year of the company is ending at the end of March each year, 2. The company did not change the fiscal year during 2011-2015, 3. The company has been admitted to the Tehran Stock Exchange by the end of fiscal year 1394, 4. The stock trading of the company has been carried out continuously on the Tehran Stock Exchange, and stop trading for more than a month has not happened on the stock that were selected with the above conditions 102 companies. In this research, a part of the information that forms the basis of the project is compiled by the library method. Also, a part of the information about the hypothesis test has been extracted from the financial statements of the companies and the Tehran Stock Exchange website.

4.3. METHOD AND TYPE OF RESEARCH

This research is categorized in terms of purpose, applied research, and descriptive-correlation type. Also, in terms of classification of research according to the method and method of data collection, this research is correlated, and market-based methodology has been used.

5. DATA ANALYSIS METHOD

To analyze data, first, a descriptive statistic including mean, standard deviation, skewness, etc., will be used and then the inferential statistics will be used. Inferential statistics include the normal test, the correlation test, and then is the multiple regression test.

5.1. FINDINGS

1: Descriptive statistics: Descriptive statistics of the research variables are included: The policy of dividend (D), financial leverage (FL), economic value added (EVA), market value added (MVA), return on assets (ROA), market value to book value (M / B), company size (SIZE)) And systematic risk (BET) are presented in Table 1:

Table 1. Descriptive analysis of research variables

Elongation	Skewness	Variance	Standard deviation	Average	Maximum	Minimum	Number	Variable
0.121	0.312	0.120	0.177	0.337	0.896	0.117	510	D

Elongati on	Skewnes s	Varianc e	Standard deviation	Averag e	Maxim um	Minim um	Numbe r	Variabl e
0.328	0.280	0.277	0.263	0.249	0.068	0.010	510	FL
0.241	0.246	0.023	1.078	2.8	50.00	1.778	510	EVA
0.163	0.369	1.217	1.143	6	3.348	1.219	510	MVA
0.274	0.355	1.165	1.123	6	7.346	1.684	510	M/B
0.115	0.291	0.286	0.078	0.337	1.794	1025-5	510	ROA
0.241	0.246	0.023	0.178	0.588	1.778	0.008	510	BET
0.209	0.306	0.327	0.156	20.021	4.996	0.132	510	SIZE

Source: Author

In this season, descriptive statistics are first examined. The number of observations in the descriptive statistics of companies is 510 (102 in 5 years). According to descriptive statistics, the dispersion index of these variables is low in different companies. The highest standard deviation is related to the market value added variable, and the lowest standard deviation is related to the systematic risk variable. The highest standard deviation is related to the market value added variable and the lowest standard deviation related to the systematic risk variable. Because when the absolute magnitude of the numbers related to skewness and elongation is large. It can be concluded that it differs greatly from the normal distribution. The high skewness indicates the sum of the numbers to the negative or positive, and the elongation is also related to the shortness and breadth of the distribution of variables.

2. Testing the Normality of the Variables: The following table shows the normal results of the variables:

Table 2. Testing the Normality of Variables

Significance level	Z Kolmogorov-Smirnov	Variables
0.238	2.031	D
0.691	1.712	FL
0.299	1.450	EVA
0.642	1.741	MVA
0.582	1.77	M/B
0.447	1.247	ROA
0.311	1.968	BET
0.287	1.684	SIZE

Source: Author

As it can be seen, since the significance level in all variables is more than 0.05, so the research variables have a normal distribution.

3. Correlation test: Due to the fact that the data distribution is normal, Pearson correlation coefficient is used to examine the correlation between variables.

According to Pearson correlation test, economic value added, market value added, asset return rate, company size and market value to book value, there is a positive and significant correlation with dividend policy, and the financial leverage has a reverse and meaningful relationship to the policy of dividing profits.

Table 3: Pearson Correlation Test of Research Variables

Systematic risk	Size of the company	Ratio of market value to book value	Asset return rate	Market value added	Economic value added	Financial Leverage	Dividend policy	Variable
0.248	*0.364	*0.452	**0.520	**0.132	**0.294	0.153	1	Dividend policy
0.347	0.493	0.308-	0.196-	0.407-	0.385	1	*0.153-	Financial Leverage
0.128	0.566	0.157	0.083	0.018	1	0.0385-	**0.294	Economic value added
0.209	0181	0.371	0.068	1	0.180	0.407-	0.1321	market value added
0.332	0.103	0.311	1	0.68	0.083	0.196-	0.520*	Asset return rate
0.116	0.087	1	0.311	0.371	0.157	0.308-	0.452*	Ratio of market value to book value
0.288	1	0.087	0.103	0.181	0.596	0.493	0.364*	size of the company
1	0.288	0.116	0.332	0.209	0.128	0.347	0248**	Systematic risk

Source: Author

** Significantly at the level of error %1

* Significantly at the level of error %5

4) Other findings: Multivariate regression test

4-1) Significance test for regression: According to F statistics in all regression tables, since the level of significance is less than 0.05, then the regression model is significant in all tests of assumptions.

4-2) Linear test: A linear is a situation that indicates an independent linear functional of other independent variables. If the linearity is high in a regression equation, it means that there is a high correlation between the independent variables, and, despite the high R2, the model is not high; that is, although the model looks good, it does not have meaningful and independent variables. In the case of linear concurrency, there are problems in determining the accuracy of the regression equation. Test linear variables as follows:

Table 4. Linear test

Status Indicator	Special amount	Variables
3.832	0.948	1
4.217	0.983	2
5.514	0.973	3
5.938	0.916	4
5.977	0.908	5

Source: Author

As can be seen from the table, special values close to zero of internal correlation of forecasts are high, and small changes are in the data amounts to large changes in the estimation of the coefficient of the regression equation. Specific values represent the probability of internal correlation between variables. Specific values represent the probability of internal correlation between variables, and values greater than 30 represent a serious problem in using regression in the present situation (Yeganeh and others, 2009). On the other hand, all status indicators are smaller than 15 which is indicated the absence of a coincidence between independent variables.

4-3) Lack of solidarity test: Durbin-Watson statistics in the table represent an autocorrelation test between research variables. Since this statistic is in the regression test table between 1.5 and 2.5, therefore, there is no correlation between the research variables of the problem itself.

4-4) Main hypothesis test: A question that is often raised in applied studies, is whether there is any evidence of data integration or that the model is different for all cross-sectional units. So, it must be considered that are there any differences between levels, heterogeneity, or individual differences? In the case of heterogeneity of the panel data method, the least-squares data integration method is used to estimate the model. For this purpose, the F lemmer test is performed. In this test, the H0 assumption equals the width of the originals (combined data) against the opposite hypothesis H1 of the inequality of the width of the originals (the data of the panel data). If it is determined that the sections studied are heterogeneous and have individual differences, panel methods are more appropriate. Husman test has been used to choose between constant and random effects. The Hausman test statistic, which is calculated for the constant or random determination of the differences between cross-sectional units, has a chi-square distribution with the degree of freedom equal to the number of independent variables. The results of the F lemmer test are as follows:

Table 5. F Limer Test (Consistency width of the origin of the sections)

Test result	p-value	Degree of freedom	F statistics	Research models	Zero hypothesis
H0 is rejected	0.001	3	2.6453	Model 1	The width of the origin of all sections is the same
H0 is rejected	0.035	3	1.1325	Model 2	
H0 is rejected	0.011	3	1.0231	Model 3	
H0 is rejected	0.000	3	1.5243	Model 4	
H0 is rejected	0.031	3	1.758	Model 5	

Source: Author

F test of the hypothesis of zero shows the use of compilation data method in contrast to the hypothesis, ie, the use of panel data method. Considering the significance level of the above table, the result of this test indicates that the examined sections are heterogeneous and the use of panel method data is more appropriate. After selecting the method of panel data using the F lemmer test, Hausman test is done. In this test, if the hypothesis 0 (H0) is accepted, then the random effects model and, if H0 is rejected, the constant effects model is used.

Table 6. Hausman test results (choice between static and random effects)

Test result	p-value	Degree of freedom	Chi-square statistics	Research models	Zero hypothesis
H0 is rejected	0.021	3	5.4503	Model 1	The difference is not in systematic coefficients
H0 is rejected	0.048	3	4.4528	Model 2	
H0 is rejected	0.000	3	4.3452	Model 3	
H0 is rejected	0.000	3	5.5464	Model 4	
H0 is rejected	0.022	3	5.7792	Model 5	

Source: Author

The results show that the value of this statistic for each model is significant, and the significance level reported in the above table (p-value < 0.05) indicates the rejection of the H0 hypothesis at 95% confidence level for each of the models, and implies the use of a constant effect method.

4-5) the first hypothesis testing: In this study, the first hypothesis examines the effect of financial leverage on dividend policy in companies admitted to the Tehran Stock Exchange. The result of its regression is presented in Table 7:

Table 7. The results of multivariate regression of financial leverage and dividend policy

Significant level	T Statistics	Coefficient	Variable name	Symbol	Variable Type
_	_	_	Dividend policy	Y	The dependent variable
0.025	2.648-	1.744-	Alpha	α	Fixed amount
0.001	-2.995	*0.740-	Financial Leverage	X1	independent variable
0.020	2.80	*0.227	size of the company		Control variable
0.094	1.593	0.540	Systematic risk		
_	_	*1.856	Durbin Watson		
0.003	_	3.742	F statistics		
_	_	0.443	Correlation Coefficient		R
_	_	0.197	The coefficient of determination		R Square
_	_	0.196	Adjusted coefficient of determination		Adjusted R Square

Source: Author

*The significance level is 0.05.

As the chart shows, financial leverage (p-value <0.05) has a significant effect on dividend policy. The tensile coefficient shows that the effect of a company's leverage on dividend policy is greater than the size of a company. The variable of financial leverage on dividend policy has a direct, weak, and meaningful impact on dividend policy. Systematic risk as well as its significant level is higher than 0.05, so it has no significant effect on dividend policy. Regarding the amount of F statistics, the fitted regression model is significant, and according to the coefficient of determination, these variables explain 19.7% of changes in dividend policy. The Watson camera statistics are also between 1.5 and 2.5, so it can be concluded that there is no correlation problem between the variables.

4-6) The second hypothesis test: In this study, the second hypothesis examines the effect of financial performance indicators on dividend policy in accepted companies in Tehran Stock Exchange which has four sub-hypotheses.

4-6-1) Test of first sub hypothesis: In this study, the first sub-hypothesis examines the effect of economic value added on dividend policy in admitted companies to the Tehran Stock Exchange. The result of its regression is presented in Table 8:

Table 8. Results from the economic value added regression and dividend policy

Significant level	T Statistics	Coefficient	Variable name	Symbol	Variable Type
_	_	_	Dividend policy	Y	The dependent variable
0.002	2.544	1.765	Alpha	α	Fixed amount
0.040	2.531	*0.657	Economic value added	X1	The independent variable

Significant level	T Statistics	Coefficient	Variable name	Symbol	Variable Type
0.001	2.985	*0.145	size of the company		Control variable
0.213	1.395	0.335	Systematic risk		
_	_	1.775	Durbin Watson		
0.003	_	14.002	F statistics		
_	_	0.668	Correlation Coefficient		R
_	_	0.446	The coefficient of determination		R Square
_	_	0.445	Adjusted coefficient of determination		Adjusted R Square

Source: Author

* The significance level is 0.05.

As the chart shows, economic value added (p-value <0.05) has a significant effect on dividend policy. The tensile coefficient shows that the effect of a company's leverage on dividend policy is greater than the size of a company. The variable of economic value added on dividend policy has a direct, weak, and meaningful impact on dividend policy. Systematic risk as well as its significant level is higher than 0.05, so it has no significant effect on dividend policy. Regarding the amount of F statistics, the fitted regression model is significant, and according to the coefficient of determination, these variables explain 44.6% of changes in dividend policy. The Watson camera statistics are also between 1.5 and 2.5, so it can be concluded that there is no correlation problem between the variables.

4-6-2) **Test of second sub hypothesis:** In this study, the first sub-hypothesis examines the effect of market value added on dividend policy in admitted companies to the Tehran Stock Exchange. The result of its regression is presented in Table 9:

Table 9. The results of multivariate market value-added regression and dividend policy

Significant level	T Statistics	Coefficient	Variable name	Symbol	Variable Type
_	_	_	Dividend policy	Y	The dependent variable
0.000	2.365	1.445	Alpha	α	Fixed amount
0.000	2.118	*0.729	Market value added	X1	The independent variable
0.000	2.254	*0.387	size of the company		Control variable
0.112	1.619	0.431	Systematic risk		
_	_	1.894	Durbin Watson		
0.001	_	6.987	F statistics		
_	_	0.702	Correlation Coefficient		R
_	_	0.492	The coefficient of determination		R Square
_	_	0.491	Adjusted coefficient of determination		Adjusted R Square

Source: Author

* The significance level is 0.05.

As the chart shows, market value added (p-value <0.05) has a significant effect on dividend policy. The tensile coefficient shows that the effect of a company's leverage on dividend policy is greater than the size of a company. The variable of market value added on dividend policy has a direct, weak, and meaningful impact on dividend policy. Systematic risk as well as its significant level is higher than 0.05, so it has no significant effect on dividend policy. Regarding the amount of F statistics, the fitted regression model is significant, and according to the coefficient of determination, these variables explain 49.2 % of changes in dividend policy. The Watson camera statistics are also between 1.5 and 2.5, so it can be concluded that there is no correlation problem between the variables.

4-6-3) **Test of third sub hypothesis:** In this study, the first sub-hypothesis examines the effect of return on assets on dividend policy in admitted companies to the Tehran Stock Exchange. The result of its regression is presented in Table 10:

Table 10. The results of multivariate regression of return on assets and dividend policy

Significant level	T Statistics	Coefficient	Variable name	Symbol	Variable Type
_	_	_	Dividend policy	Y	The dependent variable
0.050	2.405	1.545	Alpha	**α**	Fixed amount
0.003	2.950	*0.747	return on assets	X1	The independent variable
0.003	2.840	*0.245	size of the company		Control variable
0.391	1.257	0.184	Systematic risk		
_	_	1.921	Durbin Watson		
0.001	_	6.950	F statistics		
_	_	0645	Correlation Coefficient	R	
_	_	0416	The coefficient of determination	R Square	
_	_	0.415	Adjusted coefficient of determination	Adjusted R Square	

Source: Author

* The significance level is 0.05.

As the chart shows, return on assets (p-value <0.05) has a significant effect on dividend policy. The tensile coefficient shows that the effect of a company's leverage on dividend policy is greater than the size of a company. The variable of return on assets on dividend policy has a direct, weak, and meaningful impact on dividend policy. Systematic risk as well as its significant level is higher than 0.05, so it has no significant effect on dividend policy. Regarding the amount of F statistics, the fitted regression model is significant, and according to the coefficient of determination, these variables explain 41.6 % of changes in dividend policy. The Watson camera statistics are also between 1.5 and 2.5, so it can be concluded that there is no correlation problem between the variables.

4-6-4) **Test of fourth sub hypothesis:** In this study, the first sub-hypothesis examines. The effect of market value to book value in admitted companies to the Tehran Stock Exchange. The result of its regression is presented in Table 11:

As the chart shows, ratio of market value to book value (p-value <0.05) has a significant effect on dividend policy. The tensile coefficient shows that the effect of a company's leverage on dividend policy is greater than the size of a company. The variable of ratio of market value to book value on dividend policy has a direct, weak, and meaningful impact on dividend policy. Systematic risk as well as its significant level is higher than 0.05, so it has no significant effect on dividend policy. Regarding the amount of F statistics, the fitted regression model is significant, and according to the coefficient of determination, these

variables explain 48/7 % of changes in dividend policy. The Watson camera statistics are also between 1.5 and 2.5, so it can be concluded that there is no correlation problem between the variables.

Table 11. The results of multivariate regression of the ratio of market value to book value and dividend policy

Significant level	T Statistics	Coefficient	Variable name	Symbol	Variable Type
_	_	_	Dividend policy	Y	The dependent variable
0.000	2.558	1.284	Alpha	α	Fixed amount
0.000	2.511	*0.844	market value to book value	X1	The independent variable
0.000	2.829	*0.198	size of the company		Control variable
0.173	0.927	0.726	Systematic risk		
_	_	1.669	Durbin Watson		
0.001	_	2.292	F statistics		
_	_	0.699	Correlation Coefficient	R	
_	_	0.488	The coefficient of determination	R Square	
_	_	0.487	Adjusted coefficient of determination	Adjusted R Square	

Source: Author

* The significance level is 0.05.

6. CONCLUSIONS

The main purpose of this research is studying the impact of financial leverage and financial performance indicators on dividend policy of accepted companies in the Tehran Stock Exchange. The statistical sample is included 102 companies and the research period is from 2011 to 2015. The statistical sample is included 102 companies and the research period is from 2011 to 2015. The dependent variable is included dividend policy, independent variables of financial leverage, economic value added, market value added, return on assets ratio and the ratio of market value to book value, and control variables are included company size and systematic risk. Information gathering method in the Theoretical Foundations section is library method, and data have been extracted in the test section of the hypotheses from the financial statements and the Tehran Stock Exchange website. The data analysis method is also multiple correlation and regression test. The summary of test hypotheses results has been presented in the following table:

Table 12. Summary of test hypotheses results

Test result	Severity of impact	Type of impact	Hypothesis
Confirmation of hypothesis	-0.740	Reverse and meaningful	1. Financial leverage is effective on dividend policy
Confirmation	-	Reverse	2. Financial performance indicators are effective on dividend

of hypothesis		and	policy

Test result	Severity of impact	Type of impact	Hypothesis
		meaningful	
Confirmation of hypothesis	0.857	Reverse and meaningful	1.2. economic value added is effective on dividend policy
Confirmation of hypothesis	0.729	Reverse and meaningful	2.2. market value added is effective on dividend policy
Confirmation of hypothesis	0.747	Reverse and meaningful	3.2. return on assets ratio is effective on dividend policy
Confirmation of hypothesis	0.844	Reverse and meaningful	4.2. the ratio of market value to book value is effective on dividend policy

Source: Author

Table 13. Summary of the results of the control variables

Type of impact	Variable	Row
Direct and meaningful	Impact of company size on dividend policy	1
No effect	Effect of company's systematic risk on dividend policy	2

Source: Author

The important findings of this study can be summarized as follows:

1: The financial leverage on the dividend policy of the companies accepted in the Tehran Stock Exchange between 2011 and 2015 has a reverse, strong and significant relationship. So it can be argued that companies with high financial leverage are less likely to divide profits. The financial leverage reflects the amount of debt utilization in the capital structure, and the amount of financial leverage reflects the company's bankruptcy risk. When the company's financial leverage is high, managers have to abandon the dividend policy in order to save the company from the risk of bankruptcy.

2: The economic value added on the dividend policy of the accepted companies in the Tehran Stock Exchange between 2011 and 2015 has a direct, strong and significant relationship. Therefore, it can be argued that companies that have high economic value added are more likely to divide profits.

3: The market value added on the dividend policy of the accepted companies in the Tehran Stock Exchange during the years 2011-2015 has a direct, strong and significant relationship. Therefore, it can be argued that companies with higher market value added are more likely to divide profits.

4: The rate of return on assets on the dividend policy of the companies accepted in Tehran Stock Exchange during the years 2011-2015 has a direct, strong and significant relationship. Therefore, it can be argued that companies with a high return on assets are more likely to divide profits.

5: The ratio of market value to book value on the dividend policy of the companies in Tehran Stock Exchange during the years 2011-2015 has a direct, strong and significant relationship. Therefore, it can be argued that companies with a high market value ratio are more likely to split their profits. The high financial performance (economic value added, market value added, and return on assets) increases the

liquidity and managers' desire to distribute profits. When the company has a poor performance, managers are forced to refuse to distribute profits among shareholders in order to finance them.

6: The size of the company has a direct, strong and significant relationship with the dividend policy of the accepted companies in the Tehran Stock Exchange between 2011 and 2015. Companies with larger sizes, or, on the other hand, have a large amount of assets, are more likely to distribute profits because they have

sufficient financial resources and finance managers to make sound financial decisions and make one of the right decisions. The trust of shareholders is that the distribution of profits has a great influence on the trust of investors. These results are in line with the results of Chen et al. (2012) and Etemadi, Chalaki (2009) and contradict the results of the research (2012).

6) Proposals

1. According to the results of the research, more supervision should be considered by the board of directors on the performance of the executives of the company in order to maximize financial performance.

2. Managers try to keep the firm's leverage to a reasonable degree, since the high leverage is reflected the risk of corporate bankruptcy and may be affected the company's distribution of corporate profits.

3. Companies and owners of the company will try to increase the amount of assets and capital of the company because in that case, a better company can use future investment opportunities and increase its financial performance, which has a great impact on dividend policy.

4. According to the hypothesis test, it is recommended to investors if the investment risk issue is of special importance to them, they will invest in companies with low leverage.

7) Proposals for future research

1. A study of the effect of industry type on the relationship between financial leverage and financial performance on dividend policy

2. Relationship review between financial leverage and financial performance on dividend policy during the life cycle of companies and divided into high and low growth opportunities

3. Review the relationship between financial leverage and other financial performance metrics such as annual return on equity, market value to book value, and ... with dividend policy

REFERENCES

Ameri, M. (2007). "Dividend Policy and its Effective Factors on Companies Listed in Tehran Stock Exchange and its Relationship with Quality of Profit." Graduate Thesis, Al-Zahra University.

Chalaki, P. (2003). "The Effect of Accounting Profit and Operating Cash Flows on the Dividend Cash Flow in Accepted Companies in the Stock Exchange." Master thesis, Tarbiat Modares University of Tehran.

Chen, Zhilan. Cheung, Yan-Leung. Stauraitis, Aris. Wong, Anita W.S. (2011). Ownership Concentration, Firms performance, and dividend policy in Hong Kong. Pacific-Basic Financial Journal, Vol (13), PP. 431-449.

Habibi, D., Taleb, N., Qodaratollah, Falahat Dost, M. (2012). "Relationship between ownership concentration, financial performance and dividend policy in the capital market of Iran". Isfahan Financial Accounting Research. number 10.

Hajian, N. (2006). "The Effect of Increasing Dividend Profit on Investors' Behavior". Master thesis, Faculty of Accountancy and Management, Allameh Tabatabaei University.

Mashayekh, S.A. M. (2011). "Investigating the Relationship between Ownership Focus, Corporate Performance, and Dividend Policy in Accepted Companies in Tehran Stock Exchange". Accounting and Auditing Reviews; 45: 25-44.

Mehrani, Kaveh. (2004). "Earnings per share, dividend, and investment". Ph.D. thesis for guidance of Dr Naghi Bahram Far, Faculty of Management, University of Tehran.

STUDY OF THE PROPOSED NATIONALLY APPROPRIATE MITIGATION ACTIONS TO REDUCE GREENHOUSE GASES EMISSION IN TEHRAN SEWAGE PROJECT

(A CASE STUDY OF TEHRAN SOUTHWEST WASTEWATER TREATMENT PLANT)

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Abstarct

NAMAs refer to a set of voluntary actions to mitigate climate change and to prevent temperature rise of $2°C$ by 2050,which do not represent a legal obligation under the UNFCC.NAMAs are being done towards sustainable development in environmental, economic, social and cultural aspects in developing countries supported and benefited by knowledge of the world, technology transfer, financing and capacity development in developed countries in the form of measurement ,reporting and verification (MRV) system, and established strategies and national planning framework are the primary driver. This article is contributed to reduce GHG emission by implementing Shahr-e-Aftab wastewater treatment plant which is located in southwest Tehran with an area over 4400 ha, and population of A2O method and effluent and sludge volume production is about 40000000 m^3/year. Biogas in wastewater sector and optimal use of CH_4 and Co_2 because of their potential for energy production in the form of heat and power and the possibility to use renewable energies as an alternative is of the results of this study.

JEL *classification: Q54*

Key word: *Greenhouse gas mitigation, Tehran sewage project, wastewater treatment plant, Shahr-e-Aftab, NAMA, sewerage, MRV*

1. INTRODUCTION

The first goal of wastewater management is to protect environment and provide public health with the use of new methods in the world through municipal wastewater collection and transporting it to the treatment plant for treatment and water reusing. Moreover, reduce of GHG$_S$ emissions and recycling of consumed water resources are also the objectives of this management. In other words, wastewater management, control of methane emissions during the refining process and using CH_4 conversion process to produce power and heat, have replace a way to save energy in the treatment plant. According to this strategy the volume of trapped CH_4 gas is considerable and can be used for renewable energy production with safety to avoid serious risk, which accrediting wastewater management by this way will bring added value.one of the most valuable energy efficiency methods in terms of signing the clean energy project and CER of methane with more than 15 thousand tons in each of the projects is the experience of CDM implementation in modules 5 and 6 of Tehran south WWTP and in modules 1 and 2 of Tehran west WWTP.NAMA debate raised in 2007 for the first time and has had a gradual growth which needs international community negotiation and future talks to be completed. According to INDC contents high portion of energy sector in emission and its reduction is only (not necessarily) of the environmental commitments and legal obligation of industries that is considered as the top priority in strategic planning taking into account the need for optimal use of capitals, natural resources and energy production (INDC,

EPA, 1394). Hence to achieve the national partnership commitment of wastewater and to take advantage of international environment facilities align with participating in $NAMA_S$ preparation, the study of GHG reduction program in Tehran WWTP became the main environmental wastewater plan management challenges which the project of constructing Tehran southwest treatment plant was put on the agenda.

2. MATERIALS AND METHODS

2.1. INTENDED NATIONALLY DETERMINED CONTRIBUTION

Program offered includes conditional and unconditional cooperation in reducing GHG emissions and items related to compatibility, all subjected to removing ecumenical, technological and current financial constraints which due to the long duration of sanctions and restrictions mentioned above, the formation of capacities and organizational structures will be time-consuming process which even with financial and technical assistance make it difficult to achieve the objectives of the program. Islamic Republic of Iran despite the fact that has no participation, is doing its national plans of actions in large portion emissions, vulnerability reduction and compatibility (INDC, EPA, 1394).

2.1.1. GHGs emission reduction potential

CO_2 and CH_4 gases are made of wastewater treatment and are two of GHG_S that are destructive elements in the atmosphere that the amount of each can be calculated based on the selected treatment method. Carbon dioxide is produced in anaerobic units and sludge digesters at high temperature.

2.1.2. Nationally appropriate mitigation actions

The notion of $NAMA_S$ was introduced for the first time at 13th COP which was held in 2007 in Bali. The Bali action plan can be achieved in topics includes mitigation action in developing countries, IT support, financing and capacity building. All this should be capable of measuring, reporting and verification (MRV) (Sudhir, Desgain, 2013). $NAMA_S$ of Iran was presented in climate change meeting (21cop) in Paris.

2.1.3. Methodology development for planning $NAMA_S$

The methodology of study is based on collected information and has stages that are associated with the programs, reference scenarios, a series of NAMA'S objectives that include GHG_S potential calculation, $NAMA_S$ development priorities, creating measuring, reporting and verification methodology and identifying the financing resources. In this study wastewater management is divided into three main sections: Collection, treatment and effluent and subsection are:

A. **Sewerage system** including the main, semi-main and sub-transmission lines.

B. **Treatment**: Treatment plant, equipment and technology applications, human resources, knowledge and skill.

C. **Effluent**: Effluent management, sludge disposal

In developing countries, technology is feasible economically in a small scale and combined wastewater treatment and energy production can simultaneously protect water resources and facilitate accessing to energy resources, and the use of new technologies in the form of power and heat from anaerobic wastewater treatment process in energy conversion cycle has a direct relationship with GHG_S emissions potential reduction and this is another advantage of using technology for methane recycling ,desirable effluent and sludge management. So setting national priorities to address the problem of effluent discharge with utility percent in urban areas due to the pollution caused by factories and industries in project area, can be a help in water shortages and efficient use of water resources within the context of $NAMA_S$, in the vicinity of surface water management, in Tehran southwest region. On the other hand, biogas energy of wastewater treatment is an opportunity to reduce GHG_S emissions and is an alternative for renewable energy.

2.2. TAKE A LOOK AT VARIETIES OF INTERNATIONAL ENVIRONMENTAL FACILITIES

Global Environmental Facility-GEF

Global environmental facility as a financial institution under the management of United Nations, to grant financial aids to developing countries to protect the global environment and promote sustainable livelihood and well-beings, was established in 1991 in local communities. In fact, GFE funds are provided through UN environmental conventions and developed committed members and donors such as the World Bank, multinational corporations, European unions and developed governments and etc. GEF's projects are implemented by governments department such as World Bank, UNDP and UNEP and other law enforcement agencies of the United Nations. Projects of power generation from renewable sources which have the ability to obtain financial assistance from GEF are targeted.

FP: Full-size projects with financial resources more than $2milion.

MSP: Medium-size projects with financial resources less than $2 million.

EA: Enabling activity (with a focus on helping to prepare a general report on the environmental conventions associated with GEF).

SGP: Small grant program to support NGO_s in developing countries. Credit limits of these projects are $ 5000.

GCF: According to article 11 of the convention on climate change green climate fund was established as an operating entity to support projects, programs, policies and other activities in developing countries. GCF's fund will be managed by CEO of GCF.

AF: Adaption fund was founded in 2001 to finance adaption projects and programs in developing countries that are parties of the Kyoto protocol and are particularly vulnerable to the effects of climate change. Adaption fund are provided by the share of revenue from clean development mechanism project activities and other financial resources. This is %2 of GHG_s CER revenue for CDM project activities.

Recent development of transferring resources

9th meeting of the parties under Kyoto protocol thanked the Swedish government financial and assistance fund in Brussels regional investment in Belgium and agreed to help fund by Austria, Belgium, Finland, Germany, Norway and Switzerland government in 2013, that enables the fund to reach its goal of raising funds to provide $ 100 million by the end of 2013.

CDM: CDM is an international cooperation mechanism under Kyoto protocol which provides important resources to achieve sustainable development by promoting investment in environmentally friendly projects in developing countries. According to article 12 of the Kyoto protocol countries of developing countries (non-Annex I) will receive CER by reducing GHG emissions under the CDM projects which can be sold to developed countries (Annex I).

$NAMA_s$: $NAMA_s$ are voluntary actions taken by developing countries to reduce GHG emissions which is not a legal obligation for them and can be done (but not necessarily) with the support of industrialized countries through financing, technology transfer or capacity building. Due to NAMA's flexibility, it has many forms include plans, policies or specific programs or individual projects which is considered in two different forms for $NAMA_s$ projects (Sudhir, Desgain,2013).

A: Unilateral NAMAꜱ: plans implemented by the use of the funds and other internal resources independently in developing countries.

B: Supported NAMAꜱ: Plans implemented by international support and take place through traditional methods such as grant, technical assistance, loans and capacity building programs, but market-based mechanism and sale of certificates of NAMA's projects in the carbon market can be considered as one of the dynamic support mechanism. NAMA's scheme that supported by creating and selling carbon credits of

industrialized countries is generally called supported NAMA. Due to the potential of Shahr-e-Aftab WWTP construction in small-scale in the form of NAMAs scenario it can pave the road map for reducing GHG emission by 7500 Tons/year.

CDM and NAMAs

CDM is one of the flexible mechanisms of the Kyoto protocol. It provides locational flexibility of emissions reduction, hence allowing emissions reduction undertaken in a developing country to offset emissions in a developed country, typically through a trading agreement to match with their obligation under the Kyoto protocol and with the aim of helping developing countries to achieve sustainable development. While NAMAs refers to voluntary activities for GHG emission mitigation in developing countries that are led by local governments and are not subject to mitigation commitment under UNFCCC. And achieving to emission mitigation compared to baseline emissions mode aligned with sustainable development is developed with the aim of reducing GHGs emissions to level below that of BAU until 2020.In general CDM and NAMAs are projects in order to reduce the effects of GHGs and registered project are actually a tool to achieve climatic national objectives or low-carbon strategies, and it could say that climatic national strategies provides an overview while NAMA's registered projects are means to implement this overview in countries. CERs issued by CDM are salable in carbon market and for NAMA, the priorities of the host country, with the possible added benefit of reducing GHGs emissions in the NAMA's policy planning a way will be opened to attract international investment participation or business opportunities created for the private sector motivated by financial interests of investors. Internal resources and international support (e.g. bilateral, multilateral, development banks) considered as its preparation and implementation.

2.3. NAMAS BENEFITS

Economic, social, and environmental effects: NAMA's significant co-benefits have divided it into 3 groups with the use of sustainable development three pillars, which NAMAs evaluation and performing the analysis of reduction potential is beneficial for cost-effectiveness of different projects.

2.3.1. Economic effects

A: Direct effects:

-Power generation: Reduce the operating costs for wastewater treatment process and do not use the AC power distribution network

B: Indirect effects:

-Livelihood: Improve the situation

-Job creation: creation of temporary and permanent jobs

-Revenue: Turning a waste product into a source of income

-Agricultural: production of bio-organic fertilizer used in agricultural production

-Cost reduction: in two parts, the cost of WWTP for power and the cost of effluent for environmental applications.

2.3.2. Social effects

-Reduce odors from sewage

-Enhance health and welfare in residential area

-Illustrating the ability of national-regional society by using the innovation

2.3.3. Environmental effects

-Reduce water pollution of municipal sewage, especially through open channels in the region (which is the main cause of pollution in studied area)

-Use less chemicals in needed water treatment

-Renewable energy production: As an alternative to fossil fuels

2.4. THE PROPOSED PROGRAM OF NAMA IMPLEMENTATION

In accordance with the strategic plan and Tehran sewage implementation activities project roadmap at the national level which it usually covers 5-10 years NAMAs framework in these projects is the construction of WWTP which is established with the aim of institutional framework for sustainable development and has essential convergence. Now we can use Tehran sewage project management policy based on the development of CDM projects with a focus on the process of wastewater treatment and sewage discharge from industries in Tehran and efforts to promote innovation and creation of advanced WWTP and reduce GHG_s emissions more than CDM projects, long time in an effective environment. Independent production of GHGs and released GHG_s of wastewater, lack of a transparent value chain, vast geographical area and integrated wastewater treatment process, make NAMA project more preferable than a CDM project. Therefore, wastewater treatment process at the Shahr-e-Aftab WWTP is shown in figure 1. Which recommendation technology also for NAMA like the previous experiences including the use of aerobic and anaerobic digester of treatment process in sludge treatment processes for energy production from biogas and slurry rich in nutrients. Aerobic oxidation cause reduction of organic load and nutrients in wastewater and production of nutrient-rich sludge that enhance use of anaerobic digester sludge in biogas energy production so that it can produce 2 kWh power. So, the key indicators that will lead to the estimation of GHG_s emissions include:

-Calculation of reducing methane emissions; Ton

-Biochemical oxygen demands

-Chemical oxygen demand from wastewater

-Percentage of methane absorption as biogas or its conversion (Co_2, H_2O)

Generally, GHG_s calculation's standards and protocols can be an instruction, based on the development of special NAMA project objectives. GHG_s as CH_4, $N2O$, Co_2 are entering into the WWTP from collected municipal treated wastewater that is done under aerobic and anaerobic processes. And methane is commonly expected to be released in sewage system from produced sludge which this emission is time and temperature-dependent in treatment plant system. And sludge digestion will also increase methane emissions. However, the measurements show that the nitrification process in wastewater treatment may be a dominant source of $N2O$ (UNDP (2006).

2.5. MRV OF NAMAs

In order to control the planned activities of GHG reduction, monitoring plan is done through management systems that include measurement, and reporting. Enough documentation and information accuracy of any activity with relevant data are of requirement of this section to validate certified of international references .Although monitoring is not listed as a requirement of MRV, it can naturally be an integral part of NAMAs management reporting returns to relevant authorities by measured information details with a transparent and standardized principles and reflects the commitment of parties under the convention on climate change and development activities relevant report. Reporting happens through national communications under the convention. The purpose of verification is to ensure the accuracy and reliability of reported information or the procedures used to generate that information. According to NAMAs objectives ,methods of study should be proportionate and flexible and the ability of NAMAs project to support policies, programs and integration of mitigation options in the context of NAMA comes true and based on sustainable development policy in term of environmental, economic and socio-cultural and restrictions of available information at the beginning of the project ,paying attention to the financial plan and action plan regarding the implementation of the projects which can extend feasibility and true potential ,is required (Olsen et al., 2015).

2.6. OVERVIEW OF THE STUDY AREA

The coverage of Shahr-e-Aftab WWTP is about 4400 ha and is located in the southwest of Tehran which has been planned in two 25-year periods.(13 years(1397-1410) and 12 years (1410-1422)) population plan are estimated to be about 714,000 people that in addition to residential areas, it covers the sewage of Tehran southern areas and wastewater master plan of studies abroad(Residential and industrial areas of Chahardangeh city).The population projection is calculated in 5-year plan period and using the rate of growth(declining) and the percentage of population density (person per hectare) to protect population at the end of the project. This treatment plant will be built in two operational modules that the first modules have input with a capacity of $112,000m^3$/day. Basics of qualitative and quantitative of produced wastewater in this treatment plant is presented in table 1. Activted sludge process with the ability of simultaneous removal of nitrogen and phosphorus of A2O is proposed for wastewater treatment of this WWTP (WWTP- Pars Consult Co. (1394). Despite the use of treated wastewater for agricultural irrigation is significant from the economic, social and environmental aspects, development of dispersed industries in this region has prioritized the discharge of effluent to surface water or underground aquifer feeding (injection into underground aquifers) According to the standard-wastewater consumption. Minimum required efficiency of wastewater treatment is based on user-defined treated wastes and it is in accordance with the use-related standards. The minimum removal efficiency of EPA pollutants is stated in table 1. (WWTP- Pars Consult Co. (1394).

Table 1. Minimum removal efficiency of wastewater pollutants in Shahr-e-Aftab WWTP

Parameter	Unit	Sewage quality Effluent quality	Removal
BOD_5	mg/lit	292	90
COD	mg/lit	525	89
NH4	mg/lit	44	98
TN-N	mg/lit	57	89
TP-P	mg/lit	13	54

Source: Author

2.7. THE BIOGAS PRODUCTION AND COMPOSITION

Assuming biogas production of 20 liters per day per person. The total amount of biogas produced at design conditions is projected about 14280 m^3/day and the amount of biogas produced at digesters includes % 60-70 methane and % 30-40 CO_2 by volume which is usually includes minor amounts of H_2S,N_2,H_2 in biogas .The Biogas produced in anaerobic digesters can be used in various ways including power production, heat, combined heat and power at plant sites which the transfer of biogas into the gas network and storage of biogas in cylinders and presenting it to consumers is also considered as suggested sources of revenue(with less priority because of the conflict with the type of sewage project activities). Since the operation of the treatment plant needs a considerable amount of energy as heat and power, combined heat and power production at the treatment plan location is a more convenient option to use biogas. The production power will connect to the treatment plant power network and will be used to power the various units. The produced heat will be used to warm the digester sludge and to supply needed heat in different parts of treatment plant. It should be noticed that biogas digester output is not usable for CHP system due to presence of foreign materials such as foam and water particles and impurities such as H_2S.Accordingly it is necessary to refine biogas before using it. Different equipment can be used such as foam trap, gravel filter and ceramic filter to remove particles and foam from biogas. Removal of sulfur compounds is carried out in the biological desulfurization unit. Also for continuous operation of the CHP system and to adjust required pressure, the use of a biogas storage tank is essential. For the safe disposal of

the biogas in an emergency situation or if CHP system become out of service a full flaring system should be used. Also to increase biogas pressure to the required extent of CHP system a suitable **blowers'** system should be installed after the storage tank. And finally for simultaneous production of heat and power it is required to obtain and install a CHP system with a capacity appropriate to the project. Figure 1 is a schematic of the project.
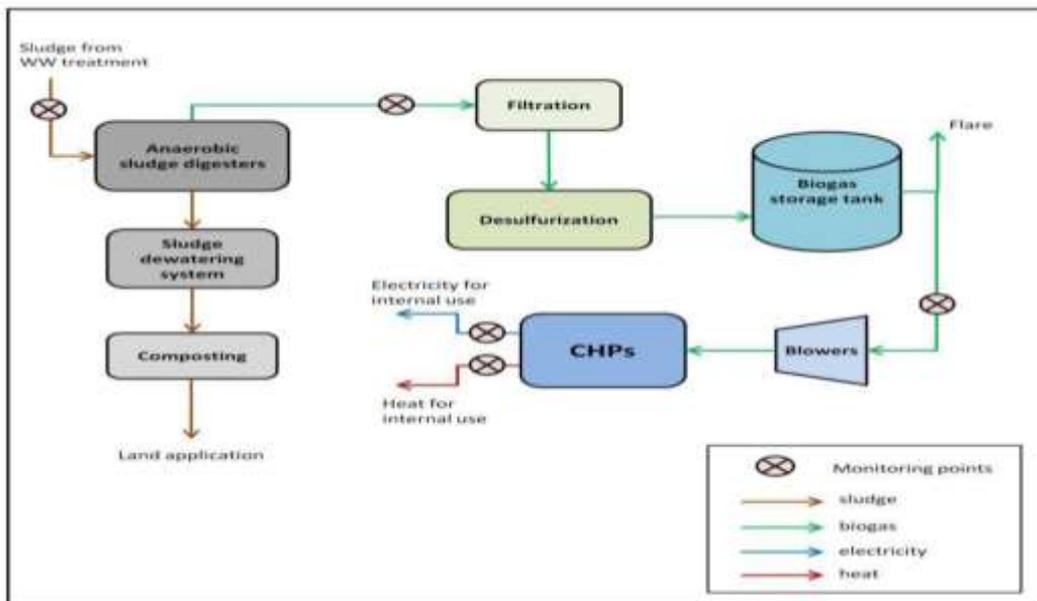
Figure 1. Diagram plan of biogas collection and heat and power production

2.8. CALCULATING THE RATE OF HEAT AND POWER PRODUCTION

The generation of power and heat in this plan and its daily and annual production can be estimated by having an approximate amount and composition of produced biogas and CHP electrical and thermal efficiency. Table 2 assumptions are used to perform this calculation. In these calculation it is assumed for safety factor that biogas production in real terms is equal to 80 percent of designed form that is 11.424 m^3/day.

Table 2. Reqiured assumption for heat and power calculation

Title	Unit	Amount
Biogas production rate in real condition	Nm^3/d	11424
CH_4 concentration in Biogas	Volume percentage	65
CH_4 heating value	Kj/Kg	50010
CH_4 density	Kg/Nm^3	0.716
CHP electrical efficiency	%	42.3
CHP thermal efficiency	%	47.5

Source: Author

Table 3. Rate of heat and power production

Title		Unit	Amount
Power	Actual power production	Kw	1301
	Daily production rate Annual production	Kwh Mwh	31.242 11.403
	Actual power production	Kw	1461

Title		Unit	Amount
HEAT	Daily production rate	MJ	126297
	Annual production	GJ	46098

Source: Author

2.9. ESTIMATION OF PROJECT REVENUES

Project income is divided into two parts:

- heat and power production revenue

- GHG$_s$'s CER selling revenue

This section presents an estimation of revenues

2.9.1. Estimated plan revenue from heat and power production

As previously mentioned, due to energy-intensive process of wastewater treatment produced power and heat will be used inside the treatment plant. So this plan will reduce buying electricity from the national grid, using of fossil fuels and energy costs. This energy cost reduction can be considered as income of this plan.

    A.   Reduce the cost of electricity

Given that the average electricity tariff for WWTP is equal to 213 Rials(with an increase of %20 in summer),the plant's annual power cost reduction in the project will be :

    B.   Reduce fuel cost

Assuming that the calorific value of per cubic meter of gas is about 35000KJ, the reduction of natural gas consumption in the project will be:

Given that the average rate of natural gas tariff for WWTP is about 1000 Rials reducing the cost of gas in the treatment plant in this project per year will be:

2.9.2. Estimated revenue from CDM projects

The plan has two ways to mitigate GHG$_s$ emissions.

A) Emission reduction related to avoid CH_4 emissions into the atmosphere, given that methane global warming factor is 21 times more than CO_2, emission reduction from this part is 40.725 tco$_2$e/y.

B) Emission reduction related to the production of heat and power from biogas (renewable source of energy) and stop CO_2 emissions resulting from fossil fuels. The generated power in this project will be used as an alternative to the used national grid in treatment plant. Therefore, it is necessary to specify the coefficient emission of CO_2 per unit of power produced in national grid. This amount for Iran network power is about 640 g/kWh. So the emission reduction resulting from power generation in this project will be:

CO_2 coefficient emission of natural gas which is equal to 56.1 Ton/TJ can be used to calculate emission reduction of CO_2 (produced heat from biogas).

Summary of GHG$_s$ emission reduction calculation in this project is presented in table 4.

Table 4. GHG$_s$ emission reduction in this project

Title	Emission reduction(tco$_2$ e)
-Emission reduction by preventing CH_4 emission into the atmosphere	40725
-Emission reduction by generating power of biogas	7297

Title	Emission reduction(tco$_2$ e)
-Emission reduction by generating heat of biogas	2586
Total	**50158**

Source: Author

If \$3 is taken as the value of any CER, yearly revenue from CDM projects is about \$150.477 which is equal to 5.266 million Rials. Revenues from this project are given in table 5.

Table 5 Project revenues

Description	mRls/year
Reduce the cost of buying power from the grid	2.550
Reduce the cost of purchasing natural gas	1.317
CER selling	5.266
Total	**9.133**

Source: Author

2.10. SUSTAINABLE DEVELOPMENT ALIGNS WITH NAMAs A CHANCE TO COOPERATE IN THE SHAHR-E-AFTAB PROJECT

Keeping the average global temperature rise below 2 ℃ and GHG$_s$ emission mitigation in atmosphere should be done before 2020 and this means that the emission must be reduced to half of current levels by 2050.This requires extensive cooperation of both developed and developing countries, as developing countries should define basic infrastructure and social system to develop emission reduction of local plans and consider the attracting investment opportunities ,low-carbon economy and transfer of technology from developed countries, In the context of their activities. And the only way to achieve this goal will be planning of emission reduction mechanism with bilateral or multilateral national international cooperation and remove the needs of technical, financial and capacity-building development. NAMA except for GHG$_s$ emission reduction has a shared goal with sustainable development that is defined in multiple dimensions of economic, social and environmental benefits. Saving energy and consequently increase of revenues and welfare, general health improvement, job creation, reducing air, soil and water pollution, raise public awareness and capacity building, all can be of the objectives of this project. According to NAMA objectives the project method is appropriate and flexible and given that the ability to adjust NAMA project for southwest WWTP construction is to support policies, programs and integration options to reduce environmental pollution. In NAMA it is also intended for policy program of sustainable development in environmental, economic and socio-cultural dimensions considering the limitation of the information available in the region to provide reference scenario. It is necessary to pay attention to financial and action plans in relation to the implementation of the project which can develop the feasibility and true potential of the project. Shahr-e-Aftab NAMA project is more likely to success being in a small scale in relation to management policy and alignment with the grand strategy of wastewater project management and national weather policies. It should also be noted that in addition to the alignment of the project with priorities in national development plans, it has high capacity and potential for NAMA implementation beside up taking by stakeholders.

3. RESULTS

Proposed NAMA in this project looking to increase productivity and added value in the vision treatment. By creating an integrated wastewater treatment process (through aerobic and anaerobic digestion), so that trap the GHG$_s$ in the form of biogas and finally convert it to power and heat using a generator for domestic use of treatment plant in volume of biogas produced. National appropriate mitigation action in a small scale can facilitates the following objectives:

-Installation of wastewater treatment technology infrastructure (especially Tehran decentralized treatment plants)

-Marketing and sales of GHG emission reduction (The most important goal)

-Marketing and sales of value-added products (Bio-fertilizer, biogas or power, recyclable waste)

-perform annual and biennial MRV report, monitoring, control and improvement of quantity and quality of national program (Bottom-up approach)

REFERENCES

Basharat, H. B. (2013). Alternative Energy Development Board, Ministry of Water & Power, Pakistan - Waste Sector NAMA

INDC, EPA, (1394)

NAMA (2013). Seeking Support for Implementation Integrated Bio-Wastewater Treatment for agro-process wastewater, Moses Masiga

Olsen,K. Bizikov, L.,Harris, M., Boodoo, Z., Lebrun,F.,Bakhtiari,F.(2015).Framework for Measuring Sustainable Development in NAMAs- UNEP DTU

Sudhir, S., Desgain, D. (2013). Understanding the concept of Nationally Appropriate Mitigation **Actions",** , UNEP Riso Center

UNDP (2006). IPCC Guidelines for National Greenhouse Gas Inventories WWTP- Pars

Consult Co. (1394), The first phase of construction project of Shahr-e-Aftab

THE ROLE OF SOCIAL NETWORKS IN EMPOWERING TEACHERS OF CONSERVATORY SCHOOLS OF DISTRICT 11 OF TEHRAN

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Abstract

Today empowerment considered as a useful means of improving the quality and increasing the effectiveness of employees and organization change management thinkers believe that empowerment is a response to the critical need for modern management. On the other hand, with the development of new communication technologies, social networks have emerged. These sites operate on the basis of the formation of online communities and the possibility of creating a new way of communicating and sharing content. This study examines the role of social networks in empowering school teachers in District 11 of Tehran. The statistical population of District 11 of Tehran Conservatory teachers, including 406 people who use the sample, 198 subjects sample were selected by using cluster weight. Field measurement variables was performed using a 30-item questionnaire. The validity of the method validity and reliability by Cronbach's alpha (0.7316) was confirmed. For statistical analysis of the correlation hypotheses and regression in SPSS statistical software was used. Based on the model, a main hypothesis and five minor hypotheses using statistical tests were evaluated. In statistical analysis, a secondary hypothesis was rejected other hypotheses have proven that reflect the influence of social networks in the empowerment of teachers. Finally, proposals on the basis of this review was to improve the ability of students.

1. INTRODUCTION

The main reason for the rapid changes in the global economy creating new methods, at work, so as to keep alive their organizations in today's turbulent economic competitiveness are trying. Constant development of technology and the changing demands of the major causes of these changes. To stay competitive, organizations need to be flexible policies whereby personal responsibility and creativity is encouraged and allows a person to be responsible in front of their duties. In such circumstances, any of the employees, are managers who expected to engage themselves fully involved in the decision-making of the organization. So, empowerment of the main themes of a more competitive organization. Empowerment is an important strategy for the development and integration with external changes (Jaafari, Nouri, 2014).

On the other hand, outstanding organizational performance cannot be achieved through the efforts of ordinary employees. One of the reasons large organizations is that they have staff is making every effort beyond his official duties. This means that they have staff necessary capabilities and dedication to the organization, are self-reliant and have necessary competencies. All this called empowerment (Angodu, 2008).

Today empowerment as one of the most useful tools improve the quality of workers and increase organizational effectiveness is considered. Scholars change management and organizational development, know human resource empowerment as a strategic impact on performance and improvement of human

resources they believe that Empowerment of human resources is one of the new age attitude which today is used by organizations as a response to the critical need for modern management (Kinla, 2008).

According to the new strategy of educational system, many questions come to mind is a researcher, including the teachers' use of technology in teaching and learning? Do the methods enable teachers to use these technologies in the area of learning has been taken? Do students benefit from learning effective? That should be all seek in the capabilities and skills of teachers (Nassiri et al., 2012).

Despite modern communication technologies, other actors in the international system can not only governments and non-state actors, such as, multinationals, international organizations and non-governmental not know the mechanism of new technologies communication such that even as an influential actor in the international system today can play role (Toloe, 1393).

Social networks known as social media that it is possible to achieve a new way of communicating and sharing content on the Internet. Today, millions of Internet users, already have hundreds of different social networks are part of their daily online activities on the Internet at these sites are doing (Mohkamkar, Hallaj, 2014).

Today, some problems in the area of human resources, is attended to the education is suffered, most of them can be categorized as follows:

• **Check technical manpower without learning experience**

• **Technical knowledge about the school's lack of c**ompliance with industry needs

• **premature withdrawal of experienced forces on the basis of early retirement**

• **No connections to share capabilities and knowledge of people with experience in the educational** environment.

Therefore, in this study, the impact of new social media, is very attractive and full contact as technical experts, professional work and knowledge of one of the districts of Tehran directly with the problem of organizing the workforce in **school's** due dates and the central area of high sensitivity for secondary department in Tehran, studied and explored. So the main question is: "Is the use of social networks empower high school teachers in District 11 of Tehran?"

2. LITERATURE REVIEW

2.1 SOCIAL NETWORKS

Development of new technologies in the field of electronics and computers in the past few decades, leading to the emergence of a variety of electronic and computer industries and applications including Internet, mobile, satellite and computer games-in the world. Internet is a series brought a database that provide information on their various individual and collective human beings and spread each day (Bartholomew et al., 2012).

ICT in how the people nearby space, real and communication experience, has been revolutionized. These technologies affordable access to anything and anyone in the world could have made. These technologies, literally allow face-to-face interaction in cyberspace rebuild and to participate in various types of social connections (Alsna, 2009) .

In recent years the popularity of online social networks has increased to unprecedented levels. So that hundreds of millions are the most popular. The benefit success within the community of a network was established and the number of studies and research to understand these networks has increased. But very limited extent access to all users of the largest online social networking adequate information about the user's perspective and how their relationship is difficult (Gujak, 2010).

Internet users are social networks, virtual communities, a high profile in recent years in the internet websites and a significant portion of the user's activities in its place. Four social network Twitter, Facebook, LinkedIn and MySpace are the most popular virtual networks with global scope. Apart fro m this particular communication networks and software for smart phones that have been created such as WhatsApp, Viber, Tango and telegram (Bartholomew et al., 2012).

According to research Panahi et al. (2012), the use of social networks is based on the five components of "social interaction, share experiences, informal relationships, observations, mutual trust". We continue to investigate each of these dimensions.

* **Social interaction**: how to make connections between members of a community social interaction and indicate the scope and depth of relationships between individuals. According to surveys, social interaction in modern societies are heavily influenced by social networks (Panahi et al., 2012).

A feature of the social network, change the shape and nature of communication discourse. At the end of the first decade of the twentieth century, social networks such as Facebook and Twitter spread have changed communication among people. According to experts, communication, social networking more than ever reduce face to face relationships, in comparison help the spread of digital and virtual relationships (Amirpoor, Garivani, 2014).

* **Share experiences:** social networks favorable environment for participation in society, symbolic relationships, rediscover and redefine identities, social, cultural, political, religious and free from any limitations and factors suppressor through providing virtual interaction and symbolic (Amirpoor, Garivani, 2014).

Social networks can provide people need to exchange knowledge and experience. Facebook was one of these networks with high importance to Iranian users and most view of it is perhaps because he knew that could share experiences of subjective and objective conditions for the restoration and re-creation of identities in cyberspace. The public realm of cyberspace means the formation of areas to develop and strengthen relations and relations with each other or in other words the distribution arena, shaping, strengthening and clarification of ethical norms and rules (Amirpoor, Garivani, 2014).

* **Informal relations**: the social network is a virtual space that allows people to live in a new society, yet the benefits of community (congregation) is used. Where face to face relationships, empathetic and emotionally persuasive placed side by side relationship, create a relationship between physical relationship outside the framework (Amirpoor and Garivani, 2014).

Most sociologists have tried to defend combined society and community features. For example, Habermas's public sphere to the public sphere or field which he reads, revived in modern times and in places like coffee shops, a reading and discussion circles is manifested. This means social networks are the congregation in modern condition and an intermediary between society and the modern governs that are involved in public affairs and lead to social relationships and pushing it into informal relations (Amirpoor, Garivani, 2014).

Observations: social networks, in addition to the reference provided many social and cultural needs of its members. This makes it possible for members providing at the same time, social activities and other community members in the virtual communities (Panahi et al., 2012).

Always finding the first step in the learning process and people to see through behavior and utterances of others, form norms and their mental framework and are judging others. Observations in real and virtual social networks are effective on all behaviors in the network (Panahi et al., 2012).

* Mutual trust: social networking sites as a source for determining the level of social capital can be measured. Trust as a cornerstone of social capital and social capital is the determining factor. The mutual trust in online social networks can be an important factor for the network and how to use it. The extent of the areas between individuals and groups and associations between them, strengthen the spirit of solidarity and can help trust in the community. On the other hand, the

more the trust of others is more, the wider the relationship between them (Qavanloo Qajar, 2011).

2.2. EMPOWERMENT

Life and survival of any organization greatly depend on the abilities, skills, expertise, knowledge and expertise of human resources, managers of organization and the people are more prepared better able to contribute in improving the efficiency of the organization. Today, all organizations are affected by some form of rapid technological progress, to maintain its life have to change in line with the progress in all aspects of organization. Infrastructure and the starting point of all this change, is empowering and employing of human resources (Akbari Languri et al., 2013).

Contemporary organizations away from traditional hierarchical structures and move towards a flexible and dynamic structures have reached the conclusion that human relationships and social dynamics has the utmost importance. In the meantime, many organizations, the solution detects and empowerment programs have tried to correct the variables affecting individuals, education powerful staffs is their most important priority. Employee empowerment can be an effective strategy and performance improvement of human resources to be introduced. Empowerment as a mechanism to achieve cooperative management, the provision gives the responsibility to the teams and individuals. Strength training and experience-based knowledge and thinking can be effective in the empowerment process and promote a culture of learning play an important role. Employee involvement in business affairs and allowing them to participate in management processes, attention to the creativity and engagement, innovation, development and expansion of deserving individuals and team and qualified in many aspects of their performance leads to employee satisfaction and organization (Blanchard et al., 2002).

Given the importance of human resources as a factor of development agencies and appropriate manpower shortage and taking into account the need for organizations to efficient human resources, organizations to gain competitive advantage against competitors and customer satisfaction are forced to pay attention to the empowerment of employees. These are issues that in most cases they ignore serious problems for organizations to have delivered there. Employees who see themselves as a business owner will need to feel more connected with the organization. Many of the organization's human resource problems through clear and explicit attention to these issues will be resolved (Akbari Languri et al., 2013).

Today empowerment as one of the most useful tools improve the quality of workers and increase organizational effectiveness is considered. Scholars change management and organizational development, human resource empowerment as a strategic impact on performance and improvement of human resources has been introduced and believe that the empowerment of human resources is one of the new age attitude that today is used by organizations and a response to the critical need for modern management (Nassiri et al., 2012).

Empowerment perception of the presence or absence of empowerment and learning overall conditions of employees in organizations that reflect the psychology interpretation or employees, is shown. In fact, empowerment perceptions and attitudes of employees in the workplace, colleagues, organization and institutional position in its post and staff participation in organizational decision-making and delegating work refers that acceptable results in order to increase productivity and efficiency work (Batangar, 2007).

Empowerment also includes encouraging and developing their skills for relying on respectively. Empowerment is an opportunity for independence, a sense of confidence, to achieve perfection and create opportunities for increasing of capabilities and skills of individuals. Empowering the authority to make decisions from the top down in the organizational hierarchy, resources and information for employees develop their activities and create links between staff participation in the organization focuses structure (Sumi, Sherikomar, 2008).

Empowerment, is learning of how to work with others that rely less on the director and the function of the authority, resources, information and responsibility (Newsom et al, 2008):

$$Empowerment= F (A, R, I, A)1^{1}$$

Enabling is new and effective technique for improving organizational productivity by utilizing the staff. Staff through knowledge, experience and motivation lies the strength and empowerment in fact free up this power. The use of human resources potential is huge advantage for any organization. Studies show that people with strong capital are great for organization and management. Because they are self-directed, reliable and ability to adapt to internal and external changes (Akbari Languri et al., 2014).

Empowering is a state of intrinsic motivation in relation to the job definition that includes four internal thought and its expression of people's willingness to work roles. The internal assumptions include: means render, competence, effectiveness and choice (Newsom et al., 2008).

The aim of empowerment is that the adoption of elements of the environment, knowledge, perceptions and features of individual employees, transferred power to them and their potential to the actual. The purpose of empowering of their employees is that they know the owner and the need for belonging and affiliation with all understand (Plate et al., 2011).

According to the study of Jaafari and Noori (2014), empowerment is formed of the five components "significant, competence, independence, effectiveness and trust in others". In continue we define and explain each of these components:

*Meaningful: significant chance that people feel important and valuable pursue career goals, they feel that moving on the road that their time and energy is worth. Meaning is the value of internal individual career goals and interest in the job. Significant correlation between job requirements and beliefs, values and behaviors.

*Competence: competence refer to the degree that a person can do the job with skill and successfully. Empower people not only feel worthy, but feel confident that they can do things with sufficient. They feel their personal excellence and believe that can meet the challenges of a new way to learn and grow.

*Self-Determination: Self-Determination or choice capability means freedom and independence in determining activity refers to carry out the job. Experience the feeling of independence means the choice made at the beginning of activities and personal activities. Independent activity, including that associated with a feeling of freedom and choice experience. Self - Determination is a type of psychological need.

*Impact: impact or effectiveness or accepting personal consequences where that person can affect the results of strategic, administrative and operational jobs may be affected. Inability to influence the opposite effect. This dimension refers to the degree to which behavior is seen in the implementation of different career goals, this means that the expected results have been achieved in the business environment.

*Trust in Others: self-interest, competence, openness and trust in others is concerned. Empowering people with a sense of confidence and know that they will be treated fairly and honestly, they are confident that their owners with a neutral authority will behave, in other words, trust means having a sense of personal security (Jaafari, Nouri, 2014).

3. A REVIEW OF PREVIOUS RESEARCH

Abdollahyan and Hasheminia in 2015 with the aim of providing employee empowerment model on the verge of retirement in order to optimize retirement in Educational system of Shahrood did a study. The results showed that psychological factors, financial factors and economic, social and family factors as well as physical and spiritual factors on empowering of employees nearing retirement after retirement has a significant effect.

Authority * Resources * Information * Accountability [1]

In 2014 Naderi Behdani and Noe Pasand Asil in a study survey field management factors such as age, education and work experience on empowerment and innovative behavior was investigated. According to the results obtained with the exception of the education factor, other factors may not significantly in empowering disorders or innovative behavior. Due to the low scores at the end of their empowerment and employees' innovative behavior and due to environmental changes and increasing global competition suggested that organizations implement two plans to increase these variables.

Wilcox in 2014 in an article entitled "Social engineering through social networks: a review of corporate security." survey the amount of security exploits on social networking sites by using social engineering. At first he used social engineering techniques to define and then to evaluate its impact on the organization's information security. His three areas of information threats to people, processes and technology division and explanations provided about any threat.

In 2014 parsley and light the relationship between knowledge management and employee empowerment in Computer Research Center of Islamic Sciences began. The results are positive relationship between knowledge management and aspects of empowerment (includes a sense of meaning, feeling independent, feeling the impact, a sense of trust in others) stated that, while the relationship between knowledge management and competency feel rejected. Moreover, Friedman test for ranking the importance of hypotheses and questions were used. In the end, their recommendations based on the results provided to managers and staff, as well as future studies.

4. CONCEPTUAL MODEL RESEARCH

The model used in this study, a compilation of models presented in the study of Jaafari and Noori (2014) and Panahi et al. (2012). According to the study, Jaafari, Noori (2014), empowerment of the five components of "significant, competence, independence, effectiveness and trust in others" have been formed. Also according to the study Panahi et al (2012), the use of social networks of the five components of "social interaction, share experiences, informal relationships, observations, mutual trust" has been formed. Thus, the concept study will be as follows:
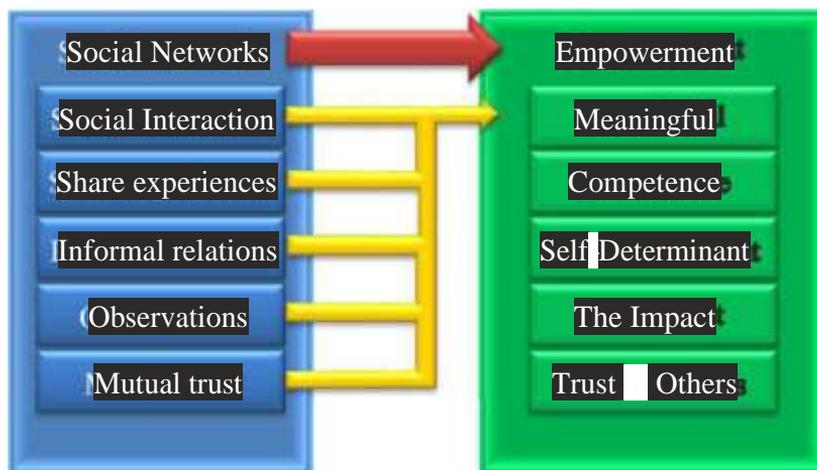
Figure 1. Conceptual model of study

5. RESEARCH METHODOLOGY

This is an applied research. The reason for this, it is to verify the relationship between the dependent and independent variables of research and practical recommendations. The study also included research approach, the class is described as describe and explain relationships between variables pays to be able to

determine the outcome of the investigation. Finally, the development of theoretical and conceptual foundations of this study, long-term applications of this research was to imagine. That's why researchers from the survey that the most common form of research in the humanities, has been enjoying.

The population in this study included all high school students in District 11 of Tehran in the school year is 2015-2016. The method used for sampling, the sampling method was used to determine the total number of samples of Cochrane. Therefore, the sample size is 198. Also, due to the existence of 14 schools in the district 11 in Tehran, the distribution of the sample by weight will crowd each school.

In this research, library resources and documentation to collect scientific data library as well as regular questionnaires or containers to collect field data is used. The main tool for data collection, is questionnaire with Likert response scale with 5-valued. Each questionnaire consists of two parts: descriptive data (demographic) and analytical (closed questions).

Its validity was confirmed by using face validity. For this, ten teachers and technical experts were consulted regarding the validity of the questionnaire that endorsed its validity. Its reliability by using Cronbach's alpha was confirmed.

To check analytical test Klomogro - Asmirinov to check the normality of variables, and Pearson correlation and linear regression analysis using SPSS software has been used to examine the relationships in the model. The Excel software was used to calculate descriptive parameters.

6. RESEARCH FINDINGS

Descriptive statistics collected field data showed that the majority of students responding to the questionnaire, are in the age range 30 to 40. Also, 58% of teachers were male and 42% were female. Also about 49 percent ha had bachelor's degree and most frequently found in this respect.

But in inferential statistics, hypothesis (a hypothesis and five hypothesis) were studied. Table 1 shows the results of testing with a confidence level of 95% (significantly lower coefficient of 0.05) is shown:

Table 1. The results of analytical tests

Result	Significant coefficient	Explanation	Hypothesis
Confirm	38%	Between social interaction in social networks and empowerment of teachers there is a significant positive relationship.	First subdivision
Confirm	30%	Between share experiences on social networks and empowerment of teachers there is a significant positive relationship.	The second subdivision
reject	102%	Between informal relationships on social networks and empowerment of teachers there is a significant positive relationship.	The third subdivision
Confirm	27%	Between observations on social networks and empowerment of teachers there is a significant positive relationship	The fourth subdivision
Confirm	29%	Between the mutual trust on social networks and empowerment of teachers there is a significant positive relationship	The fifth subdivision
Confirm	20%	Between the use of social networks and empowerment of teachers there is a significant positive relationship	The original

Source: Author

7. CONCLUSIONS

According to a survey conducted in the previous section, five of the six hypotheses hypothesis (ranging from four main hypotheses and a theory) was approved. Accordingly, it can be concluded that the use of social networks to empower teachers (teachers) School of District 11 of Tehran is effective.

In fact, from the perspective of teachers, increasing the use of social networks, enabling them to improve helps. The following practical suggestions for improvement in empowering school teachers are offered:

• **I**nstitutionalization of teaching and learning through social networks

• **Develop communication channels between teachers and students to communicate**

• **Providing pages on social networking sites to join the teachers and the students in them**

• **T**he freedom and authority to teachers

• **Particip**ation of teachers in decision-making

• **Open horizontal communication among teachers through social networks**

• **Increasing the employment relationship between teachers via social networks**

• **Create a culture of consultation and exchange of ideas among teacher**s

• **Team learning skills through participation in social networks**

• **Providing a virtual conference with one of the teachers' responsibility to others through social networks**

• **Preparation of pages on social networks as questions and answers between teacher**s on teaching techniques and scientific questions

• **Preparation of pages on social networks between teachers and students for questions and answers**

• **Evaluation of teachers' activity on social networks and consider compensation for those who have made** significant and useful activities

• **Providing a virtual conference with one of the teachers' responsibility to others through social networks**

• **Inviting teachers to participate in social networks related to work**

• **Considering incentive programs for the educati**onal participation in social networks.

REFERENCES

Akbari Languri, J., Abedini, M., Shaaban, T., Habibullah Mehdi Zadeh, M. (2013). The role of knowledge management in empowering school principals, conference management, challenges and solutions, Shiraz, 2013.

Bartholomew, M. K., Schoppe-Sullivan, S. J., Glassman, M., Dush, C.M. K., Sullivan, J. M., (2012). New Parents' Facebook Use at the Transition to Parenthood, Family Relations, Vol.61 No.3 p.455-469.

Blanchard, K-., Randolph, A., Carlos, J. (2002). Management of employee empowerment, Translator: Mehdi. Irannejad, managers press.

Mohkamkar, I., Hallaj, M. M. (2014). cyberspace, dimensions, features and functions in the areas of identity, with a focus on social networks, knowledge Magazine, Issue 201, pp. 63-82.

Naderi, B., Fatemeh, N. P. A., Seyed, M. (2014). Effects of age, education level and work experience by enabling employees and their innovative behavior in case of fire and safety services in Rasht, the first National Conference on Research and Development in the Third Millennium, Ali Abad Branch, Islamic Azad University, Aliabad Katool Branch.

Panahi, S.,Watson, J., Partridge, H. (2012). Social Media and Tacit Knowledge Sharing: Developing a Conceptual Model, World Academy of Science, Engineering and Technology, vol. 64, pp 1095-1102

Qavanloo Qajar, M. (2011). Theory of Media, Magazine Book of the Month, No. 160, pp 48-51

Sumi, S.J., Shreekumar K.N., (2008). Influence of locus of gontrol, Job characteristics and superior-subordinate relationship on psychological empowerment, Journal of Management Research, Vol.8 No3, pp. 147-160

Toloe, Z. (2014). Cultural effects of globalization with an emphasis on online social networks, the sixth International Conference on New Developments in Iran and the world, Qazvin, Imam Khomeini International University

Wilcox, H.,Bhattacharya, M., Islam, R.,(2014). Social Engineering through Social Media: An Investigation on Enterprise Security; Applications and Techniques in Information Security - 5th International Conference, Australia

INVESTIGATION OF THE RELATIONSHIP BETWEEN AUDIT FEES OF SPECIALIZED INDUSTRY AUDITORS AND COMPLEXITY OF FINANCIAL STATEMENTS)CASE STUDY: COMPANIES LISTED ON TEHRAN STOCK EXCHANGE(

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Abstract

Studying factors affecting audit fees are important in terms of its impact on audit quality. Audit fees affect planning and implementing appropriate and financial audit quality. Determination of factors affecting audit fees in complex financial statements helps clients better understand the benefits of this service. In this study, to study the research variables two hypothesizes are assessed and variables include the amount of debt, non-specialist auditors, the complexity of financial statements, degree of auditor specialty, audit fees. In this study, regression model with time-series data was used. So, the performance of financial years 2008 to 2014 of admitted companies in Tehran Stock Exchange was studied. The results of this study include There is a significant relationship between specialty of audit and audit fees in companies with complex financial statements, and there is a significant difference between specialist and non-specialist audit fees in companies with complex financial statements.

1. INTRODUCTION

Understanding factors affecting audit fees is important for both auditors, and their clients and people who matter policy and rule in audit profession (Nikbakht, Tanani, 2010). Auditors who know these factors can price their services appropriately (Geest, 2014). The importance of this issue, especially in recent years and after formation of Iranian Society of CPAs in our country is more common because after formation of the society, the exclusivity of market audit has been broken and severe competition has been created among auditors (Rajabi, Mohammadi Khashooee, 2008) In such circumstances, an auditor is successful, if according to the characteristics of the entity, he can best estimate the fees, in addition to maintenance of the quality of work, do it with minimal costs (Nikbakht, Tanani, 2008). In our country, the way to determine the audit fees has been turned to a problem and confusion of audit services pricing caused no basis to determine the remuneration of financial audit and sometimes professional judgment of auditors lead to incompatible suggestions that are not fit together (Nikbakht, Tanani, 2008). Therefore, this study aimed to determine the auditing what factors affect Iranian financial audit fees. Determination of these factors can help somehow the integrity of the market and reducing the confusion of this profession. Studying factors affecting audit fees in terms of its impact on audit quality is important. Audit fees are effective in planning and implementation of appropriate and financial audit quality. Low audit quality may reduce the confidence of financial statements users, and this matter not only leads to failure achieving audit goals, but also reduction of credibility of audit process in broad terms and prevention the efficient

allocation of capital in Securities and increase of capital and financing (Rajabi, 2004). In fact, auditor by knowing these factors will be able to obtain reliable and uniform standards which through commitment to be used by all auditors, specific cohesion and order in the profession about fees will be created. In this case, it will lead to reduce damage to audit due to market look at it (Mousavi, Darooghe Hazrati, 2011).

Studying factors affecting audit fees in terms of its impact on audit quality is important. Audit fees are effective in planning and implementation of appropriate and financial audit quality. Low audit quality may reduce the confidence of financial statements users, and this matter not only leads to failure achieving audit goals, but also reduction of credibility of audit process in broad terms and prevention the efficient allocation of capital in Securities and increase of capital and financing (Rajabi, 2004). In our country, the way to determine the audit fees has been turned to a problem and confusion of audit services pricing caused no basis to determine the remuneration of financial audit and sometimes professional judgment of auditors lead to incompatible suggestions that are not fit together (Nikbakht, Tanani, 2008). Therefore, this study aimed to determine what factors affect Iranian financial audit fees. Determination of these factors can help somehow the integrity of the market and reduction the confusion of this profession.

2. RESEARCH METHOD

As mentioned, the main goal of this research is to evaluate the relationship between audit fees of auditors specialty in industry and complexity of financial statements (about the companies admitted in Tehran Stock Exchange). Therefore, the performance of financial years from 2008 to 2014 of these companies has been studied. In an overview, this research was a field study, and causal-comparative correlation or experimental. To select the statistical sample of this research, omissive sampling method is used. In a way that of research population that includes all companies admitted on the Tehran Stock Exchange, the following criteria are considered.

1.   -The companies were admitted in the Tehran Stock Exchange at least from the early 2008.

2.   -The companies are not of investment and inter-mediation companies.

3.   The companies that have not changed their fiscal year during the period of research.

3. LINEAR REGRESSION MODEL

In this study, regression model has been used to investigate the relationship among the variables. Regression analysis is the most commonly used methods in statistical techniques. At first, the analyst estimates that there is a relationship between two variables and then collects little information about the two variables. Data are time-series that Stationary tests have been used for stationary or non-stationary. In time series models economic variables are predicted and modelled only using the information contained in past and current values and disturbing components. While structural models are multivariate in nature and try to explain changes of one variable on the base of changes of other variables. Time series models include autoregressive models, moving average models, ARMA, ARIMA, ARCH models and so on. A strong   stationary   process   is   a   process   that   for   each   time   series

the following relationship has been established.

$$F_{y_{T_1}, y_{T_2}, \ldots, y_{T_n}}(y_1, y_2, \ldots, y_n) = F_{y_{T_{1+k}}}, F_{y_{T_{2+k}}}, \ldots, F_{y_{T_{n+k}}}(y_1, y_2, \ldots, y_n) \qquad (1)$$

Where in $\boldsymbol{F}$ the common distribution function is a set of random variables. This relationship also suggests

that probability of measuring sequence of y_t for each $\boldsymbol{k}$ is similar to $y_{t_{n+k}}$. In other words, a time series is stationary when the distribution of its values is constant over time. It means the possibility that it is in certain distance in present time is the same as any other time in the past and future. Generally, two non-stationary types in mean and non-stationary variance can be mentioned. Due to the difference between steady and unsteady series, each of these time series will have certain influences on the variables. It should

be noted that a shock or flap in stationary time series is essentially temporary and its results will be removed during the time, while a shock to non-stationary time series will have permanent effects. Research regression model and variables have been shown below.

$$
\begin{aligned}
AUDIT - FEE \\
= a_1 SPECIALIST + a_2 SCALE + a_3 FM - COMPLEXITY \\
+ a_4 Fn - COMPLEXITY * SPECIALIST + a_5 FN \\
- COMPLEXITY * SCALE + a_6 SPECIALIST * SCALE \\
+ a_7 FN - COMPLEXITY * SPECIALIST * SCALE + B'X \\
+ IMR + Industry\ fixed\ effects + Year\ fixed\ effects \\
+ error
\end{aligned}
$$

Table1: Variables used in research

Explanation	Variables	Row
Auditors fees in complex financial statements	$AUDIT - FEE$	1
The amount of applying auditors from auditing firms	IMR	2
Type of industry	Industry fixed effects	3
Number of activity years to years studied by auditors	Year fixed effects	4
Total liability (both short time and long time) that are divided to total assets to remove the impact of scale	Scale	5
Complexity of financial statements	FM-COMPLEXITY	6
Specialists auditors	SPECIALIST	7
The natural log of audit and specialist variables, scale, and complexity determine a variable that represent auditor fees.	$FN - COMPLEXITY$	8
Natural log of audit fess in Rial	B'X	

Source: Author

4. RESULTS

In this research the companies admitted in Stock Exchange which have activated since 2008-2014 were evaluated. To analyze the data, they are made normalized. In other words, a researcher may face situations that data features include values which are in different scopes. These features with large values may have more effect in cost function than features with low values. This problem will be resolved by normalization of features so that their values be in the same domain.

Table2: Descriptive results of research variables

Elongation	Skewness	mean	Standard deviation	maximum	minimum	Variable
0.3214	2.2145	3.654	0.985	8.5643	1.0234	Total liability
0.365	2.989	2.586	3.214	15.475	2.99	Number of activity years
0.1236	1.325	1.854	1.23	8.654	2.1	Non-specialist auditors

Elongation	Skewness	mean	Standard deviation	maximum	minimum	Variable
0.214	2.3256	7.58	6.632	9.2145	3.21	specialist auditors
0.653	1.0365	2.323	1.123	13.265	2.356	Auditor fees
0.254	1.235	2.36	1.235	54.25	21.25	Auditors' specialty

Source: Author

According to the results of descriptive statistics variables, total liability with skewness (2.2145) that is positive and is between +3 and -3and elongation (0.3214) positive and between +1 and -1, we can conclude that it has a direct effect on the equation**.** Number of activity years with skewness (2.989) that is positive and between +3 and -3 and elongation (0.365) positive and between +1 and -1, it can be concluded that it has a direct effect in our equation. Non-specialist auditors variable with skewness (1.325) that is positive and between +3 and -3 and a kurtosis (0.1236) positive and between +1 and -1, has direct effect on the equation. Specialist auditors variable with skewness (2.3256) that is positive and between +3 and -3 and kurtosis (0.214) positive and between +1 and -1, it can be concluded that it has a direct effect in our equation. Audit fees variable with skewness (1.0365) that is positive and between +3 and -3 and kurtosis (0.653) positive and between +1 and -1, it can be concluded that it has direct impact in our equation. The auditor specialty with skewness (1.235) that is positive and between +3 and -3 and kurtosis (0.254) positive and between +1 and -1, it can be concluded that it has direct impact in our equation. The correlation coefficient shows the degree of a link between a variable pair. In this study the most appropriate type of coefficient

Correlation for exploring the linear relationship between two variable pairs is Pearson correlation coefficient. Because all variables are inter-related. The value of this coefficient varies between -1 to 1, that 1 means perfect positive correlation, zero means absence of coefficient (lack of coefficient) and -1 means a perfect negative correlation. This coefficient is equal to the covariance between the two variables divided by the standard deviation. Table 3 shows the Pearson correlation coefficient between pairs of variables.

Table3. Correlation Test

Auditors' specialty	Auditor fees	specialist auditors	Non-specialist auditors	Number of activity years	Total liability	Variable
0.153	0.142	0.182	0.188	0.117	1	Total liability
0.2588	0.135	0.172	0.363	1		Number of activity years
0.254	0.187	0.139	1			Non-specialist auditors
0.236	0.177	1				specialist auditors
0.2145	1					Auditor fees
1						Auditors' specialty

Source: Author

5. STATIONARY TEST

In this research, Levin, Lin and Chu (LLC), Imm and the sons and Shane (IPS) tests, and Fisher test for Dickey Fuller test and Fisher test to test Phillips Perron were used. Results showed that all studied variables according to Levin, Lin and Chu (LLC), Imm and the sons and Shane (IPS) are stationary with no difference. Time difference in stationary test shows the level and degree of stationary of research variables. In fact, if a variable is non- stationary and becomes stationary by one differencing, the stationary variable is called 1 degree or namely I(1). Variables are stationary without differencing, therefore they are in stationary level or so-called I(0). If the significance level of stationary test is less than 0.05 percent, it may represent the stationary of this variable. In addition, to being a stationary variable, the test statistic as the absolute value must be greater than the number 2, that the significance level and the test statistic is so.

5.1. RESEARCH HYPOTHESIS TEST

The first hypothesis states that '' There is a significant relationship between auditor specialty and audit fees in company with complex financial statements".

H0: There is no significant relationship between auditor specialty and audit fees in company with complex financial statements.

H1: There is a significant relationship between auditor specialty and audit fees in company with complex financial statements.

Since research data is a combination of cross-sectional data (Companies) and time series, therefore, before estimating pattern (1), for selecting between synthetic or sectional data, **F** Limer test is used. Accepting the null hypothesis is considered as data arrangement in cross-sectional way and rejecting the arrangement in synthetic method (panel). The results of this test have been shown in table below.

Table 4. Results of Limmer and Hausman test (pattern 1)

Result	Possibility	Degree of freedom	Amount of test	Name of test	Pat ter n
Using panel data	0.0000	63378	155402	F limmer	
Model estimation method is random effects.	0.002	3	4.6391	Hausma n	

Source: Author

So because the probability of F Limer statistics is less than 5%, the null hypothesis of Limer test, based on sectional data usage is rejected, and shows that the type of our data is panel. To determine the type of estimating the regression pattern Hausman test is used. Accepting the null hypothesis of this test indicates that the estimation method of the model in this study is random-effects model that its results have been presented in Table **. To test the first hypothesis a multiple linear regression model is used. According to the results, Pearson correlation coefficient between auditor specialty and auditor fess variables is 0.177, this number shows a significant relationship at 5% error level between the two variables and the null hypothesis at error level 5 percent is rejected and the correlation between these two variables is confirmed.

A: Studying the validity of the residuals

To study the autocorrelation in the variables, Durbin-Watson statistics is used, if the values of these statistics are at interval between 1.5 to 2.5, the assumption of existence of remained sentences is rejected. According to the results of above table the amount of this statistics is 1.67. So there is no autocorrelation model in remained sentences. Since the residuals of linear panel model are from dependant variable, and on other hand, the normal distribution has linearity properties. Therefore, we can examine the normality of pattern variable, i.e. the specialty of auditor to test the normality of residuals. This hypothesis is examined using the Kolmogorov-Smirnov test (k-s). The significance level with 0.695 value is more than 5 percent, therefore the null hypothesis on normal distribution of auditor specialty variable and the normal distribution of the residuals can be accepted.

B: Studying validity and power of pattern

Fisher F statistics: to accept the significant assumption of the whole model or in other words, a linear relationship among the independent and dependent variables **F** Fisher test is used. The null hypothesis of this test shows that there is no linear relationship between independent and dependent variables. The results of tables with a significance level of zero (below 5%) indicate rejection of the null hypothesis with 95% confidence, in other words, generally, there is a significant linear relationship among independent and dependent variables and the model has sufficient validity to analyze the results.

Adjusted coefficient of determination: This coefficient is equal to the coefficient of determination, probably one of the reasons of lack of the coefficient of determination and the adjusted coefficient of determination is the absence of additional variables that having no effect of significant differences on dependent variable leads to false increase in the coefficient of determination.

Table 5. Results of the first hypothesis test

index (vif)	Result	Significance level	T statistics	Variables' coefficiants	Variable
1.7655	significant	0.0000	12.8001	4.3652	β_0
1.8945	significant	0.0041	0.9787	0.2528	Auditor speciality
1.828	significant	0.0000	8.221	3.0758	Fees
p-value	value	test	Value		
0.037	0.695	K-S	0.61		R^2
0.000	15.8520	F fisher	0.59		Adjusted R^2
			1.67		D-W

Source: Author

R^2 in researches should be between 0 and 1 which in our test is 0.59 that confirms the test, kolmogorov-smirnov must be equal to or greater than 0.695 in normal data. Durbin-Watson used in research must be between 0 and 4 which is 1.67. So it can be concluded that there is a significant relationship between specialty of auditor and auditors fees in companies with more complex financial statements.

The second hypothesis states that " there is a significant relationship between specialist and non-specialist auditors fees in companies with more complex financial statements.

H0: there is no significant relationship between specialist and non-specialist auditors fees in companies with more complex financial statements.

H1: there is a significant relationship between specialist and non-specialist auditors fees in companies with more complex financial statements.

Because the probability of calculated F Limer statistics is less than 5%, the null hypothesis of Limer test, based on use of sectional data is rejected and indicates that our research data are panel data. To determine the type of estimation of regression model, Hausman test is used. Confirming the null hypothesis of this test indicates that the estimation method in this study will be a random-effects model. Since Hausman test probability is less than 5%, fixed effects method is used to estimate the model. To test the second hypothesis, a multiple linear regression model is used. The dependent variable of specialist and non-specialist audit fees is evident. According to table (3-4) Pearson correlation coefficient between specialist and non specialist audit fees is 0.236, this value shows a significant relationship between the two variables at error level 5 percent and **H0** is rejected at error level 5 percent and confirms that there is correlation between these two variables and also adjusted coefficient has been calculated.

-Studying residuals' credit:

1- **Autocorrelation**: To study the autocorrelation in the variables, Durbin-Watson statistics is used, if the mount of these statistics is at interval between 1.5 to 2.5, the assumption of existence of remained sentences is rejected. According to the results of above table the amount of this statistics is 1.91, So there is no autocorrelation model in remained sentences.

2- **Normality of residuals**: Since the residuals of linear panel model are from dependant variable, and on the other hand, the normal distribution has linearity properties. Therefore, we can examine the normality of pattern variable, i.e. the specialty of auditor to test the normality of residuals. This hypothesis is examined using the Kolmogorov-Smirnov test (k-s). The significance level with 0.415 value is more than 5 percent, therefore the null hypothesis of normal distribution of auditor specialty variable and the normal distribution of the residuals is acceptable.

3- **Co-linearity**: co-linearity means existence of intense relationship among independent variables used by test statistics. Values below 10 for this statistics confirm lack of co-linearity among the independent variables. In above table all values are within the permitted range.

B: Studying validity and power of pattern

Fisher F statistics: to accept the significant assumption of the whole model or in other words, a linear relationship between the independent and dependent variables **F** Fisher test is used. The null hypothesis of this test shows that there is no linear relationship among independent and dependent variables. The results of tables with a significance level of zero (below 5%) indicate rejection of the null hypothesis with 95% confidence, in other words, generally, there is a significant linear relationship between independent and dependent variables and the model has sufficient validity to analyze the results.

Adjusted coefficient of determination: This coefficient is equal to the coefficient of determination, probably one of the reasons of lack of the coefficient of determination and the adjusted coefficient of determination is the absence of additional variables that having no effect of significant differences on dependent variable leads to false increase in the coefficient of determination.

Table 6. Results of second hypothesis

0.0000	Prob(F-statistic):			22.1862.	F-statistic:
Inflation index (vif)	**Result**	**Significance level**	**T statistics**	**Variables' coefficient**	**Variable**
1.254	significant	0.0000	11.587	3.4227	β_0
1.863	significant	0.0000	3.3233	0.7684	Specialist auditor fees
1.681	significant	0.0000	8.2094	2.9967	Non-Specialist auditor fees
p-value	significant	Test		value	
0.044	0.415	K-S		0.69	R^2
0.0000	22.1862	F fisher		0.67	Adjusted R^2
				1.91	D-W

Source: Author

6. CONCLUSIONS

Audit fees are effective in planning and proper implementation and financial audit quality. Low quality of audit will reduce the confidence of financial statements users, this matter not only leads to failure at achieving audit goals, but also reduces the credibility of the audit process in broad term and prevents the efficient allocation of capital in security market and capital cost increase and financing. The auditor's specialty in an industry includes creation of constructive ideas to help (creating value-added) to clients, as well as providing new ideas and solutions for some issues that employers face in their associating industries. One of the main policies of the auditor is increasing his ability to meet different needs of

customers so that he can reach to acceptable level of competitive differentiation against his competitors and through it, he can have exclusive customers and, ultimately, create economic rents. Increase in the level of auditor specialty at client industry provides appropriate context for covering different customer needs of customers and allows the auditor to provide distinct strategies to present services to a broad group of customers with similar characteristics. There is a direct relationship between auditors fees and studying complex financial statements and the more complex financial statements, more specialized auditors, and more fees. Auditing companies employ specialized auditors for many years and thus a specialized auditor remains more time than non-specialist auditor in an organization, and this work duration may be resulted from his better performance, as we compare work time worked of an auditor with another one that all indicate their specialty. And a specialist auditor fees is more than a non-specialist auditor. There is a significant difference between independent auditor's view and administrative managers about client-specific variables. There is a significant difference between independent auditor's view and the administrative managers about audit-specific variables.

Reject/confirm	Hypothesis
Confirm	There is a significant relationship between auditor specialty and audit fees in company with complex financial statements.
Confirm	There is a significant difference between specialist and non-specialist auditors fees in companies with more complex financial statements.

Source: Author

Krishnan (2012) studied the effect of industry specialization of auditor on the amount of do's and don'ts about audit fees and its effects on auditor's fees increase on workload, studying variables such as financial leverage, profit and loss, company volume, company size, number of sub-categories and etc. He concluded that this ratio should not be accepted so much and they should determine wages themselves. Lobo, Zhao (2013) studied the relationship between auditing efforts and financial report distort. The results showed that there is a negative relationship between audit fees and re-presentation after control to adjust the audit risk. Thus, in customer retention incentive, there is a negative relationship between audit fees and fraud. Darooghe Hazrati, Pahlavan (2012) studied an article entitled the relationship between the quality of audit reports and audit fees in companies admitted in Tehran Stock Exchange. In this study they followed a question that whether there is a significant relationship between the quality of audit reports and audit fees? For this, the required data has been gathered from 54 companies from Tehran Stock Exchange, in the period from 2003 to 2009. Statistical methods used for hypothesis testing is multivariate regression. This study consists of 4 hypotheses examining the relationship between profit management, provisions provided in audit report, the auditor and the board composition with the amount of audit fees. The results show that four factors have direct and significant relationship with audit fees.

REFERENCES

Darougheh Hazrati, F., Pahlavan, Z., the relationship between Audit report quality and audit fees of accepted companies in Tehran Stock Exchange, Management Accounting, Vol. 5, N. 14, P . 13-24, 2012

Ismail, S., M. S. Malone, and Y. Van Geest. 2014. *Exponential Organizations: Why New Organizations Are Ten times Better, Faster, and Cheaper Than Yours (and What To Do About It)*. New York, NY: Diversionbooks.

Mousavi, A. R., Daroughe Hazrati, F., " study the relation between free cash flow and audit fees in the companies admitted in Tehra**n stock exchange" , research**- scientific- financial quarterly , Vol3, No. 10, P. 141-173, 2011

Rajabi, R., "Factors Affecting the Power of Professional Independent Audit", PHD thesis, Allame Tabatabie Universit, faculty of management and accounting, 2004

Rajabi,   R.,   Mohammadi   Khashouee,   H.,   "Agency   fees   and **Independent Auditing Services Pricing", journal of study the audit and accounting, Vol. 15, No. 53,** P. 35-52, 2008

Tanani, Mohsen and Nikbakht, Mohammad Reza. "Test of factors influencing audit fees for financial statements" Financial Accounting research. The second year, the second number, serial number (4). Pp. 111 to 132.**2010**.

Tanani, Mohsen and Nikbakht, Mohammad Reza**, " relation of modified** Profitability ratios based on the Inflation with stock **returns in the Petrochemical companies I the Tehran Stock Exchange", human** and social science research journal of the Mazandaran University, Vol. 7, No. 24, P. 127-144, 2008

Zhao, Y., Lobo, G., **" relation between audit effort and financial report misstatem**ents: evidence from **quarterly and annual restatements", accounting review, Vol. 88, 2013**

IDENTIFYING THE FACTORS AND INVESTIGATING THE RELATIONSHIP BETWEEN FINANCIAL RISK AND UNUSUAL RETURN SHARE IN THE BANKS OF THE TEHRAN STOCK EXCHANGE

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Abstract

The purpose of this research is Identifying the factors and investigating the relationship between financial risk and unusual return share in the banks of the Tehran Stock Exchange. In this research, a concept called the coefficient of earnings response as the ratio of the unexpected gain on unusual profits of banks as a criterion for logical decisions of investors and other financial users were studied. In this study present commercial banks in the Stock Exchange between years 2011-2015 were studied and used the factor analysis technique to reduce 18 financial ratios to calculate the risks to be included in the regression. Present research demostrate Credit risk, interest rate risk, Liquidity risk and Capital adequacy as effective factors relationship between financial risk and unusual return share in the banks of TSE. Also, the results indicate that there is a positive and relevant effect of liquidity risk and credit risk on abnormal returns of banks and also two other risks (Interest rate risk and the risk of capital adequacy) have no great effect on abnormal returns of banks.

JEL classification: G32

Keywords: *Liquidity risks, Credit risk, Unpredictable profit, Abnormal returns.*

1. STATEMENT OF THE PROBLEM

One of the most important items of financial reporting is announcement and diffusion of profit which may have attracted the attention of all stakeholders, including investors. The profit of one business unit is always used and evaluated by a wide range of investors, creditors, accounting professions, financial managers, stock market analysts, and so on. Also, the most important source of information for investors, creditors and other users of banks information in the stock market is the forecast of profit provided by the management of banks at certain intervals. Use of management judgments creates the opportunity to manage profits. In this way, managers choose methods or perform estimates that accurately reflect the economic situation of companies under their management (Noroz Beygi 2015). Investors in the capital market show different responses to profit news, and as a result, their expectations are based on published news. The announcement of profit is one of the information published in the market that causes the stock price changes and, as a result, causes the returns changes and causes the real- returns difference with expected returns that this is due to the unusual returns. Unusual returns change toward unexpected profits changes over time that the process of increasing or decreasing returns or unexpected profits has a slow and gradual movement which can be done randomly or predictably, which lasts a few months after the profit announcement. (Saghafi 2004). Risk is the likelihood of a change in the benefits and advantages foreseen for a decision, an event, or a state in future. The probability is not to be sure of changes. If there were sufficient assurance of change, there would have been a change in the scope of the expected benefits and advantages while the impossibility of predicting the probability of change makes it a risk to the advantages and benefits. Change refers to any reduction or increase in interest. In the sense that it is not merely the undesirable changes covered by the risk framework. Rather, the optimal changes in this sense are also

within the framework of risk. The decision, event, or mode of reference refers to voluntary and involuntary conditions in which the risk prevails. A decision may be made voluntarily; its benefits and advantages evaluated, and the particular risk prevail on its advantages and benefits. On the other hand, the event or state in the future may be deliberate and the predictions of its advantages and benefits are subject to the possibility of change. The risk arising from the balance sheet structure includes segments such as assets, asset structure, and asset and liability management. In this area, more attention is paid to how the various combinations of assets in the balance sheet are. In other words, whether the combination of assets that are likely to change their value in the future is more or there is a significant degree of stability required for most of the assets in the combination. The ratio of fixed assets to current assets, the ratio of financial assets to physical assets, the volume of financial assets, is one of the indicators for assessing this type of financial risk.

Studies show that abnormal returns can be affected by corporate financial information. In other words, a number of investors have not been able to calculate the expected return rate using a number of financial ratios due to the lack of knowledge of cyber investors about this relationship, this information is not reflected in the real stock price and it creates additional returns for that group of investors who have been aware of this relationship. . Accordingly, if most investors are aware of the existence of this relationship, the abnormal returns in the capital market will be reduced to some extent and so the market efficiency will increase. As a result, the identification of financial information published and its relationship with abnormal returns is very important. (Bahram far 2004).

Risks in each area has Capability to be mentioned that one of the most important of this area is banks; Because the banks, on the one hand, collect the people's capital responsible for it and, on the other hand, use these funds to carry out banking operations and activities (Mehrabi2010). The nature of risk in the banking system due to factors such as the number and variety of banking operations, the different nature of this operation, the status of the bank's capital and its limitation, the preservation of the interests of the bank's shareholders and depositors, the depositors' resources and the frequency of their resources, and the lack of sufficient expertise in the areas of resource management and registration of high financial operations are completely different from the risk in other economic units and all this requires that risk management in banks is more sensitive, complex and more difficult than risk management in other economic units. In this research, the researcher is seeking to find out whether the relationship between the coefficient of profit and financial risk (liquidity risk, credit risk, capital adequacy risk, interest rate risk) and the unusual return on the shares of the commercial banks accepted in the stock exchange there is?

Background of the research

Chang Acehan (2015), "Investigating the Effect of Liquidity Risk on Internal Banking Performance Showed that liquidity risk is determinative of the bank's internal performance and the causes liquidity risk to include current assets and dependence on foreign funds, regulatory factors and macroeconomics and liquidity risk reduces the bank's profitability because of increasing the cost of funds, but increases the margin of net interest. Chang and Nasir (2014), "A Study of the Determining Factors the Unusual returns Stock Banks Efficiency for Examples of Malaysian and Australian Banks in the Period 2000-2012" The results of the study showed that accounting profit is a variable price-related that has a simultaneous effect on the stock price of a bank.

Chang & Ariff (2013), "Investigated the Effect of Banking Risk Detrimental Factors on the Growth Rate of the profit Reaction Coefficient", The results showed that the determinants of bank risk affect the magnitude of the earnings response coefficient and, in particular, the risk factor of banks, has a significant role in the relationship between returns which suggests that this is an important factor that should be taken into account in valuing the stock price of a bank. Pornamasary (2012) "Investigated the Relationship between the Risk of Non-Payment of Debt and return on investment on Indonesian Banks" In this research, which was conducted on 22 Indonesian commercial banks between 2008 and 2010, it was concluded that the relationship between the risk of non-payment of debt and negative returns on investment is negative, but the growth opportunity factor has a significant effect on it. Also, two financial risks do not have a significant effect on return investment. Chang and Nasir (2010) conducted a study to

investigate the relationship between financial risk, price risk, market risk, and earnings response rate of Chinese commercial banks and the results of their research indicated that there is a significant relationship between financial risk, price risk, market risk and profitability coefficient. Chena, Lia and Vanga (2010), "studied an Influencing Extensive Information on the Abnormal returns that create to rivals." In this study, conducted in Hong Kong, they examined 47 countries (19 years) from 1990 to 2009.

Chang and Nasir (2009), "Investigated the effect of size of a company on stock prices at time of publication of stocks." This effect was measured by the coefficient of earnings response, and the result was that the standard unexpected returns and the size of the company had a negative relationship.

Chang and Nasir (2008) determined factors abnormal return of bank shares for an example of Malaysian and Australian banks during the period 1998-2006" results showed that accounting profit is a variable price-related that has a simultaneous effect on the stock price of a bank.

Akml and Saalm (2008) investigated in an article on "Technical Efficiency of the Banking Sector in Pakistan" and by using information from 30 public banks, 18 local banks and 8 foreign banks and factor analysis method of two-stage data Investigates the effects of bank specific factors, and macroeconomic factors on bank efficiency. In the first stage, the factor analysis method was used to estimate the technical efficiency and scale, and then, by using Tobit's regression, investigated macroeconomic and specific banking effects. The results of the study showed that banking efficiency has improved since 2000 and foreign banks were more efficient than local private banks and public banks.

Veek (2004), "Investigated the nature of risk in the banking system ", the research showed that the nature of risk in the banking system due to factors such as the number and variety of banking operations, the different nature of this operation, the status of bank capital and its limitation, the preservation of resources of bank shareholders and depositors, the status of depositors' resources and its frequency, and lack of expertise in the areas of resource management and record high financial operations is quite different from the risk in other economic units and all of these necessarily require risk management in banks to be more sensitive, complex and more difficult than risk management in other economic units. In addition, some risks are specific to the bank and are not relevant to other firms. On the other hand, the characteristics of some operations in Islamic banks have made risk management more sensitive and more complex.

In any case, the occurrence of risk in both conventional banking and Islamic banking systems leads to a decrease in the bank's profitability, which in three forms of profitability is lower than predicted goals, the loss of all expected profit and eventually loss is shown. Meanwhile, harm is the most destructive form of risk that can lead to the loss of all or part of the bank's capital, or even a portion of the deposits, and in the acute form of all bank deposits, and endangers the existence of the bank. Hence, identifying risks in the first stage and then managing them in a systematic way can be a means to prevent the occurrence of these adverse events.

Akso (2003), "Investigated the Context of the Effect of Size, Ratio of Book Value to Market Value and Past Information on Extra Returns". The research is carried out on companies listed on the Turkish stock exchange. On average, the sample consists of 86 companies that have had extra returns during the 14 months before the publication of the information. The results of the research show that the financial statements published by the companies have information content. One of the most abnormal results is that significant extra returns continue through the research methods used over time intervals.

 The existence of longer term periods of additional returns is consistent with the provisions of several unconventional theories that try to explain the abnormal returns and cause some questions about the market model and market efficiency. Another analysis of the returns from the companies showed that the excess returns observed are not only due to high risk or wrong pricing of stocks in the market, but also the size of the company can be a determinant factor in this relation. Also, the results prove that the published financial statements of smaller companies have higher informational content.

Collins and Kootari (1999) examined the relationship between systematic risk and earnings response coefficients and found that one of the factors reducing the coefficient of reaction is profit. In addition, they

found that the factor of the growth opportunities is also affected by the (β) positive systematic risk on the earnings response coefficient.

Ferret (1998), in an article titled "The Relationship Between Projected Profit and Corporate Value and Abnormal Stock Returns," by studying 716 newly-listed companies in the New Zealand Stock Exchange between 1977 and 1992, investigated the relationship between estimated earnings and company value and shares abnormal return of these types of companies at the initial stage of supply. It was concluded that earnings forecasts are related to the value of the companies with the primary supply of shares, and are more significant than other tools such as accumulated profits and there are positive relationships between profit forecast error and abnormal returns.

Halliwall and Reynold (1994), "Investigated the Effects of Business Risks on Earnings Reaction", and stated that, in addition to systematic risk, the risk of non-payment of debts could also reduce the coefficient of earnings response. They used the ranking of bonds to measure the risk of non -payment of debts, and by controlling the risk factors and the stability of the profitability process, they proved that the risk of non-payment of debts could also be negatively coefficient on earnings response.

Halliwall, Lee (1991), in an empirical study, investigated the relationship between unexpected earnings and unusual returns of securities with the impact of financial leverage. They hypothesized that the coefficient of return was related negatively to the financial leverage. The financial leverage in this research was measured as the average during the research period, based on the ratio of the book value of long-term debt to the market value of the equity. The results of this study indicate that the Earnings Reaction coefficient for companies with no leverage or with a low leverage ratio is larger than leverage companies or with a high leverage ratio.

The concept of basic risk in earnings response coefficient studies

In 1990, Kalinz & Gotary investigated the relationship between systematic risk and response coefficient to earning. They found that the only beneficial factor for profit is the systematic risk. In addition, they provided evidence that companies in which the market Considers growth opportunities for them, their earnings response rate will be high. In fact, their research showed that, as the earnings response coefficient, make possible the explicit test of the relationship between prices and return that lies in the financial valuation model, by interfering with the variables of systematic risk and growth, it is possible to explain some of the differences in the same coefficient of profit response.

Scott (2003) states the reasons for the different market reaction to reported profit based on historical cost over as follows: Whether the sequence or order of expected future outflow of banks is riskier from the point of view the risk averse investor will have less value. For diverse investments (portfolios), beta is a criterion for calculating asset risk. The investor looks at current year's profit as an indicator of future profitability and profitability. The future returns be riskier, investors' reaction to unexpected profits will be less. Coalition and Craft (1989) Weiston (1989), in the empirical research, concluded that high-beta Stock Exchange had a lower response coefficient. Freeman et al. (2004) also investigated the effect of risk on the earnings response coefficient in another study. They argued that the response coefficient to profit could increase with the company's ultimate risk, because the company's final risk is positively related to the sensitivity of expectations of dividend profit in the company's special news. They define the final risk as uncertainty about future dividends with future earnings. The news of the company's value makes investors rethink on their expectation of company's future profits. This revision will change stock prices. The price changes will be related to the value news, which will be important as the risk increases. Dalival (2003) in a research entitled "Impact of Risk on Valuation" used organization valuation theories to predict the reverse effect of risk to predict the basis to variability of the reaction coefficient of profit. Intuitively, it is obvious that the high risk base will be accompanied with market expectation on less sustainability. As a result, the effect of each level of unexpected profit on stock returns on the market decreases equally. The evidence gathered by Dalival from the US market was in line with this theory. The researcher used leverage levels and warranty rates as a benchmark for baseline risk assessment. The results of this research show that there is a reverse relationship between changes in the coefficient of profit reaction and changes in the base rate risk.

Investigating the relationship between unusual returns and unexpected earnings

In each of profit reporting banks, the unusual stock return is, the surplus of return on equity in the period of announcing the profit from the expected return on shares with respect to the bank with the beta coefficient of the market and unexpected income is also the surplus profit on the expected profit, which has been achieved either through time series models or through analysts of securities. Abnormal returns are closely related to unexpected profits and are always discussed together, so abnormal returns can be considered as a function of unexpected earnings:

$$AR=f\ (UE)$$

AR=Unusual stock returns

F = (unexpected earnings)

Fama (1965), in his research titled Risk and Investment, stated that the unusual returns are the difference between real stock returns and expected returns. Expected returns are what investors estimate to company declared stock value for them. But the actual returns are (Harm) real profit. The earnings response coefficient is the linear slope of the two axes that has been formed of market returns and share returns. Many of the studies using the regression model have investigated the relationship between returns as dependent variable and earnings as an independent variable. The results of studies that have been conducted on the relationship between return with company's profit and introduce a specific coefficient for unexpected annual earnings regression as independent variables and unusual returns as a dependent variable. Results from Fama & Nasir (2008) suggest that the regression has a specific slope in the following linear relationship:

$$AR_i=\alpha+\beta(UE_i)+e_i$$

Penman studies (1992) have been used as a constant coefficient in the return regression as a function of profit, but this factor is often referred to as a constant coefficient in unexpected returns based on unexpected returns. Always, recent models have attempted to examine the relationship between unexpected earnings and unexpected returns, which generally forms a more complex level of analysis than spending profit to profit return survey. Defining the Earnings Reaction Coefficient in the recent method has the advantage that the review will be done based on the richest content of the theory. Otherwise, the earnings response coefficient would be evaluated only in the context of a very simple and primitive approach from market response. Cheng, along with his colleagues in recent years, learned about the past determinants and the awareness of the trend of stock market changes to examine bank risks in various research studies and achieved important results.

First they proved the bank's credit risk as an effective factor in returns and profits, and considered them as an important factor in valuing the stock price of a bank by the investor. Then, the determining factors the bank's shares unusual returns reviewed for a sample of Malaysian and Australian banks over the 8-year period and showed that a variable accounting profit is related to price variable that has a simultaneous effect on the stock price of the bank. According to Cheng, Ashen (2009) in his study described liquidity risk as determining factor for internal performance. Cheng & Nasir (2010) continued past findings and introduced financial risk, price risk, and market risk, effective on the earnings response rate of commercial banks in China. Purnamasary (2012) examined 22 Indonesian commercial banks in the 2-year period. He underlined the risk of capital adequacy, and Cheng's research further demonstrated that the effect of capital adequacy risk is negative on capital returns, while liquidity and credit risk have not affect the return on investment of the Indonesian commercial bank. Halivall & Rinoldez also stated that addition to systematic risk, the risk of capital adequacy could also reduce the coefficient of profit response. They used rating of bonds to measuring the risk of capital adequacy and by controlling the systematic risk factors and the stability of the profitability process; they proved that the risk of non-payment of debt could also be negatively affected to the profit reaction coefficient.

Calculation of financial risks by using factor analysis technique

To obtain the main financial components at this stage, by using factor analysis and by grouping similar variables, the size of the data set is reducing. In fact, this tool helps in choosing appropriate ratios such that there is no coherence between variables. And it allows financial analysts to the extent possible consider the company's different financial dimensions and analyzing meaningful multi-dimensional. At this stage, some ratios are excluded from analysis due to their high correlation with other ratios.

Determination of variables of each factor (Interpretation factor matrix)

In factor matrix each column represents one agent. The values of each column are indicative of the factor loads of each variable with one factor. In the output of the software, the agents are placed from left to right with the numbers 1,2,3 and the last, respectively. Variables are also listed in the first column from top to bottom. To begin should start from the first variable and its related values checked in different factors. Wherever the maximum absolute load factor is present and statistically is significant, underneath that line. Similarly, steps must be taken for other variables. When significant loads agents were identified by investigate agent matrix, also variables were identified that have no significant agent load on no one of agents. Now all the variables have even a small share in the results, so, in order to eliminate the effects of variables that did not have significant agent load, remove them from analysis and then analyze the factor according to the significant variables and interpret the results. By identifying the meaningful variables of each factor, one can determine the appropriate name according to the type of variables of each factor and their coefficients for the factors that method has been used in this study.

Financial ratios analyzed by factor analysis technique

Determine appropriate financial ratios:

Finally, in order to rank the risks of commercial banks, 18 financial ratios were used.

The phases of the financial ratios to obtain the main financial components

Counts of factors: For initial estimation, principal component analysis is used. In this method, the linear combination of observed variables is formed. The principal component method only acts to transfer the associated variables to a set of non-interrelated variables. In this phase, the number of factors is determined in terms of value. Factors with a specific value greater than one are included in the factor model.

Specific Values: Indicates how much a factor contributes to explaining the common variance Infrastructure of variables of the underlying are share. If the agent explains all the variance in each variable, each of them has a factor load and a value for a factor of 1 equal to n (the number of variables).

Factor loads: In fact, are the standardized coefficients in a regression equation in which the main variable acts as a dependent variable and agents as independent variables. The existence of negative loads also shows that some variables represent contrary of something that is determined by that factor. Finally, the purpose of factor analysis is to summarize the variables in a number of factors. Therefore, for factor analysis, the method of extracting factors and the criteria for their determination must be determined.

Questions of research

1. What are effective factors of relationship between financial risk and unusual return share in the banks of the Tehran Stock Exchange?

2. Is there a relationship between the coefficient of profit response and financial risks with abnormal returns of stocks in admitted commercial banks in Tehran stock exchange?

Research methodology

Research Method

The present research in terms of purpose is practical and in terms of nature and descriptive method is Correlation type.

Statistical population, sample size and sampling method

In this research, the statistical population of all financial institutions (commercial banks) accepted in the Tehran Stock Exchange (TSE) was 45 banks from 2011 to the end of 2015. Considering that the statistical population of the present study, all financial institutions (commercial banks) accepted in the Tehran Stock Exchange from 2011 to the end of 2015 is 45 banks, so the statistical sample is also considered on the basis of all the same number of 45 banks.

Funding and analysis of research questions

Funding and analysis of research first question

A. The method of extracting factors:

There are different methods for extracting agents that vary in terms of the amount and type of variance explained by the variables of each factor in the model. The most basic method is the analysis of the main components. This point is necessary that there are three variances in the factor analysis. A common variance is a relative variance that is explained by common factors. The specific variance related to a particular variable and the variance of error that results from the discrepancy and uncertainty of the data collected. In the principal components analysis method, the agents justify all the variances of each variable, including the common variance in the set of variables, and also the specific variance of the variables. Therefore, the number of factors in this method in theory should be equal to the number of variables, because all variances of each variable must be explained by agents. In other word, in the analysis of the main components, there are components in number of variables, but factors are extracted that explain the maximum amount of variance.

B. The criteria for determining the factors:

Extracting agents is done according to the following criteria:

Eigen value criterion: Each agent contains one or more variables. The squared loads of an agent represent a percentage of the variance of the correlation matrix, which is explained by the factor, which is called a specific value. It is enough to calculate the correlation coefficient of the variables bring together with one factor and sum together to obtain the specific amount of that factor. Whatever the specific amount of one agent being more, that agent explain more variance. Accordingly, the number of factors is determined according to the specific amount of each agent, and the factors its specific amount is more than one, are considered as significant factors.

Previous Criterion: This method is used when the number of factors is specified by the researcher.

Cutting test criterion (Velicer minimum average partial correlations (MAP): Determines this criterion of factors on the basis that a certain degree of variance has not yet overcome on the common variance, therefore, as long as the amount of the common variance is greater than the specific variance, significant factors are extracted. To determine the number of factors based on this criterion, a specific amount chart is drawn up against the number of factors.

Criterion of Cumulative Variance percentage: In this case, the percentage of variance explained is the basis for decision making and factors are extracted that have a high percentage of variance. If the value of the variance is less than 50%, then variables with a low rate of subscription should be eliminated. In this study, the 18 steps of the financial ratio raised in the previous step were used as entrance (input) of the factor analysis. The factors were extracted by using principal components method. . The frequency of the factors was determined by using orthogonal Varimax method. Because of the complete correlation between some ratios, in this stage, 4 ratios are deducted from factor analysis and, at the end, 12 ratios remained in the collection finally, they were grouped into four factors and classified according to the common characteristics of the ratios to four factors of liquidity risk, credit risk, non-payment risk, interest rate risk and according to the opinions of experts and previous accredited researches, they have been confirmed and to calculate the four risks studied were use.

Step One: Extracting Agents

First, the amount of the initial and after the extraction of the factors for the variables entered in the factor analysis is presented in Table (1). The table above shows the degree of variable subscription or total variance with the amount of variables factor subscribe. The initial subscription rate indicates all of pre-extraction subscriptions, all of them are equal to one, and all but one exceeds are higher than 50 percentages, which is indicating the ability of the factors determined in the explanation of the variance of the studied variables. The amount of the X18 variable is less than 0.5, so in the first step, this variable is deleted. Table 1 Initial subscription rates and after factors extraction for the variables entered in the factor analysis.

Table 1 (Subscriptions) Communalities:

Variables	Initial subscription rate	Factor share of variables
X_1	1.000	0.953
X_2	1.000	0.902
X_3	1.000	0.735
X_4	1.000	0.822
X_5	1.000	0.863
X_6	1.000	0.963
X_7	1.000	0.915
X_8	1.000	0.783
X_9	1.000	0.971
X_{10}	1.000	0.852
X_{11}	1.000	0.734
X_{12}	1.000	0.701
X_{13}	1.000	0.914
X_{14}	1.000	0.970
X_{15}	1.000	0.925
X_{16}	1.000	0.741
X_{17}	1.000	0.841
X_{18}	1.000	0.437

Source: Author

Second stage: The review of the results of Bartlett's sprite test and KMO statistics

To find out that factor analysis is allowed in this study and appropriate of sampling, the KMO statistic has been calculated. In Bartlett's method, we use the least squares weighting method to estimate factor scores. For each factor, calculates scores with one standard deviation and the factors are independent of each other. In this method, in order to estimate the coefficients, the least squares method is used.

Semi & Kiser argue that when the KMO> 0.5 value is greater than the indicators of the adequacy of the sample for analysis, and the implementation of factor analysis is possible. By entering the data of all variables, the KMO was 0.670, which allowed the factor analysis to be at a good level. The Spire-Bartlett test also describes the validity of the factor analysis model. This test indicates the suitability of the data for factor analysis. Bartlett's test, which is judged by the significance level, is significant with a degree of freedom of 91. This indicates that the matrix of correlation in society is not zero. It means there is a significant correlation between variables.

Table (3) shows the variation of the special values in relation to the factors. This chart is used to determine the optimal number of components. According to this diagram, it follows that from the fourth factor, the variation of the specific value is reduced, and then four factors can be extracted as the most important factors in explaining the variance of the data.

Table 2. statistics of KMO and Bartlett's Test results

Statistic)kmo(Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.610
Bartlett's Test of Sphericity (Bartlett Spit Test)	Approx. Chi Square	805.933
	Df(Degrees of freedom)	91
	Sig.	0.000

Source: Author

Step Three: Review the gained results of the graph and figure

Attribute Diagram Valid Factors in the Eskeri method, a specific value graph is plotted for each agent. At a point where the shape of the curve for the special values is horizontally. That point, and the factors are on the left called Eskeri. The real factors and the rest of the factors are considered to be errors.

Step Four: Determine the optimal number of factors and categorize them

The total value of the variance explained: This table shows that existing variables can be converted into several factors, and these factors explain and cover several percent of the variance. The specific amount of each factor is ratio of total variable's variance that explains by that factor. This specific amount can be calculated through the sum of squares of the factor loads for all variables in that factor, so the special amounts show the exploratory significance of the factors in relation to the variables. The low level of this amount for one factor means that the factor of the explained variance has little role to explain the variance of the variables. In the column the agents are provided, that their special amount are greater than one. The column represents the set of amounts of the transacted factors after the rotation. By calculating the initial matrix of the factors, it was found that four factors with a specific value is more than 1, which covered 83.514% of the variance of the total variables. In other words, out of the 18 indicators, there are four factors that account for 83.514% of the variations of the specific values of each of the tested indices. If the factors obtained by Varimax are rotated, the first, second, third, and fourth factors are 34.259, 20.100, 15.447, and 13.708, respectively, and a total of 83.514 percent of the variance, respectively.

Table 3. Graph of percentage variance and special values of different factors

	Initial Eigenvalues			of Squared Loading			Rotatiion Sums of Squared Loading		
	Total	Of Variance %	Cumulative %	Total	Of Variance %	Cumulative %	Total	Of Variance %	Cumulative %
1	5.25	37.50	37.50	5.25	37.50	37.50	4.79	34.25	34.25
2	2.92	20.85	58.36	2.92	20.85	58.36	2.81	20.10	54.35
3	2.10	15.03	73.39	2.10	15.03	73.39	2.16	15.44	69.80
4	1.41	10.11	83.51	1.41	10.11	83.51	1.91	13.70	83.51
5	0.87	6.25	89.77						
6	0.44	3.14	92.91						
7	31	2.23	95.14						
8	0.23	1.65	96.80						
9	0.21	1.49	98.30						
10	0.12	0.88	99.11						
11	0.06	0.46	99.64						
12	0.43	0.307	99.95						
13	0.01	0.030	99.98						
14	0.00	0.02	100.0						

Source: Author

Step Five: Grouping agents after rotation

In order to better interpret the relationships between the data, special rotations and transformations were performed on the agents. In many cases, when a number of variables depend on a particular factor or even on a number of factors, the interpretation of the factors will be difficult. Hence, there are some methods that make it easier to interpret factors without changing the level of subscriptions. Table (3-5) is a component matrix in which the factor loads of the variables are shown after the rotation with the Varimax method.

Factor loads are the correlation coefficients of variables and factors. In this table, the factor loads exactly indicate which variables are included in each factor. By comparing variables related to each factor, we can obtain common features among these variables. By doing so, while the items within each dimension have the highest correlation with each other, we try to reduce our correlation between the different dimensions to the lowest level. Here it is necessary to note that some researchers for the purpose of research also to obtain definitions and naming actions, know higher coefficients of 40/0 in the definition of important and meaningful factors and consider coefficients less than these limits as random factors (Mohammadi Yeganeh, 1391). The naming of an agent is typically based on a researcher's exact assessment of what variables measure with high factor loadings. In fact, agents are named according to the definition of variables and what the common reality is. Therefore, the factors were determined by using the method of the main components of the components with special values greater than 1 and the varimax method used in this paper. As a result of this test, 4 ratios of 18 ratios was eliminated in factor analysis and a total of 14 ratios remained that were classified according to the common characteristics among them in four factors. Also, the share table shows the variables in the agents after the rotation. Each variable is placed in a factor with which the factor has a significant correlation. At present, the reviewed ratios are shown below in order to divide the four financial risks discussed in the hypotheses into the next stage and according to the experts' opinion, past research and their nature.

Table 4. The matrix of elements rotated by the varimax method

Factor 1	Factor 2	Factor 3	Factor 4	Variable
		0.930		Current debt / Current assets
		0.887		Short-term facilities / Total facilities
		0.555		Short-term deposit - Short-term loan / Total deposits
0.835				Short-term deposit / Short-term loan
0.780				Requests / Total Facility
	0.991			Total Deposits / Total Facility
0.926				Total Facility / Total Assets
0.840				Short-term liabilities - Short-term facilities / Total assets
	0.982			Total Deposits / Total Debt
			0.876	Distributed profits / Total facilities
			0.554	Capital / Total Assets
0.993				Total Assets / Total Facility
	-0.889			Visible deposits / Total deposits
			0.781	Commitments / Total Assets

Source: Author

At this stage, the four groups formed by factor analysis are grouped into four risks, liquidity, credit, capital adequacy and interest rates. To calculate these risks, we look at the first ratio reported in each group.

First factor: Credit risk

This factor is named with the highest percentage of total variance, 34.259 and with five variables called credit risk:

Table 5. Credit factor load

Row	Factor load	Description
1	0.993	Total Assets / Total Facility
2	0.926	Total Facility / Total Assets
3	0.835	Short-term deposit / Short-term loan
4	0.840	Short-term debt / short-term facility / total assets
5	0.780	Requests / Total Facility

Source: Author

Each financial sector, including banks, should carry out its activities under a comprehensive and comprehensive credit system to minimize the actual amount of credit risk associated with a recipient of the facility or business partner to avoid adverse selection and so banks need a lot of information to verify the credit of the facility or business partner. The banking system can reduce the credit risk associated with its asset portfolio by using methods such as converting into asset securitization, credit derivatives, debt sales, etc. Banks should have a strong system for valuing bonds and classifying their customers' potential risks. Banks should also have an internal risk pricing system for credit risk management. Such a system should have the ability to rank customers according to a certain degree of credit risk (Khan Wahmad, 2001).

Second factor: interest rate risk

This factor is named with the amount of variance of 20.100% and with three variables called interest rate risk:

Table 6. Factor Rate of Interest Rate Risk

Row	Factor load	Description
1	0.982	Total Deposits / Total Debt
2	0.991	Total Deposits / Total Facility
3	-0.899	Visa Deposits / Total Deposits

Source: Author

Banks and financial sectors must have clear policies to control the risk of interest rates. These policies include defining responsibilities and accountability, continuous reporting, and the use of tools and techniques to control the risk of interest rates. The interest rate risk for each component of the bank's assets and liabilities should be determined by maturity, repayment and revaluation. There are many techniques for measuring interest rate risk. The most important of these are gap analysis, crisis test and simulation method based on mathematical and statistical methods and assumptions. By using this method, it is possible to predict Incidents and events related to changing a variable using past information. Banks should also use the pressure or crisis test to examine the possible effect of interest rate changes on the slope of the yield curve (Khan Wahmad, 2001).

Third factor: Liquidity risk

This factor is named with the variance value of 15.447% and with three variables called liquidity risk:

Table 7. The factor load of liquidity risk

Row	Factor load	Description
1	0.930	Current debt / current assets
2	0.887	Short-term facilities / Total facilities
3	0.555	Short-term deposits - Short-term loans / Total deposits

Source: Author

Liquidity is an important factor in assessing cash or current inventories for resolving needs. Failure to provide sufficient liquidity to resolve the needs of creditors may result in destroying the bank. Lack of liquidity has a significant impact on the performance of banks, because investors are always concerned about the bank's ability to secure their capital (Shim, 2001).

Fourth factor: Capital adequacy

This factor is named with the variance of 13.708% and with three variables called capital adequacy:

Table 8. Factor load factor of capital adequacy

Row	Factor load	Description
1	0.876	Distributed profits / total facilities
2	0.554	Capital / Total Assets
3	0.781	Obligations / total assets

Source: Author

The risk of capital adequacy is the bank's capital, which is obliged to take care of deposits resulting from the decrease in the value of assets. Whatever the risk be higher, the likelihood of a decrease in bank debt is increasing, and whatever be lower the investors will earn more profit. Therefore, they tend to invest more, which results in an increase in stock prices (Chang, 2007).

Funding and analysis of research second question

There is a correlation between the coefficient of share response and the abnormal return of share of Maliba risks at the admitted commercial banks to the Tehran Stock Exchange.

Table 9. Results of the test of research second question (H2)

$CAR_i = \alpha_0 + \beta_1 UE_i + \beta_1 Lr_i + \beta_2 Car_i + \beta_3 Sr_i + \beta_4 Ir_i + \varepsilon_i$				
Independent variable	**Coefficients**	**Statistic t**	**Sig.**	**VIF**
Constant amount	**0.392**	**0.872**	**0.389**	
Lr(Liquidity risk)	**0.396**	**2.973**	**0.005**	**1.024**
Cr(Credit risk)	**1.640**	**2.025**	**0.039**	**1.402**
Sr(capital adequacy risk)	**0.126**	**0.553**	**0.555**	**1.234**
Ir(Interest rate risk)	**-0.298**	**-1.421**	**0.163**	**1.178**
Adjustment coefficient	**0.284**			
Watson's camera statistics	**1.881**			
F statistics	**4.488**			
Significance level of the statistic F	**0.003**			
The independent variable of the model is significant at the error level of 0.05				

Source: Author

Discussion and interpretation of the research second question results

The results from Table 6 show that the level of significance less than 0.05 was (sig = 0.039), (Sig = 0.5555), (sig = 163/0), and t statistic is greater than 1.98 (t = 02525), (t = 596 / t), (421 / -t = 1), therefore, at the error level of 5% is not significant, while Liquidity risk at 5% error rate is significant. To determine whether a general model of regression is significant or not, we use F statistics. The results show that the F statistic is 4.488 at 5 percentages error level is significant. Therefore, the estimated model is sufficient to test the sixth hypothesis. To evaluate the fit of the model, we use the adjusted coefficient of determination (R^2 adj). The results show that the adjusted coefficient of determination is 0.284. It is better use the modulated determination coefficient to interpret the fitting of the model. Therefore, model has a good fit. The results are acceptable when having no self- affiliation, except for the disorder. For this purpose, statistic of Watson Camera (DW) is used. If the value of this statistic is between 1.5 and 2.5, That is, the model has no self-affiliation. The results show that the statistic of DW is 1.881, which represents the independence of the remnants. It is also observed that in the general model, credit risk, risk of non-payment of debt, interest rate risk is not significant at 5% level. While unexpected liquidity risk is

profitable, it is based on the results of a separate regression. The linear multivariate regression model is as follows:

$$CAR_i = 0.392 + 1.298\,UE_i + 0.396\,Lr_i + 1.640Cr_i + 8.640Sr_i - 0.298\,Ir_i$$

Dissolution and Suggestions

Practical Solutions for Liquidity Risk Management of Banks

Liquidity risk is the lack of willingness of banks to provide concessional facilities or timely repayment of banks, risk with other mixed financial risks, which is why it is difficult to measure and control it.

The causes of liquidity risk are as follows:

- Exit of deposits
- Ability to convert non-cash assets into cash
- Volume of investments
- Time gap of assets and liabilities

Hence, one of the most important principles of liquidity risk management is to estimate the future needs of the bank. Liquidity management is one of the biggest challenges that the banking system faces. The main reason for this challenge is that most Sources of banks are financing from short-term deposits. In addition, the facilities granted by banks to invest in assets with a relatively low degree of liquidity. The main task of the bank is to strike a balance between short-term financial commitments and long-term investments. Maintaining insufficient liquidity of the bank with the risk of inability to fulfill obligations and, as a result, bankruptcy. Maintenance of large amounts of liquidity is a special kind of inefficient allocation of resources, which reduces the bank's profitability to public deposits and, as a result, loses the market. Liquidity management means the ability of a bank to fulfill its financial obligations over time. Liquidity management is carried out at various levels. The first type of liquidity management is carried out daily, and alternate liquidity is expected in future days. The second type of liquidity management that is based on management of liquidity process predicts the required liquidity for longer intervals of six months to two years. In summary, the third type of liquidity management is that if banks cannot provide financial resources for themselves, they cannot do the same for their customers in the first place. The proper management of liquidity risk, together with the management of other types of risk, requires the bank to determine a solution to ensure effective control of the board of directors and senior executives, as well as to perform liquidity risk measurement, care and control operations under an appropriate process, the complexity of the liquidity management process should be suitable for all levels of risks imposed on the bank. Creating liquidity is one of the main activities of the bank. Many of the direct or indirect activities depend on the ability of banks to provide liquidity to customers. . Hence, banks are particularly vulnerable in terms of liquidity problems in the sense that institutions with a particular nature and in terms of the impact they have on markets as a whole are vulnerable. The liquidity strategy of the bank should identify specific policies related to the specific aspects of liquidity management like the combination of assets and liabilities, the approach of liquidity management in terms of different currencies from one country to another, the relative reliance on using the major financial instruments, the liquidity and Asset able sales. In addition, there should be a proven solution to deal with potential temporary or prolonged liquidity disruptions. Due to the effect of liquidity risk on banks' abnormal returns, they should have measurement and monitoring system for evaluation Incoming and outgoing liquidity in future. One of the most important principles of liquidity risk management is to estimate the future needs of the bank. This estimate can be based on three methods:

- Estimates based on the resources and expenditures of cash
- Estimates based on the structure of assets and liabilities and their conversion rates to cash
- Estimates based on liquidity indicators

In case of bank's connection with international activities and, as a result, foreign currencies, there should be a measurement and monitoring and control system related to foreign currency liquidity. Liquidity risk is very important in the banking industry. The profit derived from the stock price is significantly affected by liquidity risk. Because liquidity risk reflects the activity of banks in their ability to generate sufficient capital for profitable in future. Therefore, as liquidity risk decreases, the index for profitability also decreases. Control of liquidity risk in the following actions is necessary:

- Consider the structure of funds to predict net cash flow

- Variety of resources and timeframes to prevent withdrawal of deposit

- Creation of short-term credit lines with other banks in emergency situation

- Use of derivative financial instruments for managing funds with respect to the past

- Determination of precautionary measures for major sources

- Supervision of problematic and injured assets and deposit insurance

- Increase the liquidity of financial assets and maintain a good level of cash assets.

Practical Solutions for Managing Banks Credit Risk

Granting credit facilities to customers is one of the most important tasks of banks. Banks in each country, after collecting financial resources, allocate these resources to different economic sectors.

In fact, this action strengthens the various sectors of the economy in each country to do their jobs better and ultimately strengthens the necessary conditions for economic growth in each country to better perform its tasks and ultimately create the necessary conditions to growth economic of the country. If banks can achieve this, they will allocate financial resources properly to eligible customers. Proper allocation of funds while achieving the above goal will provide the necessary background to survival of banks. In this case, it is important to note that prior to granting facilities to eligible customers, they are properly identified to improve the effectiveness of the decisions made. Obviously, any control of measures after the grant of facilities will be ineffective. Therefore, in order to create an appropriate environment for controlling credit risk, the following solutions are suggested:

- The management board is responsible for approving and reviewing the (at least annually) courses and policies of the bank's credit risk. These strategies should highlight the extent to which the bank can withstand the risks and how much its expected level of profitability is when confronted with different credit risks.

- The senior management of the bank is responsible for implementing the risk management strategies approved by the board of directors. In addition, the development of policies and procedures for the identification, assessment, maintenance and control of credit risk is the responsibility of senior management. Such policies and procedures should identify the bank's credit risk in all its activities, both at individual and portfolio levels.

- Banks should identify and manage the credit risk of all their products and activities.

- Banks must make sure that the risks of new products and activities before they are presented or committed are reviewed by appropriate risk management and control procedures and have previously been approved by the board of directors or other appropriate committees.

- Granting credit to banks should be done according to appropriate and well-defined criteria. These criteria should include accurate information from the target market of the bank, full knowledge of the borrower or counterparty, the purpose of its credit and its structure, and the source of repayment of credit.

- Banks, as well as reforming, re-financing existing funds of available credits, should have clear and transparent procedures for approving new credits.

- Granting all credits must be done in the same way. In particular, credits grants to companies and related individuals, as approved on the basis of the exceptions, should be carefully monitored and adopted other appropriate measures taken to reduce the risk of non-conventional borrowing.

- Banks should create a system for continually controlling their portfolios that are exposed to various credit risks.

- Banks should create a system to care about individual credit situation, so that they can also determine the adequacy of reserves and savings.

REFRENCES

Ahmad, N. H., & Ariff, M. (2007). Multicountry study of bank credit risk determinants.International Journal of Banking and Finance, 5(1), 1–18.

Ariff, M., & Cheng, Fan Fah (2011). Accounting earnings response coefficient: An extensionto banking shares in Asia Pacific countries. Advances in Accounting, 27(2), 246–354.

Baginski S.P, Hassel J.M. Determinants of Management Forecast Precision, AccountingReview, 1997; 72(2): 303 – 312.

Ball R.J, Brown. An Empirical Evaluation of Accounting Incom Number, Journal ofAccounting Research, 1968: 103-126.

Ball, R., & Brown, P. (1968). An empirical evaluation of accounting numbers. Journal ofAccounting Research, 6, 159–178.

Baltaghi H. B. Econometric analysis of Panel Data. New York, 3d, John Wily & Sons Lt;2005.

Beaver W.H. The Information Content of Annual Earnings Announcement, Journal ofAccounting Research 1968; 67-92.

Beaver,W. (1968). The information content of annual earnings announcements. EmpiricalResearch in Accounting: Selected Studies, 1968 Supplement to Journal of Accounting Research,6, 67–92.

Bikker, J. A., &Metzemakers, P. A. J. (2005). Bank provisioning behaviour and procyclicality.Journal of International Financial Markets, Institutions and Money, 15(2), 141–157.

Chambers, D., Freeman, R., & Koch, A. (2005). The effect of risk on price responses tounexpected earnings. Journal of Accounting, Auditing and Finance, 20, 461–482.

Choi J, L. A. Myers. The Roles that Forecast Surprise and Forecast Error Play inDetermining Management Forecast Precision; 2009-A Guide, available at:

Coën A, esfleurs A. International evidence on the relative importance of the determinants ofearnings forecast accuracy, Journal of Economics and Business, 2009: 1-19.

Collins, D., & Kothari, S. P. (1989). An analysis of intertemporal and cross sectionaldeterminants of earnings response coefficients. Journal of Accounting and Economics,11, 143–181.

Cragg J. G, Malkiel B. G. The Consensus and Accuracy of Some Predictions of the Groh ofCorporate Earnings, the Journal of Finance, 1968: 67- 48.

DeYoung, R., & Rice, T. (2004). Non-interest earnings and financial performance at U.S.commercial banks. The Financial Review, 39, 101–127.

Easton, P., & Zmijewski,M. (1989). Cross-sectional variation in the stock market responseto accounting earnings announcements. Journal of Accounting and Economics, 11,117–141.

Elton E. J, Gruber M. J. Earnings Estimates and the Accuracy of Expectational Data,Management Science; 1972: 409- 424.

Fairfield, Sweeney, & Yohn, F. (1996). Accounting classification and the predictivecontent of earnings. The Accounting Review, 71(3), 337–355.

Fama, E., & French, K. (2012). Analysis of independent and cross-sectional determinantsof earnings response coefficients. Journal of Accounting and Finance, 11(2/3),143–181.

Firth, M. and Liau-Tan, C.K. Signalling models and the valuation of new issues: Anexamination of IPOs in Singapore, Pacific- Basin Finance Journal; 2001; 27: 511-526.

Fischer, K. P., Gueyie, J. P., & Ortiz, E. (2000). Risk-taking and charter value of commercialbanks' From the NAFTA countries, paper presented at the 1st international banking andfinance conference, Nikko Hotel, Kuala Lumpur, Malaysia.

Frankel R, McNichols M. Discretionary disclosure and external financing, AccountingReview; 1995: 135-150.

Gallo, J. G., Apilado, V. P., & Kolari, J.W. (1996). Commercial bank mutual fund activities:Implications for bank risk and profitability. Journal of Banking and Finance, 22,1775–1791.

-Georgia, Siougle. Information Content of Earnings Forecast Disclosure 2003; 1-53.

Gong G, Yue Li L. The Association between Management Earning Forecast Errors andAccruals, Accounting Review 2009; 84(2): 497-530.

Hartnett N, Romcke J. The Predictability of Management Forecast Error: A Study ofAustralian IPO Disclosures. Multinational Finance Journal 2000; 4(1&2): 101-132.

Hassan,M. K., Karels, G. V., & Peterson, M. O. (1994). Deposit insurance, market disciplineand off-balance sheet banking risk of large U.S. commercial banks. Journal of Bankingand Finance, 18, 575–593.

http://www.ssrn.com**.**

Clarkson P.M, Dontoh A. The voluntary Inclusion earnings forecasts in IPO prospectuses.Journal of Contemporary Accounting Research. 2002; 14: 601-626.

http://www.ssrn.com.

Lennox C, Park C. The informativeness of earnings and management's issuance of earningsforecasts, Journal of Accounting and Economics 2006; 42 (3): 439-458.

Hutagaol Y, Siauw F. The determinants of management forecasts error and the IPOunderpricing: A case study of Indonesian IPO, 2009; A Guide, available at:

Jeitschko, Thomas D., & Jeung, Shin Dong (2005). Incentives for risk-taking in banking —A unified approach. Journal of Banking and Finance, 29(3), 759–777.

Jimenez, G., & Saurina, J. (2004). Collateral, type of lender and relationship banking asdeterminants of credit risk. Journal of Banking and Finance, 28, 2191–2212.

Johansen, S. (1988). Statistical analysis of cointegration vectors. Journal of EconomicDynamics and Control, 12(2–3), 231–254.

Kormendi, R., & Lipe, R. (1987). Earnings innovations, earnings persistence, and stockreturns. Journal of Business, 60, 323–346.

Kothari, S. P. (2001). Capital markets research in accounting. Journal of Accounting andEconomics, 31, 105–231.

Kraft, Evan, & Jankov, Ljubinko (2005). Does speed kill? Lending booms and theirconsequences in Croatia. Journal of Banking and Finance, 29, 105–121.

Lev, B. (1989). On the usefulness of earnings and earnings research: Lessons and directionsfrom two decades of empirical research. Journal of Accounting Research, 27,153–192.

Myring, M. (2006). The relationship between returns and unexpected earnings: Aglobal analysis by accounting regimes. Journal of International Accounting, Auditingand Taxation, 15, 92–108.

Nwaeze, E. (2011). Are incentives for earnings management reflected in the ERC.Advances in Accounting, 27(1), 26–38.

Ohlson, J. A., & Penman, S. H. (1992). Disaggregated accounting data as explanatoryvariables for returns. Journal of Accounting, Auditing and Finance, 7, 553–573.

Payne J. L. The Influence of Audit Firm Specialization on Analysts' Forecast ErrorsAuditing: A

Journal of Practice &Theory 2008; 27(2): 109-136. Rees L. Siavaramakrishnan K. The Effect of Meeting or Beating Revenue Forecasts on theAssociation between Quarterly Returns and Earnings Forecast Errors, ContemporaryAccounting Research 2007; 24(1): 259-290.

Richard. R. M. An Examination of the Accuracy of the Earnings Forecasts, FinancialManagement 1977; 78-84.

Ruland, w. The Accuracy of Forecasts by Management and by Financial Analysts, TheAccounting Review 1978; 2: 439-447.

Vivian, W. The Role of Management Forecast Precision in Predicting anagement ForecastError, Rutgers Business School, Rutgers University, 2009; A Guide, available at:http://www.ssrn.com

AN INVESTIGATION OF THE RELATIONSHIP BETWEEN WORK-FAMILY CONFLICT AND QUALITY OF WORK LIFE OF EMPLOYEES IN SOCIAL SECURITY ORGANIZATION

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Abstract

The objective of this study was to clarify the relationship between quality of work life and family conflict among employees at Social Security organization at Mehr city in 2014. For this purpose, 50 employees were selected by convenience sampling. Collection tools work-family conflict inventory of notes Meyer (1996) and quality of work life of Walton. (1979) for data analysis, descriptive statistics, including frequencies and percentages, and for the hypothesis, Pearson correlation and correlation matrix and independent t-test were used. Results of the findings of the study founded no relationship between work-family conflict and quality of work life, but there was a relationship between dimensions of supporting the colleagues and the quality of work life. There was no difference between men and women in quality working life and of work-family conflict and only in dimension of management support is higher in women.

1. INTRODUCTION

Improving organizational performance and increase productivity, in order to achieve maximum efficiency of human and material resources are important tasks of administrators. Quality of human capital is quality of working environment as well as the family environment and the balance between the two environments. (Ghazanfari and Abedi, 2008) Changes in contemporary societies have led to increase women's participation in the labor market and the increasing number of women working outside the home to develop a new type of family as the flame- families. In these families, men and women, in addition to the traditional role of wife and parents have job role, and this is more important for women. Because their roles as wives and mothers nowadays have assumed a new role.

At first glance, it seems that this new role leads to increase revenue, improve the economy and increase the self-employed women, but when a woman is unable to establish a kind of balance between the expectations of their view called work-family conflict. (Naeimi, Nazari, Zaker, 2012) Work-family conflict is a specific type of conflict between the roles that involved same person with different and conflicting demands of work and family responsibilities.

This means if a person cannot do their work and family time, conflict between family and career roles is established. This type of conflict is known to work-family conflict. (Rastegar, 2010) Also quality of working life includes all measures to preserve and protect the body and soul of staff and they provide grounds for satisfaction. (Allameh, 1998)

Work and family are two important aspects that make up each person's life and overall health of the individual is under the influence of harmony and balance between these two areas. Existence of disparities

and conflicts between the two areas most adverse consequences upon the individual, family, organization and society.

Nowadays, most experts in field of organizational behavior believe that the effects of overwork and lack of proper balance between work and personal life and family lead to adverse effects on quality of life that create or aggravate each other mutually and as a result, living conditions and human health and family puts at serious risk. (Shabani, Fazel, 2011)

Researcher tried to answer the question of whether is a significant relationship between work-family conflict and quality of life?

The importance and necessity of research

Family and job life are integral part of the lives of most people. So that, success of people in advance its objectives in these two areas of life, family and work. If the person in the course of their work or family life suffer its consequences affect not only the individual, but also organizations and society at large. Nowadays a lot of research on the study of factors affecting individuals' family and career and this reflects the importance and necessity of these two important components of life.

At the macro level of society, especially in organizations nowadays researchers have been aware of the importance of human resources and have found that the value of labor and capital endless development of organizations and countries are, so that in the past century and a half, a significant proportion of the progress of developed countries is for the development of efficient human resources. At the micro level, the family is a fundamental constituent of society. So that safe or unsafe, the core can affect all levels of society.

As well as due recognition of the conflicts that emerged from the work of women, the importance of such research to be felt. As well as lack of information, especially in the field of family-work conflict in the country, Work-family conflict as a major source of tension with negative consequences such as increased health risk of working women, perform the duties of parents and wife dysfunctional, lower marital satisfaction and mental health is the need for this research.

History of Research

Based on Rastegar Khaled research (**2003**) in the duties at the same time working women in their dual roles of family and career, particularly in matters relating to children greatly felt in conflict.

Maghsood and Bostan (2004) in their study concluded that women who work their problems in relation to child care, providing family feed restore order and cleanliness at home, lack of time for traveling with relatives, tending to their appearance and increase respectively. On the other hand, most of the problems of working women, women are not necessarily alone on the job, but traditional attitudes and beliefs about the role of women. In addition to the social role that makes them at the same time to reflect the requirements and responsibilities of home. In addition, these findings suggest that rate of women's participation increased cooperation with wife in household chores will be reduced substantially.

Research results Naeimi, Nazari and Sanaee Zaker (2012) showed that between quality of work life and job performance, positive correlation between work-family conflict and job performance and there is a significant negative relationship. Grease House and Biutel (1985) found that social support can the relationship between family-work conflict and its negative consequences on the mental health and social communication through the impact of specific dimensions of emotional and instrumental support to mitigate conflict. Research results Hummer and Tambon (2002) showed that lack of conflict between work and family causes a lot of problems, and negative consequences for people like (or anxiety, depression, etc.) for their interpersonal relationships (such as increases in divorce and conflict) and the organization (absenteeism and reduced productivity).

Objectives and research questions

The relationship between work-family conflicts with job satisfaction among employees with Social Security in 2014.

Research questions

Is there a significant relationship between work-family conflict and quality of life?

Is there the conflict between work and family dimensions (job involvement, job stress, peer support and management support and conflict between work and family) is a significant relationship between quality of work life?

2. THE METHOD

Method of this study is correlational. The population consisted of all employees at social security in Mehr city in 2014. The sample consisted of 50 employees, of which 28 men and 22 women were selected using random sampling method.

Data collection tools

Work-Family Conflict Scale: This scale by notes of Meyer (1996) has been made and a 24 question that has five subscales of the six first question related to occupational aspects, i.e. rate of job involvement, five questions related to job stress, five questions related to management support, three questions related to peer support and five questions related to the conflict between work and family and earn more points in 4 (50 and above) in fact shows the importance of family life is more than a job, whatever score obtained in dimension five higher (15 and above), the conflict between work and family activities more. The validity of the questionnaire using Cronbach's alpha for the work-family conflict first and second respectively 0.91 and 0.88 respectively. This advantage in Iran for the first and second respectively 82% and 92%, respectively. Builders were performed by both the correlation with sixteen psychological constructs such as life satisfaction, job satisfaction, role conflict and role ambiguity was determined that with job satisfaction, role conflict and role ambiguity of life negatively and positively associated. (Moghimi, 2009)

Quality of work life questionnaire: This questionnaire has been prepared by Walton (1979) in 45 questions, that ticks a lot 5, lot 4, Intermediate 3, low and very low 1 2 scored. Scoring and Interpretation of Results: - For options lot 5, lot 4, 3 mediums, low and very low 1 2 points to consider. - Score Questions 1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 19, 22, 24, 25, 26, 32, 34, 40, 45, 46, 47, 49, 50 reverse. I.e. too much for options 1, lot 2, Intermediate 3, 4 and very low 5 points to consider.

Reliability and Validity: In this study, Cronbach's alpha was used to assess the reliability of the questionnaire which 91% is estimated quality of life questionnaire. Also validity of questionnaires, using content has been approved.

Method of analysis data

To analyze the data, descriptive statistics such as frequency and inferential statistics including Pearson correlation and independent t test was used.

3. RESEARCH FINDINGS

In this first part of descriptive statistics and then asked for a separation arises and using inferential statistics to individual questions will be answered.

Table 1. Mean and standard deviation of the variables under study

Standard deviance	Average	Variable
2.35	1.56	Quality of Working Life
11.76	82.48	Conflict between job and family
5.17	19.80	Job Involvement
3.92	19.82	Occupational stress
4.89	16.12	Administrative support
3.23	11.08	Supporting Partners

Standard deviance	Average	Variable
5	15.66	The conflict between work and family

Source: Author

The first question: Is there any significant relationship between work-family conflict and quality of life?

Table 2. Pearson correlation between work-family conflict and qualities of work life

Significant level	Correlation coefficient	Variable
N.S	0.20	Conflict- job-family with quality of working life

Source: Author

According to Table 2, there is no significant relationship between the two variables.

The second question: Is there any relationship between the dimensions of work-family conflicts and qualities of work life?

Table 3. Correlation matrix between the variables studied

6	5	4	3	2	1	Variables
					1	1. Quality of Working Life
				1	0.09	2. Job Involvement
			1	0.12	0.05	3-occupational stress
		1	0.10	0.05	0.26	4. Administrative support
	1	0.41**	0.26	0.16	0.37*	5. Supporting Partners
1	0.29*	0.31*	0.25	0.16	0.18	6. The conflict between work and family

Source: Author

According to the correlation matrix, there is a significant positive relationship between the support staff and the quality of working life, and between peer support and managerial support at 0.01 level.

Table 4. Average differences quality of working life and the gender dimensions of work-family conflicts

Significant level	Degree of freedom	Value t	Standard deviance	Average	Frequency	category	Variable
N.S	25.66	0.41	22.29	1.54	28	Man	Quality of working life
			25.75	1.58	22	Woman	
N.S	47.71	1.80	12.31	79.92	28	Man	Conflict between job-family
			10.40	85.72	22	Woman	
N.S	32.78	0.49	3.94	20.14	28	Man	Occupational involvement
			6.49	19.36	22	Woman	
N.S	38.53	0.14	3.46	19.89	28	Man	Occupational stress
			4.5	19.72	22	Woman	
0.03	39.23	2.20	4.17	14.78	28	Man	Supporting by management
			5.29	17.81	22	Woman	
N.S	40.60	1.41	2.92	10.50	28	Man	Supporting by colleagues
			3.52	17.81	22	Woman	
N.S	47.80	1.74	5.27	14.60	28	Man	Conflict between job and family
			4.39	17	22	Woman	

Source: Author

The third question: is there any significant difference between men and women in working life and quality of work-family conflicts?

4. CONCLUSIONS

This research aimed to investigate relationship between work-family conflicts with job satisfaction among employees at Social Security in Mehr city in 2014. The results showed no significant relationship between work-family conflict and the quality of working life that is consistent with findings Hyun Young (2009) Ruth and David (2009), Yavas, Babakvs and Kartaph (2008) Kartaph and Spukman (2006). In explaining this result can be the same if people are able to do their job duties and responsibilities of both the household and and the duties of their family roles interfere with the duties of their job commitment or vice versa, in such a way that they fulfill their work and family are experiencing pressure and difficulty and they can meet the requirements of both plays well, makes that the problems in working life.

Based on the findings and variable dimensions of work-family conflicts, relationship between qualities of work life, can be concluded there is no significant relationship between variables of quality of work life and job involvement, job stress, conflict management support and work and family. Only, there is a significant relationship between the support staff and the quality of working life. In explaining this question, we can say, that as people in the community need to support and cooperate with others, workplace is no exception to this rule must be necessary and colleagues have worked together and support each other that this protection is particularly important in women because the role of being a mother, because women for reasons such as (pregnancy, physical illness, vacation, etc.) require more support from their colleagues. Another finding of this study also observed differences between men and women in managerial support.

4.1. RECOMMENDATIONS

Work-family conflict is one of the important variables that brings dangerous consequences for working women, including psychological pressure, work-related fatigue, depression and anxiety, physical illness.

So the need is felt that culture of patriarchy prevails in our society. If culture is that men help their wives at home and in foster care.

Workplace support of the government and their managers and sports classes, and recreational trips for working women to be considered that can both in the workplace and in the home environment safer and more relaxed to perform their duties.

In addition, more research on work-family conflict with other variables such as quality of life, stress, and guidelines dealing with children be provided in this area.

REFERENCES:

Hammer, L., & Thompson, C., (2002). Work – Family role conflict. Zicklin School of business, Baruch College, CUNY.

Maghsoodi, S., Bostan, Z., (2004) examines the problems of working women in Kerman time job and family roles. Women's studies, second year. 5. 18-25.

Naeimi, G., Nazari, A., M., (2012) examined the relationship between quality of work life and job performance Work-Family Conflict with married men. Journal of Occupational and Organizational Consulting Volume IV, Issue 10 8-15.

Rastegar Khaled A., (2003) Measure of job-family role conflict and social factors influencing the study of dual-**career couple's families in Tehran. PhD thesis, University of Tarbiat Modarres**

Robbins, S., P (1989) Principles of Organizational Behavior. Translation: Parsaeian, Aarabi (2007) 19. Print Publications Office of Research

Shabani B., Gholamreza. F., Abolfazl. B., Fazel, F. (2012) to determine the relationship between work-family conflict and heads and deputy heads of delegations Hamedan quality of life. A study sports management and motor behavior. Issue 15, 253-256.

STUDY THE COORDINATES OF METHODOLOGY IN FUTURES STUDIES

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Abstract

Knowledge and understanding of the future and the unknown that lies beyond human beings and human societies is very important. The present study in conducted on interdisciplinary methodology and through an overview of the paradigm of future studies, five research paradigm in futures studies, including positivism, post-positivism, assessment-oriented, constructionism and participatory will be introduced. About the differences and similarities with this paradigm in ontology, epistemology, methodology and anthropology are discussed. Then, some of the most prominent techniques and methods of futures studies will introduced. Finally, with the introduction of integrated cross-paradigm research approach as the latest methodology approach in future studies, application of this paradigm in the field of ontology, epistemology and methodology in futures studies will be discussed.

JEL classification: J28

Keywords: *Futures Studies, Ontology, Epistemology, Methodology*

1. INTRODUCTION

With the advent of various knowledge areas in natural and human sciences and increasing specialization and social problems, future studies have been emerged in a new era and after attempts by "HG Wells' in the prediction and design of the future, "Felltham" German prospective provided term of futurism in 1943 for the programs to conduct the communities toward the future. Future studies was gradually extended to the military sphere. Theodore Carman in his works such as "Towards new horizons" and "thermonuclear war" discussed this approach.

In the next steps, several scientists such as "Bertrand Degunnel" directed future studies toward intellectual and philosophical basis (Qadiri, 2006). Focus on education in the face of the future is the main task of education system and futurists. In the field of intellectual evolution approach with futures studies from the past up data, three components became so important. These three components include: changes, speed of changes and changes and complexity. Features of each of these components is that facing the future and create or promise some new system and sub-systems (Taghipour et al., 2016).

The speed of change is so staggering that traditional methods cannot cope with them. If, we do not adopt the speed of changes, we will be lost under the wheels of change. But is it possible to keep informed of our future? There is nothing certain about the future and this is the basic principles of futurism. But, there is another principle that a person can be effective in the future. In the meantime, a knowledge is emerged entitled futures studies, which tries to predict future changes in the dual form to control both inhibition of changes and prepare the society for these changes. futures studies are beyond the prediction and is not claimed to predictable.

Futures studies is the art of shaping the future in a form we want. Futures studies is a necessity (Golestani Zadeh, 2016). Given the diversity of subjects in the futures studies instead of an independent discipline, it is better to call it an interdisciplinary or multidisciplinary field (Najarian et al.,2012). However, choosing any subject, not only futures studies exists today, but also plays an important role in shaping the future of

humankind. Potential subject areas in the futures studies in terms of number are equal to diverse phenomena in the universe.

Therefore, futures studies necessarily are multidisciplinary or interdisciplinary; this area also covers a variety of topics and experts have been trained in various fields. In fact, the multidisciplinary field of futures studies, professional futures studies and futurist is delimited. Pragmatism of futurists encourage them to concern interdependence and complex phenomena to each other in their calculations and assess the results of each action (public) with a holistic approach.

Hence, futurists in any knowledge in any field of study if affect the phenomenon will be studied. Futures studies, in spite of multidisciplinary nature include the features that it inevitably puts on the border of Social sciences: Social science, unifying and multidisciplinary. Of course, some futures studies discuss topics such as based-technology changes; issues do not seem social at first glance, but even in such studies almost always, supplies are considered social consequences of such changes; requirements or outcomes almost always psychological, political, economic, social or cultural in society are considered.

In other words, futures studies undoubtedly enjoy the social aspects and the status of a science, more social flavor, but not necessarily multidisciplinary and unifying as well. To meet the information needs of social actors, disparate knowledge - such as biological and physical sciences - in the form of packages and holistic combination with a special plan should be rearranged; so that it can be perfectly applied in the specific historical circumstances governing the planning purposes.

Social science research is aimed at understanding the social world. Social scientists to generate knowledge about the social world and paradigms of different philosophical schools are considered. So far, different classifications of this paradigm have been presented. Some social scientist focus on two paradigms of positivism and naturalism. Some other concern positivism, realism and criticism. Others insist on positivism, pragmatism and rationalism critical interpretation etc.

At the same time, it positivism, realism and pragmatism are the main paradigms of research in the social sciences to. Five paradigms in futures studies by Voros (2008) is intended including positivism, post-positivism, assessment-oriented, constructionism and participating. These paradigms are assumptions of ontological, epistemological and theoretical ideas of social research (Blake, 2009).

The transition to the new millennium, however is the shift in the calendar; but certainly is a true opportunity to review and rethink about the new millennium (Miller et al., 2016). In addition, people should know where they are going. They think about their children's future and want to constantly move forward to a brighter future. What we have seen in less modern university education in the humanities is attention to the importance of futures studies.

Although, the diversity of content in the areas of humanities subjects is very wide, but to get a correct pattern can predict and analyze messages and contradictions confronting humanity and the reduces influence without previous study and future studies on the psyche of people in a society. Accordingly, this article attempts to identify and then select a valid typology of futures studies paradigms that are primarily oriented relative to determine different positions and techniques of futures studies in paradigms.

The objective of this recognition is important in this regard that use of different techniques and methods should be taken in accordance with the methodology of ontology and epistemology. For this purpose, position of techniques and methods of future studies as a transdisciplinary science are determined in paradigm to facilitate targeted applications in various research positions for researchers and a non-oriented design of a meta-paradigmatic and moving toward integration methodology is available.

2. FUTURES STUDIES

Futures studies under Foresight - future testing - futurism – future imagination - and in Latin is named futures studies future. Futures studies was emerged as knowledge, understanding and shaping the future and today has an important place in the world in various fields of human life, including politics, economy, culture, society and so on (Noorani, 2016).

Some researchers have provided different definitions for future studies in different areas. "Ben Martin," member of Science and Technology Policy Research Institute has defined future studies as: "Foresight research is a process includes systematic attempt to look at the long-term future of science, technology, economy and society, aimed at identifying areas of strategic research and emerging technologies in general may lead to the greatest economic and social benefits "(Miller et al., 2016).

Futures studies include a series of attempts by the analysis of sources, patterns and potential agents of change or prove to visualize the future and plan for them. Futures studies reflects how the change (or not change) "Today" reality "tomorrow" is born. "Future Studies" have been taken from Latin (Salami, 2012).

Futures studies is knowledge to shape the future consciously and actively in such a way to believe dreams, wishes and noble and genuine aspirations of a nation (Hand et al., 2016). The most important objective of futures studies is to create an image of the future that will lead to improvement. Visualization of the future is an appropriate strategy for action in social systems that through the creation of awareness and insight to join the society and coordinate social behavior social elements creates a ground for research purposes. One of the rights of our ancestors is pay attention to their ideas and plans for the future of society (Rahmati, 2016).

Futures studies introduce philosophical thinking and scientific methods and models proposed future study and using them to depict the future and possible alternatives and therefore, futures studies are clever engineering tool for the future. If has been said that futures studies refer to specific subjects, courses or units which are different aspects of thinking of the future. " But given that futures studies are some multidisciplinary research areas that describe and explain and offer wide viewing social phenomena and processes of change and development in various fields of human activity (Salami, 2012).

Future studies are multidisciplinary and interdisciplinary research to identify possible or desirable situation for the society in the future. Future studies is a process to predict different incidents in the future. In this definition, the term of predict is used as a statement that indicates the relative probability of the occurrence of some of the overall process or series of events. Future studies are part of the design of a new form of social design and technology (Abbasi Mazar, 2016).

Futures studies is of great importance due to its multiple applications. There are various methods for futures studies, some of which include: Delphi method, scenario method, environmental scanning method, the method of brainstorming, patent analysis, dependency tree method, morphological analysis, interactions and methods of future cycle. (Noori, Ayoubi, 2009)

"Glenn" (2012) introduced Methods of futures studies as: factor modeling, layer analysis of the causes, analysis of interactions, models of decision-making, Delphi, statistical modeling, participatory methods, personal future, market forecasts, scenarios, roadmap, alternative analysis, text mining, impact process analysis and foresight.

3. FIVE RESEARCH PARADIGM IN FUTURES STUDIES

Among the existing paradigm, one of the most comprehensive typologies in future research paradigm presented by "Voros" **and has been focused** in this study. He followed "Guba" and "Lincoln" in his working. From his perspective, positivism, post-positivism, critical theory all kinds of assessment-oriented, constructionism and participatory are five main paradigms in the study (Voros, 2008).

These paradigms are distinguishable the answers to some fundamental questions. Responding to three basic questions of each paradigm of the ontological, epistemological, methodological and fourth, i.e. cognitive value defines the boundaries of the paradigm. Ontological question discusses the nature of reality and epistemological pays attention to the nature of knowledge.

Ontology is "a general theory about what kind of things or essence that exist in the world." and refers to the variety of life and relationships within the particular context of reagents and scientific expertise. (Benton and Krayb, 2005) Ontology is the study of "social assumptions about what the world makes of

this particular approach and how to study it." (Barbour, 2007). In summary, ontology is research to justify a specific strategy of social research about the nature of social reality (Sadeghi, Naseri, 2011).

Ontological assumptions: What is the nature of social reality? These assumptions discus the question, "what is there", "what resembles" "What units is formed " and " how units interact," together (Blaikie, 2005).

Epistemology is "the study of how and what can be recognized" and "study is the nature of knowledge and justification". Epistemology can be considered as epistemic justification. In summary, epistemology examines assumptions about how to recognize what has been accepted. (Sadeghi, Naseri, 2011) Epistemological examines approaches to the question "How can we recognize social realities" the epistemological examines epistemology and nature of man and concerns kind of knowledge and criteria for judging the adequacy of knowledge and necessary criteria to distinguish between scientific and non-scientific knowledge (Creswell, 2012).

Methodology is the theory and analysis on the implementation of the research or as "Kaplan" (1964) defines "study - describe, define and justify the methods and not the procedures". In summary, the methodology is the study and justification of research methods (Sadeghi, Naseri, 2011). These five paradigm in futures studies are displayed in summary in "Table 1".

Table 1. Five Research Paradigm of Future Studies

Participatory	Constructionism	Assessment-oriented	Post-positivism	Positivism	
Participatory reality, subjective- objective reality, made jointly by the mind	Relativism, Specific local and constructed realities	Historical realism, virtual reality Formed by social, Political, cultural, Economic, racial and Gender values; formed over the time	Critical realism, real reality, but incomplete and ability to understand the reality of possibilities	Simple Realism, Real reality but understandable	
critical subjectivism collaborative exchange with the universe; the experimental range, dramatic, propositional and practical knowledge, jointly created findings	Exchange / subjectivism, created jointly findings	findings Exchange / subjectivism; the a mediating value	likely truth Evolved Dualism / objectivism, tradition / Congregation critical search for	for truth Dualism / objectivism, epistemological search	

| Political participation in joint action research, operational excellence, experimental use of language in the context of the underlying shares | Interpretive / polemical | Polemical dialogue | Developed / hypotheses, may be modified Empiricism; multiplicity critical; falsification of qualitative methods | Experimental / manipulation; verification hypotheses, mainly quantitative methods | |

Source: Fatehi Rad et al., (2013)

The Relation of Paradigms with Futures Studies Techniques

As "Voros" tells the future development of studies in these five paradigms, more basic research approach in futures studies positivism was looking for. In this way of thinking that was one of the most significant goals, accuracy, validity and reliability is very important. Futurist he tried to put aside personal values, adopt an objective position and to predict the future. So position of elite researcher was objective-oriented. Gradually the qualitative judgments post-positivist stance emerged in futures studies (Fatehi Rad et al., 2013).

Rational-scientific assumption and the objectivity governing the futures studies have not been last and in the 1970s opened up space for subjectivist approach. Gradually, interpretive and critical studies were developed in the future. In this regard, the idea of social constructionism was located in the heart of the futurist approach "Habernard Degunnel". **Jürg**en Bermasder vote results in futures studies renewed research concepts in the field. As a result, the differences of opinion and dialectic were at in the center of critical approaches. participatory paradigm has been designed and developed in the last two decades. In general, it can be said that future researches are followed in five paradigms with four objectives: (Voros, 2008)

• **Predict and control**

• **Review and development (leading to the release.)**

• **Understanding and insight (leading to the restoration o**f the previous construction.)

• **Human flourishing (through political participation)**

Techniques and methods of future studies were introduced in relation to research paradigms. The largest number of futures studies methods are in the paradigm of positivism and that's because the dominance of long-term positivist looks at future in the past century. These methods are often used for the purpose of the review include impact process analysis, mutual interaction analysis, statistical modeling, factor modeling, alternative analysis and text mining in the category of quantitative methods. A second group of methods is often the nature of quantitative - qualitative, including models of decision-making, Delphi and market forecasts are in the paradigm of post-positivism. In this way, search for truth about the future possibility is done by obtaining the views of the people. In both of these paradigms, futurists are neutral in scientists sentence who seek to identify and explore future (Fatehi Rad et al., 2013).

Future study in assessment-oriented paradigm or critical theory also has its own method. The most significant way in this paradigm is the layer analysis of causes. In this method analysis of events in four different levels of review and development as the object of the present time are discussed. Methods such as scenarios, roadmaps, foresight and personal future can be placed in fourth the paradigm or constructionism. Because in these methods, futurists through the foresight for future modernization and draw a path and desirable futures to get to it. Finally, collection of techniques that are known in participatory futures studies methods, as the title implies they are participatory paradigm. In "Table 2" position of techniques and methods in futures studies paradigms of research have been identified.

Table 2. Relation techniques and methods of futures studies of research paradigms (Fatehi Rad et al., 1392)

Participatory	Constructionism	Assessment-oriented	Post-positivism	Positivism	
				●	Factor Modeling
		●			Layer analysis of causes
				●	mutual interaction analysis
			●		Models of decision-making
			●		Delphi
				●	Statistical modeling
●					Participatory methods
	●				Personal future
			●		Market Forecast
	●				Scenarios
	●				Roadmap
				●	Alternative Analysis
				●	Text mining
				●	Impact process analysis
	●				Foresight

Source: Author

4. RESULTS

The main research paradigms in future studies are positivism, post-positivism, assessment-oriented, constructionism and participatory. These paradigms are distinguished through their differences in ontology, epistemology and methodology. The different characteristics of these paradigms in terms of the objective of research, researcher, nature of knowledge and knowledge accumulation make the boundaries of the paradigm more precisely. Techniques and methods that will be used in futures studies are related to these paradigms, in other words, each one is defined within one of these paradigms.

Understanding this relationship to choose the appropriate methods and techniques to carry out a research on the future is important. According to this study, a significant portion of techniques and methods useful in futures studies are in the paradigm of positivism and post-positivism. Analysis methods such as impact process analysis, mutual interaction analysis, statistical modeling, factor modeling, Alternative Analysis and text mining in the positivist paradigm and methods of decision-making, Delphi and forecasting market are defined in the post-positivist paradigm.

In the paradigm of constructivism, there are methods such as scenarios, roadmaps, foresight and personal future. But, methods of assessment-oriented paradigm are very limited. Among the known methods,

futures studies are only layer analysis of causes and follow a critical approach. Hence, the development of methods and techniques appears necessary for future critical study. Participation is defined in the paradigm of participatory methods with short life of several decades in the area of future research and development are still on track. It seems more initiatives are needed to develop methodology and participatory paradigm to achieve perfection.

Beyond the methodology defined in the paradigms outlined, the latest methodology of futures studies moves towards an integrated learning paradigm. any integrated approach accepted by the research should be based on pluralistic view of ontology, epistemology and methodology. different views have been proposed about integrated future studies approach. This approach was first proposed and followed by Richard Slaughter. (Slaughter, 1999, 2001, 2008)

Then, the futurists such as Voros (2005, 2006, 2008) Floyd (2008, 2012) and Morgan (2009, 2010) Ravzykv Slaughter (2010) Fatehi Rad et al. (2013) and others have developed it.

From Voros perspective, the basic assumptions of the of existing approaches have adopted and trying to reach them in an integrated and harmonious whole. to adopt a unified position is necessary go out the assumptions paradigms and move beyond a foresight - paradigm. A foresight that recognizes the achievements of all paradigm, yet free and out of the monopoly of them. Integrated meta foresight moves in the course of different perspectives and a variety, when it comes to them, to the point that needs to be used and when it was inefficient tool for the study of them out. In other words, integrated meta foresight is floating freely among paradigms (Fatehi Rad et al., 2013).

Futures studies according to the nature is an activity beyond - sighted - multidisciplinary, as a result appropriately can be integrated into the study framework used consciously in it. But for any futurist, introduction to meta-integrated paradigm, the paradigm of existing knowledge and dimensions of the ontological is their epistemological and methodological. In addition, it is necessary to determine the relationship between technology and methods available with paradigms that this article was an attempt to achieve this recognition and by specifying the position of the paradigm provides the context for proportional apply (Fatehi Rad et al., 2013).

REFERENCES

Abbasi Mazar, F. (2016). Relationship between futures studies and Strategic Management, International Conference on Industrial Engineering and Management, Tehran, Permanent Secretariat of the Conference

Barbour, R. S. (2007) Introducing Qualitative Research: A Student's Guide to the Craft of Doing, Sage Publications Ltd

Bell, W. (2003). Foundations of Futures Studies: History, Purposes, and Knowledge, Transaction Pub.

Blaikie, N. (2005). Design for Social Research, translated by Hassan Chavoshian, Ney publication

Blaikie, N. (2007) Approaches to Social Enquiry: Advancing Knowledge, 2 editions, Cambridge: Polity press.

Blaikie, N. (2009) Designing Social Research, Cambridge: Polity Press.

Creswell, J. (2012) Qualitative scanning research design: Choosing among five approaches (narration studies, phenomenology, data-based theory, ethnography, case study) translations by Danaeefard, Hassan and Kazemi, Hossein, Saffar – Eshraqi publications

Floyd, J. (2008). «Towards an Integral renewal of systems methodology for futures studies» Futures 40(2): 138-149.

Floyd, J. (2012). «Action research and integral futures studies: A path to embodied foresight» Futures 44(10): 870-882.foresight 8(2): 43-56.

Golestani Zadeh, M. (2016). Futures studies and future management, a necessity to manage the international community, the second International Conference on Management and Information and Communication Technology, Tehran, superior service companies

Gordon, A. (2009). «Future Savvy, » American Management Association Press, New York

Gordon, T. J.,Glenn, J. C. (1993). Issues in Creating the Millennium Project: Initial Report from the Millennium Project Feasibility Study, United Nations University.

Hand, M., Mai, T., Baldwin, S., Brinkman, G., Sandor, D., Denholm, P., Wiser, R. (2016). Renewable Electricity Futures Study-Volume One (No. 4). National Renewable Energy Laboratory-Data (NREL-DATA), Golden, CO (United States); National Renewable Energy Laboratory.

Havas Attila (2003). Socio-Economic and Development Needs: Focus of Foresight Programmes , Discusion Paper, New Series, 2003, 13, Budapest.

Inayatullah, S. (1990). «Deconstructing and reconstructing the future »Futures.

Inayatullah, S. (1993). «From 'who am I?' to 'when am I? Framing the shape and time of the future.» Futures 25(03): 235–253.

Inayatullah, S. (1996). «Methods and Epistemologies in Futures Studies » The knowledge base of futures studies 1: 186-203.

Krawczyk, E. and R. Slaughter (2010). «New generations of futures methods» Futures 24(01): 75-82.

Martin R. Ben (1995). Foresight in Science and Technology Analysis and Strategic Management, Vol. 7, No. 2.

Mehdi, F. R., Jalilvand, M. R., Molaee, M. M., Sameei, S., Nasrollahi, L. (2016). Coordinates of methodological interdisciplinary futures studies as an integrated meta-paradigm of, Journal of interdisciplinary studies in the humanities, the eighth round, No. 1, Pages 135-161

Miller, M. J., Moore, J., Devinney, P., Rose, J., Solano, S., Valenzuela, P. (2016). The Rural Perspective Technical Report Washington County Transportation Futures Study.

Morgan, D. R. (2009). «Futures schools of thought within the integral futures framework» foresight 11(5): 68-79.

Morgan, D. R. (2010). « Civilizational futures within the integral futures framework: the plural **quadrants» foresight 12(6): 69**-90.

Mozaffari, A. (2009). Future studies, the context beyond knowledge, order and security police Quarterly, Issue IV, second year.

Najarian, P., Mahmoud N., A., Zarghami, S., Yamani, M. (2012). Edgar Moreno multidisciplinary approach philosophical thought, Interdisciplinary Studies in the Humanities, Volume IV, Issue 2, Spring 2012.

Naserabadi, Z. (1999). Futures studies, Studies Center and strategic planning, Tehran, Defense Industries Training and Research Institute

Noori, S., Ayoubi, M., (2009). The development of future studies model based on environmental scanning, management tomorrow, Number 22

Nourani, T. (2016). The Influence of the problem solving methods to study the academic success of students managed futures studies, World Conference on Psychology and Educational Sciences, Law and Social Sciences at the start of the third millennium, Shiraz, research by Green ideas market firm

Qadiri, R. (2006). Identification and classification of variables related to science and technology foresight, technology management master's thesis, Allameh Tabatabai University, Faculty of Management

Rahmati, K. (2016). futures studies as a missing key in management decisions in Iran, the first National Conference on Islamic Law and Management Sciences, Qom, Qom governor Applied Science University

Sadeghi Fasaei, S., Mohsen, N. R. (2011) fundamental elements of qualitative research in the social sciences: ontology, epistemology, methodology and method, Journal of Social Studies, Volume V, Number 2, Summer 2011

Salami, R., Morteza K., Ali, S. D., (2012). Effect of futures studies in the field of police investigation, Journal of Industrial Technology, Issue 19

Schwandt, T. (2001) A Dictionary of Qualitative Inquiry (2nd ed.), Thousand Oaks, CA: Sage.

Slaughter, R. A. (1999). « a new framework for environmental scanning. » foresight 01(05).

Slaughter, R. A. (2001). «Knowledge creation, futures methodologies and the integral agenda» foresight 3(5): 407-418.

Slaughter, R. A. (2008). «Integral Futures Methodologies» Futures 40(2): 103-108.

Taghipoor, K., H., Fereshteh, R. P., D., (2016). Identification of talent, a new approach based on futures studies on teacher training system, the National Conference on Teacher Education, Isfahan University of educators, university,

Tapio, P., Hietanen,O. **(2002). «Epistemology and public policy: using a new typology to analyze the paradigm shift in Finnish transport futures studies» Futures.**

Voros, J. (2005). «A generalized "layered methodology" framework» foresight 7(2): 28-40.

Voros, J. (2006). «Introducing a classification framework for prospective methods».

Voros, J. (2008). «Integral Futures: An approach to futures inquiry». Futures 40(2): 190201-.

Walliman, N. S. R. (2006) Social Research Methods, Sage Publications Ltd

INVESTIGATE THE SIMULTANEOUS IMPACT OF BUSINESS ETHICS AND RELATIONSHIP QUALITY ON CUSTOMER LOYALTY; CASE STUDY: IRANIAN AGRICULTURAL BANK CUSTOMERS

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Abstract

Today, researchers, experts and managers of the organizations have made a lot of effort to improve management tools of interpersonal communication and promoting customer orientation culture. Everyone considers loyalty as the most important factor which determines the success of the organizations and improves profitability, which is achieved through business ethics and professional behavior of staff. Therefore, the aim of this study is to determine the impact of business ethics and relationship quality on loyalty of Agriculture Bank customers in Chabahar free zone. This research, objective-wise, is an applied study, and in terms of data collection for analysis (hypotheses or questions) is an analytical-descriptive study from correlation branch. The data and the model which was proposed in this study were collected from 230 customers and using the Pearson correlation test, multiple linear regression and ANOVA respectively. Statistical analysis results show that ethics and quality of communication between organizations and customers have an impact on customer loyalty. Several researches have shown the positive impact of business ethics and the relationship quality on the customer loyalty separately. But this study is an attempt to evaluate the impact of business ethics and relationship quality on customer loyalty simultaneously. The findings showed that not only the development of customer loyalty depends on business ethics of employees but also the ability to create a strong and close relationship with our customers is related to customer loyalty.

JEL classification: M14

Keywords: *Bank, Customer, Business ethic, Relationship quality, Loyalty*

1. INTRODUCTION

Customer loyalty has currently become one of the greatest concerns to researchers in the business-to-business relationship (B2B) (Hennig-Thurau et al., 2002; Athanasopoulou, 2009). Securing and increasing current customer loyalty emerges as an important marketing issue due to the economic advantages of retaining existing customers as opposed to searching for potential customers (Abdul-Rahman and Kamarulzaman, 2012). Highly competitive environment in the financial services industry, the ability of a financial institution to compete on price has become increasingly difficult. Therefore, most service marketers recognize today the importance of initiating and maintaining enduring relationships with customers (Sin et al., 2002; Narayandas & Rangan, 2004; Lam & Burton, 2006; Lemon et al. 2002; Liu et al., 2008; Wilson, 1995). Anderson and Srinivasan (2003) claimed that a well-established firm may collapse without customer loyalty. In this sense, customer loyalty should be regarded as a long term-term investment for the service providers. In order to develop a loyal customer base, service providers should maintain their relationships with their business customers. Rauyruen and Miller (2007)

found that the quality of B2B relationships is important in securing customer loyalty. Also to develop long-term relationships, good communication quality can increase customer reliability (Crosby et al., 1990, Li and Ho, 2008). In other words, higher quality communications, interactions between service providers and customers and Stable, long-term transactions are created that both sides can achieve common interests (Singh, 2008). At the other hand The implications for financial institutions are that it is of increasing importance that new, non-price factor, such as ethical sales behavior of salespeople is used as a means of differentiation, to achieve higher revenue growth and improved market share (Roman, 2003; Ferrell et al., 2007). Furthermore, ethical sales behavior can play a critical role in the formation and maintenance of long-term relationships with customers (Roman & Ruiz, 2005; Chen & Mau, 2009; Amyx et al., 2008; Schwepker & Good, 2004; Lagace et al., 1991). Business customers are now exposed to a wider choice of firms that are willing to provide services to them. This makes them more inclined to switch to other service providers. For service providers that want to pursue sustainability, it is necessary for them to understand the nature of their customers in order to maintain customer loyalty (Abdul-Rahman and Kamarulzaman, 2012). Therefore, retaining customers and maintaining customer loyalty demands that banks must listen to their customers and understand their needs (Dibb and Meadows 2001; Adamson & Handford, 2003; lassar et al., 2000; Selnes, 1998; Dick & Basu, 1994). Researches indicate that salespeople who act in an ethical manner are more effective at building strong customer relationships and their customers are more satisfied with them, more trusted and/or committed to them (Hansen and Riggle, 2009; Walter et al., 1999; Goff et al., 1997). However, in the financial services context, the salesperson's ability to affect customer's loyalty and dependency on the financial institution may be determined largely by the behaviors they implement when interacting with the customer (Reddy and Czepiel 1999; Strout, 2002; Goff et al., 1997; Pressey & Mathews, 2000). If good ethics is good business, the consequences of such initiatives should be enhanced business results. **Taking the "high road" with more ethical strategies should translate into greater market share** and return on investment, which leads to long-term sustainability of organizations (Weeks et al., 2006). Therefore, in this study we have tried to explore and investigate the impact of different **aspects of the relationship quality of bank employees and also business ethic on customers'** loyalty. More specifically, study aims to empirically investigate the effect of relationship quality (customers' trust, commitment and satisfaction) and ethical behavior on customer loyalty. Such understanding could contribute to improving the ethical behavior of the salespeople and consequently enhance the opportunity to build long-term profitable customer relationships in the context of Iranian banking industry.

2. LITERATURE REVIEW

Customer Loyalty

While there are various definitions of loyalty, the most common definition of loyalty is given by Oliver (1999) as "a deeply held commitment to rebuy or re patronize a preferred product or service in the future despite there are situational influence and marketing efforts having the potential to cause switching behavior" (Yim et al. 2008). Consistent with the aim of developing long-term relationships with the service provider, this study based the definition of customer loyalty as that put forward by Oliver (1999). Various authors have found that increase in customer loyalty will increase profits, reduced costs to acquire new customers, and decrease costs to serve current customers (Reichheld and Sasser, 1990). The increasing competition, particularly in the service industry, has caused firms to become very concerned in attracting potential customers and trying to maintaining long-term relationships with their current **customers (Jamil and Aryaty, 2010). An expectation of continuity reflects the customer's intention to** maintain the relationship in the future and captures the likelihood of continued purchases (Palmatier et al., 2006).

Business Ethic

Crane and Matten (2010) stated that business ethics is the study of business situations, activities, and decisions where issues of right and wrong are addressed. Finally, Bos (2007) mentioned that business ethics studies the moral and immoral actions of individuals in business organizations as well the businesses and the morality of economic system of society. Roman and Munuera (2005) defined ethical sales behavior as fair and honest actions that enable the salesperson to foster long-term relationships with customers based on customer satisfaction and trust. Salespersons typically have personal interactions with the customer and their actions are more readily visible, and unethical behavior can have a profound effect on the public opinion of the company (Mantel, 2005). Definitions of ethical behavior versus unethical

behavior are based upon the degree to which a proposed act is perceived as right versus wrong, good versus evil, fair versus unfair, or just versu**s unjust (Roman, 2003). A salesperson's unethical behavior** may negatively impact customer satisfaction and retention. Dubinsky et al. (1992) contends that unethical salesperson behaviors may result in customer dissatisfaction, poor word-of-mouth, lost customers, reduced sales and profits (Burnett et al., 2008). We used the definition of business ethics provided by Roman and Munuera (2005). Therefore, the study focuses on salespeople's ethical behavior as perceived by customer who takes place during the inte**raction between them and the bank's salespeople.**

Relationship quality

The concept of relationship quality is based on the theory and research in the field of relationship marketing in which the ultimate goal is to strengthen already strong relationships and to convert indifferent customers into loyal ones (Berry and Parasuraman, 1991). Also the ultimate aim is to enhance the relationship between the firm and become uninterested customers into loyal customers (Beny, 2000). Because of the importance of relationship marketing in today's business world, the relationship Quality to assess the strength of the relationship and the degree of satisfaction of the customer's demands and expectations is essential (Crosby et al., 1990; Li and Ho, 2008). Relationship quality was found to be an important factor in maintaining and developing successful business-to business relationships (Rauyruen and Miller, 2007). Relationship quality had been regarded as a higher-order construct and critical role in the customer decision-making or post-purchase process in marketing concept (Kim et al., 2006; Morgan and Hunt, 1994; Crosby et al., 1990). Although there is, as yet, no clear consensus in the literature on the sets of dimensions that comprise the construct of relationship quality (Hennig-Thurau et al. 2002; Athanasopoulou, 2009), extant literature has found that trust, commitment, and satisfaction are the core dimensions of relationship quality (Hennig-Thurau et al., 2002). Relationship quality has been originally termed as a bundle of intangible value that augments products or services and result in an expected interchange between buyers and sellers (Levitt, 1986). Relationship marketing quality can be considered as an overall assessment of the strength of a relationship (De Wulf et al, 2001). According to Crosby et al. (1990), customers that trust the service providers are more likely to repurchase and stay with the same service provider. Relationship quality is a higher order construct depicting the value customers attach to their relationship with the service provider (Dorsch et al., 1998). According to Hennig-Thurau and Klee (1997), relationship quality can be seen as the degree of appropriateness of a relationship to fulfill the needs of the customer associated with that relationship. Nevertheless, most research has conceptualized the effects of relationship marketing on outcomes as fully mediated by one or more of the relational constructs of trust, commitment, satisfaction, communication and/or relationship quality (Alrubaiee & Alnazer,2010). It has been conceptualized as a higher-order construct consisting of several distinct, though related dimensions, with critical importance of relationship satisfaction, trust and relationship commitment (Bonnin et al., 2005). Another school of thought suggests that the global construct of relationship quality, as reflected by a combination of commitment, trust, and relationship satisfaction, offers the best

assessment of relationship strength and provides the most insight into exchange performance (De Wulf et **al, 2001). However, the study conceptualizes a relationship quality as a bank's ability to identify, develop,** and manage cooperative relationships with key customers characterized by trust and commitment. Therefore, the development of a relationship quality is important to develop long-term relationships with key customers. To develop long-term relationships, good communication quality can increase customer reliability (Crosby et al., 1990; Li and Ho, 2008). In other words, the higher the quality of communication between service provider and customer interactions and transactions create long-term stability that both

sides can achieve common interests (Singh, 2008). Therefore, the study focuses on three dimensions: trust, commitment, and satisfaction, as suggested by Hennig-Thurau, et al. (2002).

Commitment

Relationship commitment is also an important component of relational exchanges. It is defined as an **enduring desire to maintain a valued relationship" (Moorman, Zaltman, and Deshpandé,** 1992). Commitment, the **party's** expectations the relationship the change of short term benefits to encourage long-term benefits from the relationship. Also customers committed most closely relationship experience that over time, lead to a commitment to the relationship (Ou et al., 2011). Kalagahan (1995) believes that the commitment is what makes that both sides in the same way move ally to achieve the desired goal (Morgan and Hunt, 1994). Scanzoni (1979) stated commitment is the most advanced phase of partn**ers' interdependence".** Commitment is a good indicator of long-term relationships (Morgan and Hunt, 1994; Shamdasani and Sheth, 1995) and is thought to represent the peak in relational bonding (Dwyer et al., 1987). Commitment is important to the study of relationships because it not only signals enduring stability at the conceptual level, but also serves as a reliable surrogate measure of long-term relationships at the operational and empirical level (Farrelly & Quester , 2003). The construct of commitment is regarded as the central construct in relationship marketing (Garbarino and Johnson 1999, Pritchard et al. 1999). The construct of commitment has also been shown to be an important dimension of relationship quality (e.g. Hennig-Thurau et al. 2002). Research suggests that relationship commitment is at the core of all successful working relationships and that it is an essential ingredient in successful long-term relationships, including supplier–buyer relationships (Anderson and Narus, 1998). research highlights that commitment is an affective nature (Garbarino & Johnson, 1999; Morgan & Hunt, 1994; Sheth & Parvatiyar, 2002). Affective commitment reflects a **customer's** sense of belonging and involvement with a service provider akin to emotional bonding (Fullerton, 2005), while calculative commitment is the way that the customer is forced to remain loyal against his or her desire (De Ruyter, Wetzels & Bloemer, 1998). Luarn and Lin (2003) establish significant relationship between commitment and loyalty. Various studies in the relationship marketing area have shown that these two factors seem to be crucial in influencing one another (Anderson and Narus, 1990; Anderson and Weitz, 1992; Kumar et al., 1995; Morgan and Hunt, 1994; Pritchard, Havitz and Howard 1999; Fullerton, 2003; Evanschitzky et al., 2006). Several other studies confirm a significant interaction of affective commitment and continuance commitment on loyalty (Fullerton, 2003; Evanschitzky et al., 2006). Bloemer et al., (1998), stated that the commitment to the Bank is a necessary condition for happening loyalty to the bank.

Trust

One of the goals in the regulation and supervision of financial markets is to enhance trust in financial institutions and in the financial system (Masciandro et al., 2007; Grunbichler and Darlap, 2003; Hasan and Severiens, 2001). As Dwyer, Schurr, and Oh (1987) argue, trust is important because it provides a basis **for future collaborations. Trust is also defined as one party's belief that its needs will be fulfilled in the** future by actions undertaken by the other party (Anderson and Weitz, 1989). Kramer (1999) posited that trust has both thinking and feeling aspects to it and that trust is socially oriented. As Sirdeshmukh et al., (2002) stated trust is the expectations held by **the consumer that the service provider "can be relied on to deliver on its promises". Studies in the financial services industry revealed that trust is one of the most** significant attributes valued by customers (Roman, 2003). Mayer et al. (2007) defined trust as vulnerability of one party to the actions of another on the basis of expectations that the other person was performing in the desired way. Mishra (1996) posited that there are four dimensions of trust (i.e., reliability, openness, competence, and concern) and found that communication is critical for demonstrating all aspects of trust (Mishra et al., 2008). According to Cater and Zabkar (2009) trust is belief, feeling or expectation about an exchange partner which can be judged from the partner's expertise, reliability and intentions. In the realm of relationship marketing, trust as an important variable for relationship success has been recognized (Heffernan et al., 2008). Trust is a human attribute assessed by **one's** traits (Chu, 2009), behavior and motives (Tian et al., 2008). Liang et al. (2008) called it the ability to **sacrifice one's own interest for others. The majority of definitions for trust describe it as the belief by one** firm that a partner will perform actions producing positive results for **the former (Alrubaiee & Alkaa'ida,** 2011). Trust regarded as a key ingredient for the development of long-term business and has been

recognized as a highly significant tool for enhancing company relationships (Berry, 1995). Creating trust in customer mind set importance for companies because from the previous studies Trust along with

commitment is an important antecedent of loyalty (Ball et al., 2004). Meanwhile, many researchers have **suggested that customer's trust plays a significant role in building long** term relationship and achieving customer loyalty (Zhang, 2009). Winning the trust of customers to establish long-term relationships and increase their loyalty is very important. Many researchers have noted that customer trust an important role in creating long-term relationship and achieve customer loyalty (Berry, 1995; Bowen and Shoemaker, **2003; Chu, 2009). People like "Bloemer and Odekerken", "Ball, Coelho and Machas" recognize that** consumers due to uncertainty and less

perceived risk in purchasing, to a brand they to trust and tend to remain loyal (Taghizadeh et al., 2012).

Satisfaction

One of the prerequisites of loyalty, especially in services, customer satisfaction that most researchers have pointed to it**.** (Heskett et al., 1994) have stated explicitly that loyalty is a direct result of customer satisfaction. Some researchers, such as (Ostrowski et al., 1993) even indulge and stated that a satisfied customer becomes a loyal customer naturally. Relationship satisfaction reflects exclusively the customer**'s satisfaction with the relationship and differs from the customer's satisfaction with the overall exchange (Palmatier et al., 2006.). Satisfaction has been defined as a consumer's evaluative judgment related to the** pleasurable level of consumption-related fulfilment (Oliver, 1996). Kotler (1994, p.20) importantly states **"the key to customer retention is customer satisfaction". In** theory, several authors posit the contribution of

satisfaction to customer loyalty. For example, Aaker (1996) and Heskett, Sasser and Schlesinger (1997) state that satisfaction is a key determinant to every level of brand loyalty. There is a stream of empirical research that stresses the link between satisfaction and customer loyalty. In consumer marketing, there is consistent evidence that satisfaction contributes to repurchase intentions, behavioural intentions, customer retention and customer loyalty (e.g. Anderson and Sullivan, 1993; Bearden and Teel 1983; Bitner, 1990; Bloemer, de Ruyter and Peeters 1998; Bloemer and Kasper 1995; Boulding et al. 1993; Burton, Sheather and Roberts 2003; Dube and Maute 1998; Ennew and Binks 1999; Oliver 1997; LaBarbera and Mazursky 1983; Patterson 1995; Selnes 1993; Yu and Dean 2001). In business-to-business research, several authors show that a link between satisfaction and loyalty exists. For example, Eriksson and Vaghult (2000) found that satisfied customers stay with the firm. Their findings indicate that long lasting and deep relationships are the result of the parties involved being satisfied with the outcome of their work. Mouri (2005) ascertains that experience which satisfies the need and desire of customer may increase the possibility of long term relationship. A customer requires different satisfaction level at different stages of relationship (Spath et al., 2007).

3. CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

RESEARCH HYPOTHESES

H1: The observance of Business ethics is effective on the customer loyalty.

H2: Attention to Relationship quality is effective on the customer loyalty.

H3: The customer's commitment is effective on the level of customer loyalty.

H4: The customer's trust is effective on the level of customer loyalty.

H5: The customer's satisfaction is effective on the level of customer loyalty.

H6: Observing Simultaneous the Business ethics and attention to Relationship quality is effective on the level of customer loyalty.

RESEARCH METHODOLOGY

This research base on objective is functional and to collect data for analysis (hypotheses or questions) is descriptive - analytical and correlation branch.
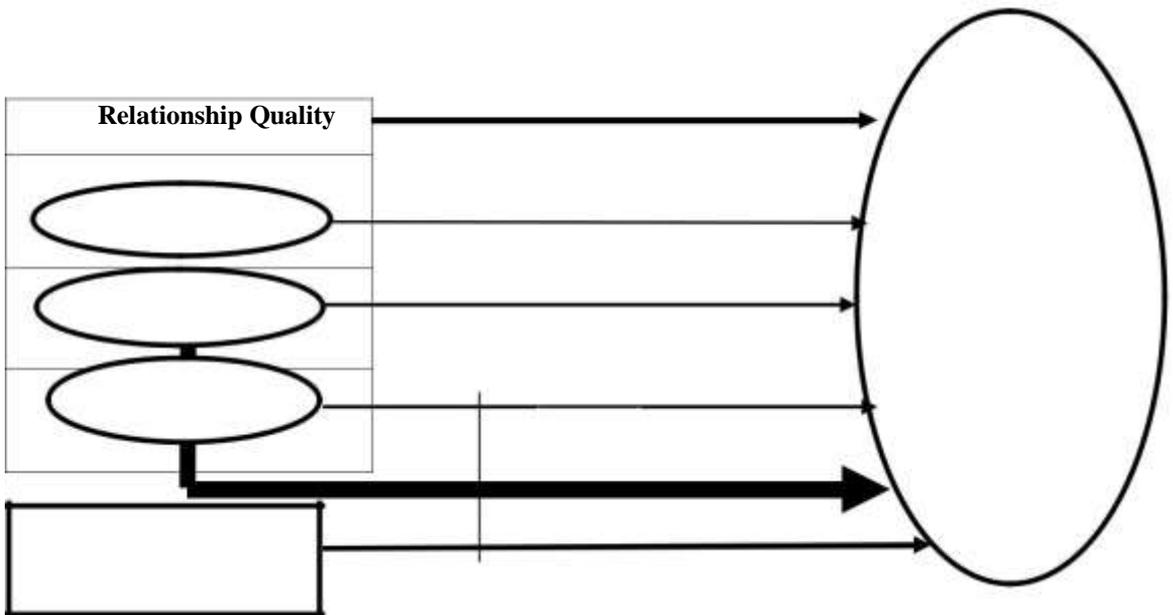
Selection of sample and respondent's demographics

The proposed research model is tested in the context of bank industry because financial services are highly abstract services characterized by credence attributes and consequently difficult for consumers to fully understand (Howe et al., 1994). Therefore, the customer must rely on the bank salesperson for correct information and proper guidance (Roman & Munuera, 2005). Consequently, bank industry can adequately reflect the actual characteristics of ethical sales behavior relationships. Accordingly, the study is empirical based on the primary data collected from a sample of agricultural bank customers in Iran – Chahbahar free zone. The study was carried out in 2015 on a convenience sample from ten main Iranian banks. Questionnaires were administered to a total of 380 bank customers based on Cochran formula within the area of Chahbahar free zone. A total of 230 respondents returned surveys, of which one questionnaires were rejected due to the lack of some information. Thus, 229 valid questionnaires were finally obtained, giving response rate of 60.2 per cent, a rate that is regarded as good. The participants in this study were predominantly males (67 percent), majority (47.4 percent) of the respondents were ages up to 40 years old. In terms of education, most of them (59.6 percent) were university graduates (possessed a bachelor degree). Finally, (94.8 percent) of the respondents were married.

Data analysis

The statistical package SPSS (version 24.0) was used for data analysis. A two-step detailed statistical analysis of data was involved. First, factor analysis was performed to extract the underlying factor of study variables, second, the correlation coefficient "Pearson ", ANOVA test and multiple linear regression analysis was performed to understand the effect of business ethics and relationship quality on customer loyalty.

Measures

All constructs in this study (i.e. Business Ethics, commitment, trust, satisfaction and customer loyalty) were measured using multi-item Likert scale adapted from prior research previously validated in other contexts to ensure content validity. All items were measured using nine-point Likert-type scales. The

respondents were asked to indicate their agreement or disagreement with the statements provided, with **anchors of 1 to indicate 'strongly disagree' and 9 to indicate 'strongly agree'. This section consists of 29**

questions that the five items used to measure ethical sales behavior were adapted from those originally developed by Roman (2003) to assess ethical sales behavior from the customer perspective in the Spanish financial sector. This scale was also adapted next by Roman and Ruiz (2005); Chen and Mau (2009); Hansen & Riggle, (2009). All items were negatively worded and subsequently reverse coded. The Seven items used to measure customer commitment was adapted from Morgan and Hunt (1994); Gruen et al. (2000); Wetzels et al., (1998); Sanzo et al, 2003; Karande et al. (2008); Hansen and Riggle, (2009); Kennedy et al. (2001); Chen and Mau, (2009). The measure for trust were adapted from Morgan and Hunt (1994); Karande et al. (2008); Sanzo et al, 2003; Hansen and Riggle, (2009); Kennedy et al. (2001); Chen and Mau, (2009); Sirdeshmukh et al. (2002); Eisingerich and Bell, (2007). The eight items measure of

customer trust designed to capture the major dimensions of trust: confidence, reliability, and integrity. These items were utilized as well, focusing specifi**cally on those that capture respondents' perceptions as**

to the integrity and reliability of the bank/sales person. The seven items used to measure satisfaction was adapted from Crosby, Evans and Cools (1990). Customer loyalty was measured by a six-item scale developed by Sirdeshmukh et al. (2002); Chen and Mau, (2009); Hansen and Riggle (2009).

Measure reliability

In this study, to determine the reliability of the test was taken a sample of 15 pre-test questionnaire and then using data obtained from the questionnaires and to help Spss software reliability coefficient for each variable were calculated using Cronbach's alpha. Results Software questionnaire show 91 percent of credit that is acceptable.

Measure validity

Test reliability of the questionnaire factor by factorial analysis was performed using Spss software. In this study, the questions are extracted and used from standard scales. And because it is a standard questionnaire has content validity[1].According to the results of all the factor loadings of variables, was higher than 0.5, indicating the validity of the questionnaire.

Table 1. Descriptive statistics of variables

	Loyalty	Relationship Quality			Business Ethics
		Commitment	Trust	Satisfaction	
Standard deviation	1.5515	2.1753	1.5942	1.3386	1.4002

Source: Author

4. HYPOTHESES TESTS

On purpose "Investigate Impact of Business Ethics and Relationship Quality on Customer Loyalty" The sixth hypothesis results in this case that between the relationship quality and business ethics on customer loyalty of bank exists direct relationship. I.e. by increasing ethical behavior seller when providing services and considering communications more friendly, becomes more customer loyalty. It also reviews the results of ANOVA test and multiple linear regression between ethics and relationship quality on customer loyalty bank observed a significant correlation between these two variables with loyalty that show the

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[1] - In psychometrics, **content validity** (also known as **logical validity**) refers to the extent to which a measure represents all facets of a given social construct. For example, a depression scale may lack content validity if it only assesses the affective dimension of depression but fails to take into account the behavioral dimension. An element of subjectivity exists in relation to determining content validity, which requires a degree of agreement about what a particular personality trait such as extraversion represents. A disagreement about a personality trait will prevent the gain of a high content validity.

positive relationship between them. The results of T-test and multiple linear regression showed that the influence of business ethics on customer loyalty is more attention to the relationship quality.

The first hypothesis

Pearson Correlation test was conducted and the results shown taht There is a significant positive correlation between business ethics and **customers' loyalty with a significant value of** 0.000 lower than 0.05. Hence we accept the Hyphothesis1.In other words business ethics and **customers' loyalty are related** with high relationship (r = 0.889**). Also, it is a direct relationship, means when the business ethics increases, the customer loyalty will increase. In other words, whatever the employees are more honest and employees with better ethics collide with customers, customers are more attracted to the bank, and will have greater loyalty to the bank.

Column Beta with the value of 0.753 with a significant value of 0.000 lower than 0.05 indicates the important role of the independent variable of ethical behavior in predicting and having the impact on the equation and on the dependent variable, i.e. customer loyalty.

The regression equation of first hypothesis is as follows:

(Business Ethics) 1.257 +1.894=customer loyalty

In general, there is a significant relationship between customer loyalty and employee moral behavior, and the impact of the independent variable (the business ethics of employees) on the dependent variable (customer loyalty) is much stronger.

The second hypothesis

In order to test this hypothesis, we conducted a multiple regression analysis using customer loyalty as the dependent variable, and the various components of relationship quality (trust, satisfaction and commitment) as the predicting variables. Thus, we can identify the relative importance of relationship quality components in explaining the variation in the customer loyalty levels. In the regression model summary table shown that there is a significant positive correlation (R=0.704) between components of relationship quality (trust, satisfaction and commitment) and customer loyalty. Also, according to the value of adjusted R (R^2 =0.415) found that the important role of the independent variables of relationship quality in predicting and having the impact on the equation and on the dependent variable, i.e. customer loyalty. Also, ANOVA statistics (F = 105.9; p <0.001) explain that relationship quality has a significant positive association with customer loyalty. These are generally expected results and confirms the hypothesis of study that believes that there is a correlation between them.

In other words, whatever the employees are more honest and employees with better ethics collide with customers, the relationship with customers has better quality, i.e. if the customer is satisfied with the performance and handling and speed of service. And if customers are willing to cooperate with banks, as well as, customer loyalty increases. Attention to the issue of relationship quality with customer and its management in the Internet service sector is of considerable importance. A relationship with a good quality has many benefits for services firms, especially makes positive view of their customers, and also increases their loyalty.

The third hypothesis

Pearson Correlation test was conducted and the results shown that There is a significant positive correlation between customer commitment a**nd customers' loyalty with a significant value of 0.000 lower** than 0.05. Hence we accept the Hypothesis. In other words, **customer commitment and customers' loyalty** are related with high relationship (r = 0.712**). Also, it is a direct relationship, means when the customer commitment increases, the customer loyalty will increase.

Beta column a value of 0.662 shows the effective role of the independent variable, i.e. the customer commitment in predicting and effectiveness in equation and also the dependent variable, i.e. customer loyalty increases.

The regression equation for the third hypothesis is as follows:

(Commitment) 2.129 +0.508: customer loyalty

In general, there is a significant relationship between customer loyalty and customer commitment, and this relationship is very strong, in other words, the independent variable has a significant impact on the dependent variable, and the third hypothesis is confirmed.

The fourth hypothesis

Pearson Correlation test was conducted and the results shown that There is a significant positive **correlation between customer trust and customers' loyalty with a significant value of 0.000 lower than** 0.05. Hence we accept the Hypothesis. In other words, **customer trust and customers' loyalty are related**
with high relationship (r = 0.690**). Also, it is a direct relationship, means when the customer trust increases, the customer loyalty will increases.
Beta column with a value of 0.532 shows the relatively high effective role of the independent variable, i.e. the customer trust in predicting and effectiveness in equation and also the dependent variable, i.e. customer loyalty increases.
The regression equation for the fourth hypothesis is as follows:

(Trust)1.46 +0.68: customer loyalty

In general, there is a significant relationship between customer loyalty and customer trust, and this relationship is to a large extent strong, in other words, the independent variable has a significant impact on the dependent variable, and confirmed the fourth hypothesis.

Fifth hypothesis

Pearson Correlation test was conducted and the results shown that There is a significant positive correlation between customer satisfaction **and customers' loyalty with a significant value of 0.00 lower** than 0.05. Hence we accept the Hypothesis. In other words, customer satisfaction **and customers' loyalty** are related with high relationship (r = 0.567*). Also, it is a direct relationship, means when the customer satisfaction increases, the customer loyalty will increase.

Beta column with a value of 0.403 shows the relatively high effective role of the independent variable, i.e. the customer trust in predicting and effectiveness in equation and also the dependent variable, i.e. customer loyalty increases.

The regression equation for the fourth hypothesis is as follows:

(Satisfaction) 1.47 +0.70: customer loyalty

In general, there is a significant relationship between customer loyalty and customer satisfaction, and this relationship is to a large extent strong, in other words, the independent variable has a significant impact on the dependent variable, and confirmed the fifth hypothesis.

Sixth hypothesis

In order to test this hypothesis, we conducted a multiple regression analysis using customer loyalty as the dependent variable, and the various components of relationship quality (trust, satisfaction and commitment) and business ethics as the predicting variables. In the regression model summary table shown that there is a significant positive correlation (R=0.881) between components of relationship quality (trust, satisfaction and commitment), business ethics and customer loyalty. Also, according to the value of adjusted R (R^2 =0.774) found that the important role of the business ethics and relationship quality in predicting and having the impact on the equation and on the dependent variable, i.e. customer loyalty. Also, ANOVA statistics (F >5; p <0.001) explain that business ethics and relationship quality has a significant positive association with customer loyalty. Also, multiple regressions are significant statistical technique to understand the relationship of variables. Regression coefficient received on customer satisfaction, trust and commitment is (Beta=0.403, 0.532, 0.662 and P< 0.01). Thus, we can identify the relative importance of relationship quality components and business ethics in explaining the

variation in the customer loyalty levels. These are generally expected results and confirms the hypothesis of study that believes that there is a correlation between them.

5. DISCUSSION AND IMPLICATIONS

This study provides a model, explaining how bankers' ethical behavior and relationship quality are able to establish higher customer loyalty. In other words, this research has proved that the analyses of relationship quality variables and business ethics can predict customer loyalty in the case of Iranian banking customers well enough. The results of this research showed that there is a direct relation between sticking to the principles of business ethics and bank customers' loyalty so that with increase of business ethics we will establish higher customer loyalty. With analyses of the results of ANOVA test and multiple linear regression on business ethics and loyalty of customers, a significant association that showed a positive relationship between these two variables has been seen. The results of this research is consistent with the results of Ansari et al (2012) and Roman (2003). As a result, staff commitment to business ethics has a direct impact on customer perception of products and services and leads to higher loyalty to the organization. Thus, this research represents an initial step in analyzing the role of ethical behavior, perceived by customers, to develop and maintain the relationship with customers. The findings showed that ethical behavior of a seller leads to higher customer satisfaction, trust and loyalty to the bank. According to the results of this research, bank managers ought to consider employees' behavior as a vitally important issue. Today organizations are not mechanical like a tool to be managed and to guaranty improvement of their quality, so it can be concluded from the findings that quality will be achieved with only focusing on ethical values. Quality management and business ethics are prerequisites of each other, therefore ethics related researches should be done on how to use the tools and techniques of quality management.

Moreover, the paper, by empirically validating customer loyalty, contributed to the role of relationship quality based on what was perceived by the bank customers in order to develop customer loyalty (through customer trust, commitment and satisfaction) to the bank. Consistency between this study and the previous one, proved relationship quality as a significant predictor of customer trust, commitment, satisfaction and customer loyalty as in Alrubaiee (2012), Kim et al (2006), Rahim nia et al (2012), Ranjbarian et al (2011). Dubinsky used the same variables (relationship quality, commitment, trust and satisfaction) in his research as well with the conclusion that these variables had a significant positive relationship with customer loyalty. As a result, higher communication quality can cause more interaction between the service provider and its customers to establish long-term relationships, which is in the context of development of loyalty. Emphasis on the relationship quality with customers and managing it entails many benefits for service organizations such as increasing organizational capacity in critical conditions, more profit margin, positive reaction of customers to buying and persuading others. Due to the specific characteristics of services, this study revealed the importance of relationship quality and proved that focusing on this matter and strengthening interpersonal communications can be effective on customer loyalty in banking services. A higher-quality relationship and more friendly behavior with customers, who are deciding to purchase a service, acts as a strong motivational factor to reduce risks and consequently makes the decision process easier. Although relationship quality is not considered as commitment for future satisfaction, it can lead to increasing confidence in service shopping. Thus, a relationship with a higher quality and with more satisfaction level leads to higher growth in income and greater share of the market. According to the hypothesis confirmation, with an emphasis on building relationships with customers and creating high level of trust and satisfaction and relationship commitment, relationship marketing activities leads to an increase in quality of the communication. Therefore, service sector should form intimate, friendly and informal relationships outside the organizational framework in order to develop customer loyalty.

Also the results of this research show that there is a significant direct relationship between the commitment and loyalty of customers and with increase the sense of customer commitment in the bank, as well as greater customer loyalty. The results of this study showed that among the factors related to relationship quality I.e.: satisfaction, trust and commitment, factor commitment has greater impact on customer loyalty. This result is consistent with some previous research and support their findings such as:

Alrubaiee (2012), Oliver (1997), Oliver (2003), Pritchard et al (1999), Rahim nia et al (2012). As a result, the commitment is important to create long-term relationship and lead to more commitment to maintain the relationship and build loyalty. Also Commitment as a trust is one of the factors level measurement of relationship between the customer and the bank. Thus, according results of this research, can be said that commitment is the most important structure of the relationship quality in order to create long-term relationships and loyalty of customers. According to the results can be suggested that bank managers can give to their employees the necessary training to establish friendly relations, intimate and informal to increase its customer relationship commitment. Also banks with superior quality service than other banks can be cause more customers commitment. On the other hand, according to several studies that have been done in this case, banks can enhance development commitment customer through value creation and satisfaction on customers, which in this case can be offered strategies and interactive marketing tactics and management principles of Customer orientation.

Also the results of this research show that there is a significant direct relationship between the trust and loyalty of customers and with increase the sense of customer trust in the bank, as well as greater customer loyalty. This result is consistent with some previous research and support their findings such as: Alrubaiee (2012), Chen and Maaou (2009), Reichheld and Schefter (2000), Kim et al (2006), Baradaran et al (2011), Rahim nia et al (1391).

As a result, winning the trust of customers to create long-term relationships and increase their loyalty is very important and high levels of customer trust to service providers, is to create lasting relationships and loyalty. Several researchers have expressed that trust as the main factors causing the development of successful customer relationship and customer loyalty. They state that the customer needs to feel secure in their relationship with the service provider and ensure that their interaction with the service provider is reliable enough to trust them. In this research was shown that trust is very important and key role in improving customer behavioral tendencies and also reduces their tendency to change banks. It is worth noting that customers perceive and believe the security services organization have desirable effects on customers based on their use of online banking services. Therefore, create a sense of trust in the consumer lead to loyalty and frequent use of the service organization.

Also the results of this research show that there is a significant direct relationship between the satisfaction and loyalty of customers and with increase the sense of customer satisfaction in the bank, as well as greater customer loyalty. This result is consistent with some previous research and support their findings such as: Aydin and Ozar(2005),Bowen and Chen (2001), Martnson (2007), Gilbert et al (2004), Oliver (1999), Fornell(1992), Ball et al (2004), Levitt (1981), Bolton (1994), Bloemer and Kasper (1995), Oliver (1980), Bitner (1990), Heskett et al (1994). When are offered superior customer expectation service and innovative that have been out of customers expect makes the surprised customer, because satisfies one hidden need him an innovative way, thus he will reach to the upper stage that called pleased. And placed his loyalty after this stage.

Several researches has been shown positive impact of business ethic and relationship quality on customer loyalty separately, but in this research has tried be evaluated to the impact of business ethic and relationship quality on loyalty simultaneously. The results of this research confirm previous research results, and show the positive effect of these two factors on customer loyalty. Findings of this research showed that not only depends the development of customer loyalty to the business ethic of employees and sellers, but also is important the ability to create one high-quality relationship with customers in this context. Results of this research showed that are not of equal importance attention to the business ethic and relationship quality in terms of customers. Therefore, the organization should consider how to appropriate behavior with customers, how to manage complaints about the quality of service and, etc., to give great importance. Customers that sees ethical sales behavior are more likely to trust the bank and thus to show a commitment to it. As a result, customer who trust to the bank and will maintain its commitment to the bank, in turn, are more likely to desired behaviors, for example, show a more loyalty. This research represents an important step in examining and understanding the dynamics of the relationship between ethical behavior and relationship quality on customer loyalty in the banking industry. So banks that important long-term relationship with customers is valuable to them, have to achieve an environment where the potential for unethical behavior is minimized. From the perspective of management ethical

behavior is one vital determining factor for customer loyalty in banking services. So for the banks that would like to building long term relationships with customers, how to encourage staff to strengthen ethics is very important when providing services. Therefore, having a new strategy, attention to the important points in establishing, maintaining and expanding customer relationships and trying to satisfy his to expand achieving the goals of customer-centric and brings bases of loyal customers in the long term.

Words ethics, commitment, trust and satisfaction will become more important in service organizations, especially banks because of total dependence on customers for survival. Offering various products and proportional to customer needs, commitment to the promises and provide the best possible services is important from the banks in order to keep existing customers and loyal to their bank for competition market share.

RESOURCES

Anderson, R. E., & Srinivasan, S. C. (2003). E-satisfaction and e-loyalty: A contingency framework. Psychology and Marketing, 20, 38-123.

Ansari, M., Hoseyni, A., Rahmani Poshanloei, H., & Seyfi, S. (2012). The impact of professional ethics for staff on customer loyalty Banks. Ethics in Science and Technology, 7, 63-74.

Athanasopoulou, P. (2009). Relationship quality: A critical literature review and research agenda. European Journal of Marketing, 43, 583-610.

Adamson, I., Chan, K-M., & Handford, D. (2003). Relationship marketing: customer commitment and trust as a strategy for the smaller Hong Kong corporate banking sector. International Journal of Bank Marketing, 2, 58-347.

Alrubaiee, L., & Al-Nazer, N. (2010). Investigate the impact of relationship marketing orientation on customer loyalty: The customer's perspective. International Journal of Marketing Studies, 2, 155-174.

Anderson, J. C., & Narus, J. A. (1998). Business marketing: Understand what customers value. Harvard Business Review, 76, 53–65.

Anderson, J. C., & Weitz, B. (1992). The use of pledges to build and sustain commitment in distribution channels. Journal of Marketing Research, 25, 18-34.

Anderson, S. C. & Narus, J. A. (1990). A model of distributor firm and manufacturer firm working partnerships. Journal of Marketing, 54, 42-58.

Alrubaiee, L. (2012). Exploring the relationship between ethical sales behavior, relationship quality, and customer loyalty. International Journal of Marketing Studies, 4, 7-25.

Aydin, S. & Ozar, G. (2005). National customer satisfaction index. Marketing Intelligence & Planning, 23, 486-504.

Alrubaiee, L., & Alkaa,ida, F. (2011). The mediating effect of Patient satisfaction in the Patients' perceptions of healthcare quality–Patient trust relationship. International Journal of Marketing Studies, 3, 103-127.

Anderson, E. & Weitz, B. (1989). Determinants of continuity in conventional industrial channel dyads. Marketing Science, 8, 310–323.

Aaker, D. A. (1996). Building strong brands. New York: Free Press.

Anderson, E. W., & Mary, W. S. (1993). The antecedents and consequences of customer satisfaction for firms. Marketing Science, 12, 125-143.

Amyx, D., Bhuian, S., Sharma, D., & Loveland, E. (2008). Salesperson corporate Ethical values (SCEV) scale: Development and assessment among salespeople. Journal of Personal Selling & Sales Management, 28, 387–401.

Abdul-Rahman, M., & Kamarulzaman, Y. (2012). The influence of relationship quality and switching costs on customer loyalty in the Malaysian Hotel industry. Procedia - Social and Behavioral Sciences, 62, 1023 – 1027

Burnett, M., Pettijohn, C., & Keith, N. (2008). A comparison of the ethical perceptions prospective personal selling and advertising employees. The Marketing Management Journal, 18, 77- 83.

Bonnin, G., Segard, O., & Vialle, P. (2005). Relationship marketing and innovation: the case of the launch of wireless local loop telecommunication services in France. Journal of Services Research, 6, 149-171.

Beny, L. L. (2000), Cultivating service brand equity. Journal of the Academy of Marketing Science, 28, 37-128.

Berry, L. L. (1995). Relationship marketing of services-growing interest, emerging perspective. **Journal of the Academy of Marketing Science, 23, 236−245.**

Ball, D., Coelho, P. S., & Machas, A. (2004). The role of communication and trust in explaining customer loyalty an extension to the European customer satisfaction index (ECSI) model, European. Journal of Marketing, 38, 1272-1293.

Bowen, J.   T., & Shoemaker,   S. (2003). Loyalty: A strategic commitment. Cornell Hotel and Restaurant Administration **Quarterly, 44, 31-46.**

Bowen, J. T., & Chen, S. L. (2001). The relationship between customer loyalty and customer satisfaction. International Journal of Contemporary Hospital Management, 13, 213-217.

Bearden, W. O., & Jesse, E. T. (1983). Selected determinants of consumer satisfaction and complain reports. Journal of Marketing Research, 20, 21-28.

Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. Journal of Marketing, 56, 57-71.

Bitner, M. J. (1990). Evaluating service encounters: The effects of physical surroundings and employee responses. Journal of Marketing, 54, 69-82.

Bloemer, J. & Kasper, H. (1995). The complex relationship between consumer satisfaction and brand loyalty. Journal of Economic Psychology, 16, 311-329.

Bloemer, J., De Ruyter, K., & Peeters, p. (1998). Investigating drivers of bank loyalty: The complex relationship between image, service quality and satisfaction. International Journal of Bank Marketing, 16, 276-286.

Boulding, W., Ajay, K., Richard, S., & Valarie, A. Z. (1993). A dynamic process model of service quality from expectations to behavioural intentions. Journal of Marketing Research, 30, 7-27.

Burton, S., Simon S., & John R. (2003). Reality or perception? The effect of actual and perceived performance on satisfaction and behavioral intention. Journal of Service Research, 5, 292-302.

Berry, L. L., & Parasuraman, A. (1991). Marketing service – competing through quality. New York: The Free Press.

Chen, M. F. and Mau, L. H. (2009). The impacts of ethical sales behaviour on customer loyalty in the life insurance industry. The Service Industries Journal, 29, 59–74.

Crosby, L. A., Evans, K. R., & Cowles, D. (1990). Relationship quality in services selling: An interpersonal influence perspective. Journal of Marketing, 54, 68-81.

Crane, A., & Matten, D. (2010). Business ethics. 3rd ed. Oxford: Oxford University Press.

Cater, B., & Zabkar, V. (2009). Antecedents and consequences of commitment in marketing research services: The client's Perspective. Industrial Marketing Management, 38, 785-797.

Chu, K. M. (2009). The construction model of customer trust, perceived value and customer loyalty. The Journal of American Academy of Business, Cambridge, 14, 98-103.

Dibb, S., & Meadows, M. (2001). The Application of a Relationship Marketing Perspective in Retail Banking. The Services Industries Journal, 21, 169-194.

Dick, A.S., & Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. Journal of the Academy of Marketing Science, 22, 99-113.

Dubinsky, A. J., Marvin A. J., Ronald E. M., Masaaki K., & Chae U. L. (1992). Ethical perceptions of field sales personnel: An empirical assessment. Journal of Personal Selling and Sales Management, 12, 9-21.

De Wulf, K., Gaby O., & Iacobucci, D. (2001). Investments in consumer relationships: A cross-country and cross-industry exploration. Journal of Marketing, 65, 33–50.

Dorsch, M. J., Swanson, S. R., & Kelley, S. W. (1998). The role of relationship quality in the stratification of vendors as perceived by customers. Journal of Academy Marketing Science, 26, 128-142.

Dwyer, F. R., Schurr, P. H., & Oh, S. (1987). Developing buyer seller relations. Journal of Marketing, 51, 11-28.

De Ruyter, K., Wetzels, M., & Bloemer, J. (1998). The relationship between perceived service quality, service loyalty and switching costs. International Journal of Service Industry Management, 9, 436-453.

Dube, L., & Manfred F. Maute (1998). Defensive strategies for managing satisfaction and loyalty in the service industry. Psychology & Marketing, 15, 775-791.

Eisingerich, A. B., & Bell, S. J. (2007). Maintaining customer relationships in high credence services. Journal of Services Marketing, 21, 253-262.

Eriksson, K., & Vaghult, A. L. (2000). Customer retention, purchasing behaviour and relationship substance in professional services. Industrial Marketing Management, 29, 363-372.

Evanschitzky, H., & Wunderlich, M. (2006). An examination of moderator effects in the four stage loyalty model. Journal of Service Research, 8, 330-345.

Ennew, C. T., & Martin R. B. (1999). Impact of participative service relationships on quality, satisfaction and retention: An exploratory study. Journal of Business Research, 46, 121-132.

Ferrell, O. C., Johnston, M. W., & Ferrell, L. (2007). A framework for personal selling and sales management ethical decision making. Journal of Personal Selling & Sales Management, 32, 291–299.

Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experience. Journal of Marketing, 56, 6-21.

Farrelly, F., & Quester, P. (2003). The effects of market orientation on trust and commitment: The case of the sponsorship business – to – business relationship. Journal of Marketing, 37, 530-553.

Fullerton, G. (2005). How commitment both enables and undermines marketing relationships. European Journal of Marketing, 39, 1372-1388.

Fullerton, G. (2003). When does commitment lead to loyalty? Journal of Service Research, 5,333-344.

Garbarino, E., & Johnson, M. S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. Journal of Marketing, 63, 70-87.

Grunbichler, A., & Darlap, P. (2003). Integration of EU financial markets supervision: Harmonization or unification? Journal of Financial Regulation and Compliance, 12, 36-44.

Goff, B. G., Boles, J. S., Bellenger, D. N., & Stojack, C. (1997). The influence of salesperson selling behaviors on customer satisfaction with products. Journal of Retailing, 73, 171-183.

Gilbert, G. R., Veloutsou, C., Goode M. M. H., & Moutinho, L. (2004). Measuring customer satisfaction in the fast food industry. Journal of Service Marketing, 5, 371-383.

Gruen, T. W., summers, J. O., & Acito, F. (2000). Relationship marketing activities, commitment, and Membership behaviors in professional associations. Journal of Marketing, 64, 34–49.

Hennig-Thurau, T., Gwinner, K. P., & Gremler, D. D. (2002). Understanding relationship marketing outcomes. Journal of Service Research, 4, 230-247.

Hansen, J. D., & Riggle, R. J. (2009). Ethical salesperson behaviour in sales relationships. Journal of Personal Selling & Sales Management, 29, 151–166.

Hennig-Thurau, T., & Klee, A. (1997). The impact of customer satisfaction and relationship quality on customer retention: A critical reassessment and model development. Psychology & Marketing, 14, 737–764.

Hasan, M. R., & Severiens, J. T. (2001). The european central bank: The search for credibility. Managerial Finance, 27, 12-20.

Heffernan, T., O'Neill, G., Travaglione, T., & Droulers, M. (2008) Relationship marketing: The impact of emotional intelligence and trust on bank performance. International Journal of Bank Marketing, 26, 183-199.

Heskett, J. L., Sasser, W. E., & Schlesinger, L. A. (1997). The service profit chain: How leading companies link profit and growth to loyalty, satisfaction, and value. New York: Free Press.

Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser, W. E., & Schlesinger, L. A. (1994). Putting the service-profit chain to work, Harvard Business Review, 72, 164-174.

Howe, V., Hoffman, K. D., & Hardigree, D. W. (1994). The elationship between ethical and customer-oriented service rovider behaviors. Journal of Business Ethics, 13, 497-506.

Jamil, B., & Aryaty, A. (2010). The influence of relationship quality on loyalty in service sector. International Journal of Economics and Management, 4, 81-100.

Karande, K., Ha, J., & Singhapakdi, A. (2008). The role of contextual factors in relationship commitment of buyers to foreign suppliers: A survey of Korean importers. Industrial Marketing Management, 37, 856–862.

Kennedy, M. S., Ferrell, L. K., & Leclair, D. T. (2001). Consumers' trust of salesperson and manufacturer: An empirical study. Journal of Business Research, 51, 73-86.

Kim, W. G., Lee, Y. K., & Yoo, Y. J. (2006). Predictors of relationship quality and relationship outcomes in luxury restaurants. Journal of Hospitality & Tourism Research, 3, 143-169.

Kramer, R. M. (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. Annual Review of Psychology, 50, 569-598.

Kumar, N., Scheer, L. K., & Steenkamp, J. B. E. M. (1995). The effects of perceived interdependence on dealer attitudes. Journal of Marketing Research, 32, 348-356.

Kotler, P. (1994). Marketing management. NJ: Prentice Hall.

Lagace, R. R., Dahlstrom, R., & Gassenheimer, J. B. (1991). The relevance of ethical salesperson behavior on relationship quality: The pharmaceutical industry. Journal of Personal Selling & Sales Management, 11, 39-47.

Lam, R., & Burton, S. (2006). SME banking loyalty (and disloyalty): A qualitative study in Hong Kong. International Journal of Bank Marketing, 24, 37-52.

Lassar, M., Manolis, C., & Winsor, R. D. (2000). Service quality perspectives and satisfaction in private banking. International Journal of Bank Marketing, 18, 181-99.

Lemon, K. N., White, T. B., & Winer, R. S. (2002). Dynamic customer relationship management: Incorporating future considerations into the service retention decision. Journal of Marketing, 66, 1-14.

Levitt T. (1986). The marketing imagination. New York: Free Press

Levitt, T. (1981). Marketing intangible products and product intangibles. Harvard Business Review, 59, 95-102.

Li, Y., & Ho, Y. (2008). Discuss the impact of customer interaction on customer relationship in medical service. The Business Review, 11, 152-158.

Luarn, P., & Lin, H. (2003). A customer loyalty model for E-service context. Journal of Electronic Research, 4, 156-167.

Liang, C. Wang, W. (2008). **Do loyal and more involved customers reciprocate retailer's relationship** efforts? Journal of Services Research, 8, 63-90.

LaBarbera, P., & Mazursky, D. (1983). A longitudinal assessment of consumer satisfaction/dissatisfaction: The dynamic aspect of the cognitive process. Journal of Marketing Research, 20, 393-404

Mantel, P. (2005). Choice or perception: How affect influences choices among salespeople. Journal of Personal Selling & Sales Management, 25, 43–55.

Martenson, R. (2007). Corporate brand image satisfaction and store loyalty: A study of the store as a brand store brands and manufacturer brands. International Journal of Retail & Distribution Management, 35, 544-555.

Morgan, R. M. & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. journal of Marketing, 58, 20–38.

Moorman, C., Zaltman, G., & Deshpandé, R. (1992). Relationships between Providers and Users of Market Research: The Dynamics of Trust Within and Between Organizations. Journal of Marketing Research, 29, 314–329.

Mishra, A. K. (1996). Organizational responses to crisis: The centrality of Trust. In R. Kramer & T. Tyler (Eds.), Trust in organizations: Frontiers Of theory and research (pp. 261-287). Thousand Oaks, CA: Sage.

Mishra, K. E., & Li, C. (2008). Relationship marketing in fortune 500 U.S. and chinese web sites. Journal of Relationship Marketing, 7, 29-43.

Mayer, R. C., Schoorman, F. D., & Davis, J. H. (2007). An integrative model of organizational trust. Academy of Management Review, 32, 344-354.

Mouri, N. (2005). A consumer-based assessment of alliance performance: An examination of consumer value, satisfaction and post-purchase behavior. University of Central Florida, pp. 156. AAT 3193496.

Masciandro, D., Nieto, M. J., & Prast, H. (2007). Who pays for banking supervision? Principles and trends. Journal of Financial Regulation and Compliance, 15, 303-326.

Narayandas, D., & Rangan, V. (2004). Building and sustaining buyer–seller relationships in mature **industrial markets. Journal of Marketing, 68, 63−77.**

Oliver, R. A. (1996). Satisfaction as behavioral perspective on the consumer. New York: McGraw-Hill.

Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. Journal of Marketing Research, 17, 460-469.

Oliver, R. (2003). Cognitive, affective and attribute bases of the satisfaction response. Journal of Consumer Research, 20, 418-430.

Oliver, R. L. (1999). Whence Consumer Loyalty. Journal of Marketing, 63, 33-44.

Ou, W., Shih, C., Chen, C., & Wang, K. (2011). Relationships among customer loyalty programs, service quality relationship quality and loyalty an empirical study. Chinese Management Studies, 5, 194-206.

Oliver, R. L., Rust, R. T., & Sajeev V. (1997). Customer delight: Foundations, findings, and managerial insight. Journal of Retailing, 73, 311-336.

Ostrowski, P. L., Terrence, V. O., & Geoffrey, L. G. (1993). Service quality and customer loyalty in the commercial airline industry. Journal of Travel Research, 32, 16-24.

Pressey, A. D., & Mathews, B. P. (2000). Barriers to relationship marketing in consumer retailing. Journal of Services Marketing, 14, 37-52.

Palmatier, R. W., Dant, R. P., Grewal, D., & Evans, K. R. (2006). Factors influencing the effectiveness of relationship marketing: A meta-analysis. Journal of Marketing, 70, 136-153.

Pritchard, M. P., Havitz, M. E., & Howard, D. R. (1999). Analysizing the commitment loyalty link in service contexts. Journal of the Academy of Marketing Science, 27, 333-348.

Patterson, P. G. (1995). Choice criteria in final selection of a management consultancy service. Journal of Professional Services Marketing, 11, 177.

Rauyruen, P., & Miller, K. E. (2007). Relationship quality as a predictor of B2B customer loyalty. Journal of Business Research, 60, 21-31.

Ranjbarian, B. Barari, M. (2008). The contribution of Rrelationship marketing underpinning to customer Lloyalty: A comparison of a private with a government owned bank. Journal of Business Management, 2, 83-100.

Rahim nia, F. Harandi, A. Fatemi, Z. (2012). Study of relationship quality with customers on and customer loyalty: Case of five star hotels in Mashhad city. Journal of Management Researches, 1, 83-102.

Reddy, S. K., & Czepiel, J. A. (1999). Measuring and modeling the effects of long-term buyer-seller relationships in corporate financial services markets. Journal of Business Research, 46, 235-244.

Roman, S. (2003). The lmpact of ethical sales behaviour on customer satisfaction, trust and loyalty to the company: An empirical study inthe financial services industry. Journal of Marketing Management, 19, 915–939.

Reichheld, F. F., & Sasser, W. E. (1990). Zero, defection: Quality comes to service. Harvard Business Review, 68, 105-111.

Reichheld, F. F., & P. Schefter. (2000). E-loyalty: Your secret weapon on the web. Harvard Business Review, 78, 105-113.

Sanzo, M. J., Santos, M. L., Vazquez, R., & Alvarez, L. (2003). The role market orientation In business dynamic relationships: Testing an integrator model. Journal of marketing Management, 19, 73-107.

Schwepker Jr, C. H., & Good, D. J. (2004). Marketing control and sales force customer orientation. Journal of Personal Selling & Sales Management, 24, 167-179.

Selnes, F. (1998). Antecedents and consequences of trust and satisfaction in buyer-seller relationships. European Journal of Marketing, 32, 305-322.

Roman, S., & Ruiz, S. (2005). Relationship outcomes of perceived ethical sales behavior: The **customer's perspective.** Journal of Business Research, 58, 439–445.

Sin, L. M., Tse, A. B., Yau, O. H., Lee, J. S. & Chow, R. (2002). The effect of relationship marketing orientation on business performance in a service- oriented economy. Journal of Services Marketing, 16, 656-676.

Strout, E. (2002). To tell the truth. Sales and Marketing Management, 154 , 40-47.

Walter, A., Ritter, T., & Gemünden, H. G. (1999). Value-creating functions of customer relationships from a supplier's perspective: Theoretical considerations and empirical results. 15th IMP Conference. Dublin.

Roman, S., & Munuera, J. L. (2005). Determinants and consequences of ethical behaviour: An empirical study of salespeople. European Journal of Marketing, 39, 473–495.

Singh, R.   (2000). Relational embeddedness, tertius iungens orientation and relationship quality in emerging markets. Asia Pacific Journal of Marketing and Logistics **20, 479-492.**

Scanzoni, J. (Eds). (1979). Social exchange and behavior interdependence. In Burgess, R.L. and Huston, T.L. Social Exchange in Developing Relationships, Academic Press, Inc., NY: New York

Shamdasani, P., & Sheth, J. (1995). An experimental approach to investigating satisfaction and continuity in marketing alliances. European Journal of Marketing, 29, 6-24.

Sheth, J., & Parvatiyar, A. (2002). Evolving relationship marketing into a discipline. Journal of Relationship Marketing, 1, 3-36.

Sirdeshmukh, D., Singh, J., & Sabol, B. (2002). Consumertrust, value, and loyalty in relational exchanges. Journal of Marketing, 66, 15–37.

Selnes, F. (1993). An examination of the effect of product performance on brand reputation, satisfaction and loyalty. European Journal of Marketing, 27, 19-35.

Spath, D. & Fähnrich, K. (Eds). (2007). Advances in services innovations. Springer, Verlag, Berlin. 3-16

Tian, Y., Lai, F., & Daniel, F. (2008). An examination of the nature of trust in logistics outsourcing relationship: Empirical evidence from China. Industrial Management and Data Systems, 108, 346-367.

Taghizadeh, M. R., Rezaloie, A., Taleghani, M., & Gholizadeh, M. R. (2012). Assessment of the **impact of relationship marketing on customer's loyalty level: Case Study; Mellat Bank in Rasht city** northern of Iran. Journal of Basic and Applied Scientific Research, 2, 49-62.

Wetzels, M., De Ruyter, K., & Van Birgelen, M. (1998). Marketing service relationships: The role of commitment. Journal of Business & Industrial Marketing, 13, 406-423.

Wang, C. L., Siu, N., & Barnes, B. (2008). The significance of trust and renqing in the long-term orientation of Chinese business-to-business relationships. Industrial Marketing Management, 37, 819–824.

Weeks, W. A., Loe, T. W., Chonko, L. B., Martinez, C. R., & Wakefield, K. (2006). Cognitive moral development and the impact of perceived organizational ethical climate on the search for sales force excellence: A cross-cultural study. Journal of Personal Selling & Sales Management, 26, 205–217.

Wilson, D. T. (1995). An integrated model of buyer – seller relationships. Journal of the Academy of Marketing Science, 23, 335-345.

Liu, Y., Tao, L., & Wang, Y. (2008). Relationship stability, trust and relational risk in marketing channels: Evidence from China. Industrial Marketing Management, 37, 432–446.

Yim, C. K., TSE, D. K., & Chan, K. W. (2008). Strengthening customer loyalty through intimacy and passion: Roles of customer – firm affection and customer – staff relationships in services. Journal of Marketing Research, 45, 741- 756.

Yu, Y. & Dean, A. (2001). The contribution of emotional satisfaction to consumer loyalty. International Journal of Service Industry Management, 12, 234-250.

Zhang, X., & Feng, Y. (2009). The impact of customer relationship tactics on customer loyalty - within Swedish mobile telecommunication industry. Master Thesis of Halmstad University.

EXPLORES THE CONCEPT OF NARCISSISM IN RELATION TO CONSUMER BEHAVIOR IN MARKETING

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Abstract

Consumer behavior in recent decades has been one of the most important consideration of marketing researchers. Diversity of consumer behavior is due to variations in effective factors on behavior of individual and incentives of individual to buy. The existence of different groups of consumers for markets of a product reflects the wide differences. Today's the consumer is considered as a primary key of success or failure of a company so it is important to understand consumer behavior. Narcissism mainly as a character that shows stability over time, more recent research suggests that changes in situation may arise in narcissism. Mass customization systems provide opportunity to produce their products in a unique design for consumers and for retailers and manufacturers, departments of customers who design unique products because of their potential impact on product releases and profit from it have considerable importance. Therefore, in this research we are trying to evaluate concept of narcissism in marketing and its relation to consumer behavior.

1. INTRODUCTION

During the buying products, consumers are faced with many decisions. The researchers of consumer behavior perform significant effort to better understand how such decisions are expressed. Recently Luxury Consumption critical is Called in connection with the person and excesses, extravagance and excesses Social. Luxury consumption, is a phenomenon that is relatively universal, has Greater inclusiveness in developed countries and is growing among the middle class in developing countries. In other words, luxury Consumption is common in countries that have a tendency toward materialism. Deluxe or luxury products meet requires of an individual to the social prestige and by buying these products show their character. Brand has a significant impact on consumer perception and decisions related to buying, Patients with histrionic personality disorder has been very Attention-seeking and these people are extreme in their reactions and Due to the dramatic and intense responses, this term has been applied to them and this disorder is more common in women. As well narcissistic people has Non-realistic perception of their importance, Unexceptionable, deceived people and lack of empathy and a lot of problems in relationships (Santrock, 2004). "One of the characteristics of humans during human life is their consumption behavior. Per person for continues the individual and social behavior, it is necessary, which consume some of the creations of human in various spheres of life, covers Consumption of various dimensions all the trappings of material and spiritual of production of human. Each of us use or consume based on a special system, food, clothing, housing, Transport, household goods, ideas and services. Behaviors of Human consumption on the one hand, affected on various aspects of economic and social life and on the other, is influenced by various factors.

Usage pattern can show issues such as lifestyle, floor and even the type of attitude of individuals and on the **other, can be measured according to mentioned items amount and type of consumption"** (Khajenuri, Mosavat, Moazeni; 2012). "Consumers use of products to define their identity in different situations. A consumer may buy, use and discard a product but different people may have different ways to do this function. In addition, can consider consumers as actors, need to different products to help them to play a different role (Solomon, 2013). **"Narcissistic** Consumers, focus their attention on products with higher prestige and uniqueness and thus create an important part that make replication with latest products (Sedikides, Cisek, Hart, 2011). For retailers and manufacturers, departments of customers who design unique products because of their potential impact on product releases and profit from it have considerable importance (Ibid). The use of unique products acts not only as a strategy for individual appearing in material world (Emmons, 1984), but also Brings a colorful life style for the general public and it is important to superiority (Chatterjee and Hambrik, 2007). Due to the increasing rate of narcissism and tendency toward materialism around the world, distinct advantages of unique products and because of narcissistic people make an important part of the market for large manufacturers in this research will examine the meaning of this term in marketing.

2. BACKGROUND OF RESEARCH

Rashidian (2006) pays to explore the culture of narcissism and Christopher lasch views Show some shortcomings and Unilateralism of his view that provides ability to effectively to analyze and understand many present human behaviors in Western culture and in effective cultures from that (Rashidian, 2006).

Saffarinia, Tdris Tabrizi, Mohtashami and Hassan Zadeh (2014) examined the impact of community-friendly and narcissistic personality traits on social well-being of residents in Tehran. The results showed with the decrease in people's narcissism and strengthening Friendly community personality in them Can also helped to improve their social well-being (Saffarinia et al.,2014).

Khairy and Fath Ali (2015) explored the factors influencing on intention to buy Deluxe products, Results showed that consumer attitudes toward luxury products, quality services, luxury restaurants, Perception of luxury brand and Social impact has impact on purchase intention While the image of the restaurant and arrogance di**dn't have impact on intend to buy** (Khairy, Fath Ali, 2015).

Heidarzadeh and Teimourpour (2013) explored market of luxury goods based on the perceived value of luxury by consumers and its results is Initial steps to better understand consumers Toward luxury goods and Different aspects of value and showed the extent to which luxury consumer market Can be heterogeneous and the reasons of luxury market valuation are different (Heidarzadeh, Teimourpour, 2013).

Ganji and Shafaii Moghadam (2012) conducted the study of Luxury consumption (various goods and services) Urban and rural population of Iran by relying on theories of Pierre and concluded that in the present society Part of consumption Not because of the need for purchased goods, But also takes place because of acquisition of higher status that it is called "prestige consumption " And the phenomenon of imitation of foreign consumption are also seen not only among private consumers Among the government agencies (Ganji, Shafaii Moghadam ,2012).

Vaziri Behrozan and Yousefi (2012) explored Clothing consumption and Influential Factors on that Results of a study on 272 high school students in Shahroud Showed that the propensity to performing consume is high and Major portion of Fluctuations desire to Clothing consumption is under the influence At the same time social status, religion, gender, age, follow of others and Some of their combined forms (Vaziri Behrozan, Yousefi ,2012).

Abdolvand and Reihani (2010) evaluated the impact of psychological antecedents and brand on use of luxury goods in young people the results indicated that the two measures antecedents of brand and psychological of antecedents have a significant impact on consumer behavior of luxury goods among young people. As well as the impact of each of the studied variables have been different according to levels of income, education and gender (Abdolvand, Reihani ,2010).

Lambert & Desmond (2013) in checking narcissism and Male consumer of brand names, paid to compare broking nature from narcissistic with the orientation of a group of non-narcissistic in dealing with people and brands and evidence shows that narcissistic people have fragile personality (Lambert, Desmond, 2013).

Husic and Cicic (2008) in examining of luxury consumption Factor and concluded that Perceived quality of consumers in these markets, is the determining factor of brand and also represents a "snob effect" stronger among respondents, that apply from Buying unique items in an effort to itself distinguish as well as a rare product is indicative of the prestige and respect among respondents. And therefore consumers of luxury goods around the world have similar behavior (HusiC, Cicic, 2008).

Giovaninni and Thomas (2014) examined use of luxury fashion and consumers of Y generation and this research from the perspective of self-concept clear some fashion consumer behavior of deluxe generation Y and Self-awareness and self-esteem have significant impact on the consumer of generation y and Also motive for luxury consumption and brand loyalty (Giovaninni, Thomas, 2015)

Clark, Carlov and Neale (2014) paid to explore the various aspects of narcissism and in exploratory analysis Extracted 8 factor Contingent Self-esteem, fantasy and High imagination, Ability, leadership, degraded its value, Exhibitionism, manipulation, Right and excellence and found that this agents of Narcissism have had Different relationships with self-esteem, depression, anxiety and stress As well as this 8 factors is reflecting both higher dimension of adaptive and maladaptive narcissism (Clark, Carlov, Neale, 2015).

Zuckerman and O'loughin (2009) explored the narcissism and Welfare that this longitudinal research paid to at the same time to explore the prospective narcissism and several indicators of well-being in a non-clinical population. Analysis showed that narcissism can increases welfare but the increase narcissistic does not increases welfare. (Zuckerman, O'loughin, 2009).

Stoeber,. sherry and Nealis (2015) explored the multidimensional perfectionism and vulnerable and magnifying narcissism. The results showed that self-oriented, other-oriented and social perfectionism is different with magnifying and vulnerable narcissism. While all three forms of perfectionist indicate a positive and unique relationship with magnifying and vulnerable narcissism (Stoeber, Sherry, Nealis, 2015).

Wang, Sun and Song (2015) explored the motivations for luxury consumption and eight factors were identified as self-actualization, product quality, social comparison, and the influence of others, Invest for the future, motive for gift, age and personal income. Young consumers usually do not have program before buying, they do Buying Deluxe products more on emotion and less for self-actualization and invest in the future (Wang, Sun, Song, 2015).

Brun and Castelli (2013) explored the nature of luxury, perspective of consumer and Came to the conclusion that the concept of Deluxe is a concept of multi-faceted and comprehensive approach that is used to classify consumers. And originally is used to reveal the characteristics of different customers and prove that tangible and intangible characteristics and social distinctions are dependent to the underlying motivation for the purchase of luxury goods (Brun, Castelli, 2013).

Seo, Buchanan-oliver & B.cruz (2015) explored markets of luxury brands as a multiple collision and explained consumption of luxury goods in the multicultural market. The results indicated that consumers are influenced by the internal beliefs in a national market (Seo, Buchanan-oliver,Cruz, 2015).

Seo & Buchanan-oliver (2015) examined the luxury brands, Industry trends and the concept in the future. The results indicated that luxury brands have been emerged as a particular form of Brand that transfer unique meaning to his followers. That this meaning has been formed by number of important trends of cultural, social, and foreign that researchers and practitioners with regard to consumer deluxe model have reached to it (Seo, Buchanan-oliver, 2015).

Boson, Lakey, Campbell, Zeigler-hill, Jordan and kernis (2008) explored Clarifying relationship between narcissism and Self-esteem that results of some research showed that the narcissism indicates high Self-esteem but some of the results showed the opposite. They use masks model for narcissistic, such responded to this fascinating question that why narcissistic as megalomaniac behavior between Exploiters, that they do not love a depth of within himself (Boson et al., 2008).

Cheah, Phau, Chong & Shimul (2015) in checking records and reputation of the brand in the tendency to buy luxury brands came to the conclusion, Prominent brand affected in order to Buying luxury brands as well as social status has a significant impact in arrogance and Conceit of material and tend to buying Deluxe brands (Cheah et al., 2015).

Nagi and Cho (2012) in an article entitled young deluxe consumers in China, based on the key values of Deluxe-oriented behavior patterns, identified four separate section for young consumers, Cross-border section, established, followers and immaterial Deluxe (Nagi, Cho, 2012).

3. THE CONCEPT OF NARCISSISM

"The concept of narcissism or unhealthy self-love; It was introduced for the first time in the writings of Freud, But coherent theory in this field returns to work such as Mental Cavani Such as, Khot and Kerenberg. According to the Khot that, in addition to the solidarity in conceptualization has support of research, Narcissistic is transformation process value in the "self**" that** continues from birth to death. In other words, the person throughout his life tries to move toward primitive and childish narcissism that, is at the beginning of the whole development and has features such as jealousy, arrogance, exploitation and sense of entitlement to value of "healthy himself" that, is at the end of this spectrum. Research findings show that in the normal population, Narcissism is a multifaceted personality structure that has, complex relationship with mental health. Some components of this structure of personality such as authoritarianism, Supremacy and self-acclaimed somewhat are predictive value, and are totally unrelated to mental disorders. Others, such as exploitation and sense of entitlement are considered as predictors of psychological problems, depression and anxiety. So, extreme narcissistic is considered as one personality disorder that appears as a pervasive pattern consists of grandiosity (in fantasy and action), need for admiration and lack of empathy po **wer"** (Ghorbani, 2014). Patients with histrionic personality disorder has been very Attention-seeking and these people are extreme in their reactions and Due to the dramatic and intense responses, this term has been applied to them and this disorder is more common in women. As well narcissistic people has Non-realistic perception of their importance, Unexceptionable, deceived people and lack of empathy and a lot of problems in relationships (Santrock, 2004). In the contemporary world, practices narcissistic behavior has great vogue and modern societies usually wings to attribute such a sense of grandiosity, exhibitionism, entitlement, exploitation in interpersonal relations and lack of empathy (Watson, Taylor, Morris, 1987). During the buying products, consumers are faced with many decisions. The researchers of consumer behavior perform significant effort to better understand how such decisions are expressed. Recently Luxury Consumption critical is Called in connection with the person and excesses, extravagance and excesses Social. Luxury consumption, is a phenomenon that is relatively universal, has Greater inclusiveness in developed countries and is growing among the middle class in developing countries. In other words, luxury Consumption is common in countries that have a tendency toward materialism. Deluxe or luxury products meet requires of an individual to the social prestige and by buying these products show their character. Brand has significant impact on consumer perception and decisions related to the purchase. Need for uniqueness refers to psychological desire for uniqueness rather similar to others. In other words, this concept is meant to the consumer needs to search for products and distinct material goods, to show different himself than others. Need for uniqueness first time in 1980 was interred by "Sander and Feromekin" in literature of marketing and consumer behavior. The researchers noted that people tend to realize themselves unique and unsurpassed to others. They added that they have great value for something unique that obtain in difficult. Hence acquisition of large material assets, may give the impression to people that are different than others (Tian, 2001). According to Tepper and Bearden (2010), showing unusual and unique objects can satisfy customers' needs to be different than others. In the case of luxury goods, the customer needs to unique as compared to others, is achieved through acquiring luxury goods to improve their personal identity (Tepper, Bearden, 2010). Almost all active in the field of luxury goods tend to manage their brands through the concept of "scarcity" because usually customers of these items feel that Luxury goods are not used by many people and users are limited (Dubois & Paternault). Zimmer and et al (1999) found that perceived image and quality of unknown brands, are affected through the customer needs to unique (Zimmer, Little,Griffiths, 1999). Also

Amaldoss and Jain (2005), in the study of social needs on excessive consumption, found customer Because of their need to unique turn toward buying quality goods but exactly the opposite is true. The results of that study is support of this idea that Customer perception of the brand has relationship to needs to unique (Amaldoss, Jain. 2005).

Theoretical Foundations of narcissism

Attribute narcissism

"Narcissus" in Greek mythology is the name of the young beauty, who is placed in loved a girl named **"Echo". He neglected to echo so that poor girl's body is disappear**ed and from him stays just sound later, "Narcissus" in punishment for neglect suffered the same pain, this means that in limpid spring sees his picture and will be caught to his love. The word "narcissism" means "narcissism" has been taken from this narrative, Narcissistic to say someone that note to herself in somewhat unbalanced and unhealthy (Narimani, 2011). Couplings and Campbell (2008), define narcissistic tendencies as a preoccupation to herself and a lack of concern for others. In their opinion Materialism is one of the examples of narcissism epidemic in America (ibid.). Freud (1914), know narcissism one of the most important findings of its own and says we will put steps by born from a narcissistic absolutely adequate to stage perception of an external and variable world and the beginning of discover topic. According to the Forum (1976), the modern consumer determine himself with the formula **I'm that** is equal what I have and what I spend, He defines his narcissistic personality to a marketer character that is relevant to "having" and Includes alien and destructive impulses that Looking for a tool relation with others. Lasch (1979) has known marketing relevant to narcissism and says that marketing puts the consumer at the center and gives him instant gratification. According to the Psychiatric Association of America (2013), narcissism is defined as a pattern of grandiosity that is combined with need for admiration and lack of empathy (American Psychiatric Association, 2013).

Narcissism from the perspective of Freud

One of the important discoveries of Freud is theory of narcissism. Freud (1914), who considers it one of his most important discoveries, and seeks profit to understand certain phenomena such as psychosis (narcissistic neurosis), Love, anxiety (fear of castration), jealousy, sadism, and also an understanding of collective

phenomena the such as the readiness of oppressed classes for loyalty to his rule, according to Freud thought, a man never overcome to "the core of **narcissism "of** himself. Freud's fundamental belief that it was from

him remains unchanged. The main mode of human in beginning of newborn, the first is narcissism. And during normal development, children increases breadth and intensity of his relations with the outside of world but in many moments cuts his dependence on topics and returns it to me (secondary narcissism). But even in the normal human growth and development throughout life remains somewhat narcissistic (Narimani, 2011).

Views of forum about narcissism

According to forum, people who prepare the more freedom for themselves, their safety is limited. He Raises requirements five due to the dichotomy between freedom and safety, need for affiliation, which is realized by destructive and constructive ways. This need stems from this fact that man, in terms of the ability to think and reason, has lost Instinctual relationship with nature, as a result, man must create its own relationship and most satisfaction relationship is relationship based on producer love with another human that leads to compassion, responsibility, respect and mutual understanding. In fact, forum knows love as the best way to satisfy this need, and any failure to satisfy the sense of dependence knows Leading to narcissism (Sholtz, Soltez, 2013).

Dimensions of narcissism from the perspective of Raskin and Terry

According to Raskin and Terry (1988), narcissism has seven **dimensions'** authority, merit, excellence, glaring, fame, desert and arrogance (Raskin, Terry, 1988).

Authority

The authority Includes impact or lack of impact on people, Sense of success or failure, daring or pretentious or lack of courage, Possession or function, sense of giving recognition by others or lack of it, Leader or follower, feel the leader or learn to lead (Ibid.).

Merit

Merit includes responsibility for the decisions or willingness to accept responsibility for decision-making in the sense of competence, Information about the performance or lack of information in some cases, affiliation or non-affiliation with the others in doing things, Belief in the all or limited freedom In lifestyle, hope or despair to success, believe in the ability or inability of the others (Ibid.).

Excellence

Excellence includes belief in being a good or embarrassment during defined, Belief or non-belief in being special, Interest or no interest to being defined, Willingness or unwillingness to sign biography, Belief or lack of belief in the supernatural or being an exceptional.

Glaring

Glaring Includes modesty or lack of humility, or Courage or caution in Exercise, preferring to public or being in the spotlight, grow or not grow on their own, Initiate or lack of attention to new patterns interest or lack of desire to become famous, Depression, or indifference to the neglect of the people (ibid.).

Fame

Includes ability to express or accept the results of behavior, feel easy or unwillingness to guide and control people, feel read minds or lack of understanding, a sense of interest and or inability to storytelling and believed to be convincing or not (ibid).

Desert

Desert Includes thinking ability and inability to rule the world, Favorites or neglect of respect of others than him, happy logic or expectation of happiness, expectation of others or to help others, Satisfaction or dissatisfaction of downloads, willingness or unwillingness to power (ibid.).

Arrogance

Arrogance Includes interest or unwillingness than boast own to others. Interest or no interest in looking at his body and look in the mirror (Ibid.)

Mode narcissistic

Narcissistic consumers or those who are in a state of narcissistic induction have significant importance for companies using mass customization systems (Fox, Rooney, 2015). To develop a unique product, Companies do not have to increase share of customer from Narcissistic real or parts of target that contains a large number of narcissistic However, the Company may create a state of narcissism among the current users by using marketing communications (Manipulation and stimulation based on the advertising) recognize similar benefits. Companies can use several methods to create a state of narcissism (Debelis et al., 2016). Narcissism mode can be stimulated through marketing communications to influence the product unique. Manipulation mode Narcissism causes Consumer design products more unique. Feelings evoked of desert can Increase consumer creativity through increased demand for unique. Arousing a narcissistic mode (independent of the prevailing levels of narcissism consumers attribute) provide Causal evidence for impact of proposed of Narcissism on a unique product. In addition, creating a stimulation technique that can be used in marketing, is a strategic tool to influence the unique products (ibid.).

4. CONCLUSION

With the advancement of technology and the manufacture of various products Consumers have more willing to buy luxury products or finishes stating about luxury goods that has unique features and are precious and

more valuable than essential commodities. Brand has created value for the consumer and enhance consumer understanding of luxury and quality of product and for some target consumers of luxury and extravagance is too much from personal well-being. These people tend to show their individuality goods and understand others to them. To do this, give more money and toward the purchase luxury have emotional approach. Use from the term of consumption (boastful types), to demonstrate the willingness of people to showcase outstanding evidence of their willingness to purchase luxury consumer. Examine the relationship between this narcissistic with the behavior of consumers and the willingness to buy Non-essential goods and in other words, luxuries, is including issues that can help to successfully in marketing.

REFERENCES

Abdolvand, M.A., Reihane, N. (2008). The role and impact of psychological antecedents and Brand on consumption of luxury goods among young people. Marketing Management magazine, Issue 8, Spring and Summer 2008, p. 1.

Amaldoss, W.,Jain, S. (2005). Conspicuous consumption and sophisticated thinking. Management Science, 51(10), 1449-1466.

American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders.5th Edition Washington, DC: American Pychiatric ssociation.

Bosson, J. K., Lakey, C. E., Campbell, W. K., Zeigler, H., V., Jordan, C. H., Kernis, M. H. (2008). Untangling the links between narcissism and self-esteem: A theoretical and empirical review. Social and Personality Psychology Compass, 2(3), 1415-1439

Brun, A., Castelli, C. (2013). The nature of luxury: a consumer perspective. International Journal of Retail & Distribution Management, 41(11/12), 823-847

Cheah, I., Phau, I., Chong, C., Shimul, A. S. (2015). Antecedents and outcomes of brand prominence on willingness to buy luxury brands. Journal of Fashion Marketing and Management, 19(4), 402-415

Clarke, I. E., Karlov, L., Neale, N. J. (2015). The many faces of narcissism: Narcissism factors and their predictive utility. Personality and Individual Differences, 81, 90-95.

Debellis, E., Sprott, D. E., Herrmann, A., Bierhoff, H. W., Rohmann, E. (2016). The Influence of Trait and State Narcissism on the Uniqueness of Mass-Customized Products. Journal of Retailing, 92(2), 162-172.

Dubois, B., Paternault, C. (1995). Understanding the world of international luxury brands: the" dream formula."(Special Issue: Research Input into the Creative Process). Journal of Advertising research, 35(4),

Giovannini, S., Xu, Y. Thomas, J. (2015). Luxury fashion consumption and Generation Y consumers: Self, brand consciousness, and consumption motivations. Journal of Fashion Marketing and Management, 19(1), 22-40.

Heidarzadeh, K., Raes Rohani, F. (2013). Evaluate the effects of demographic factors and understanding of the brand among consumers tend to buy luxury cars. Journal of Management Development and Transformation, May 2014, No. 18, pp. 13-22.

Husic, M., Cicic, M. (2009). Luxury consumption factors. Journal of Fashion Marketing and Management: an international journal, 13(2), 231-245.

Lambert, A., Desmond, J. (2013). Loyal Now, but Not Forever! A Study of Narcissism and Male Consumer–Brand Relationships.

Lasch, C. (1979). the culture of narcissism:American life in an age of diminishing expectation. new York, ny,usa: w.w.norton.p.20.

Narimani, P. (2011). Narcissistic disorder. Tehran: The Sound of Light.

Rashidians, A. K. (2006). Culture of narcissism (narcissism) (analyzing two vision). Recognition, spring 2006, No. 49, pp. 215-234.

Seo, Y.,Buchanan-Oliver, M. (2015). Luxury branding: the industry, trends, and future conceptualisations. Asia Pacific Journal of Marketing and Logistics, 27(1), 82-98.

Sholtz, D., Schultz, S. A. (1976).   Theories of personality. Translation: John, SM (2013). Translation: John, SM (2013). Tehran Edit Publication.

Solomon, M. R. (2009). Consumer behavior. Translation: doctor Kambiz Heidarzadeh (2013), Tehran marketing Publication.

Stoeber, J., Sherry, S. B., Nealis, L. J. (2015). Multidimensional perfectionism and narcissism: Grandiose or vulnerable? Personality and Individual Differences, 80, 85-90.

Shankar, A., Fitchett, J. A. (2002). Having, being and consumption. Journal of Marketing, 18(February), 501_516.

Tian, K. T., Bearden, W. O., Hunter, G. L. (2001). Consumers' need for uniqueness: Scale development and validation. Journal of consumer research, 28(1), 50-66.

Twenge, J. M., Campbell, W. K. (2008). Increases in positive self-views among high school students birth-cohort changes in anticipated performance, self-satisfaction, self-liking, and self-competence. Psychological Science, 19(11), 1082-1086.

Zuckerman, M., O'Loughlin, R. E. (2009). Narcissism and well being: A longitudinal perspective. European Journal of Social Psychology, 39(6), 957-972.

POLITICAL CONNECTIONS AND STOCK RETURNS

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Abstract

*Since the political connections of companies with the government are significant factors **in determining the company's** value, we therefore investigate the relationship between the political connections of companies and stock returns. To conduct this research, we selected 116 listed companies in the Tehran Stock Exchange during 2010 -2015. Multivariate regression was employed to test the hypotheses, and the results of the analysis rejected those hypotheses, that is to say, stock returns have no direct relationship with the political connections of companies. Additionally, stock return premiums of the companies having political connections does not increase when their shareholder are governmental institutions.*

JEL classification: P26

Keywords: *Political connections, Stock returns*

1. INTRODUCTION

The political connections of financial firms are noteworthy factors which influence financial reporting quality and the cost of ordinary shares and consequently company returns (Chaney et al., 2012). Companies are largely inclined to communicate closely with government and politicians because these connections bring many benefits, such as the privilege of market access, tax breaks, easier access to credit, government subsidies (Aning Sejaty, 2009). Instead, the politically connected companies may share the benefits gained from these connections with politicians (Aning Sejati 2009, Bushman et al., 2004). Such economic context at a community level is called **"relationship-based economics"** (Chen et al., 2011).

The politically connected companies easily achieve capital resources and other benefits through their connections which cause them to rely less on high-quality financial reporting (Chaney et al. 2012, Aning Sejaty, 2009).

Political connections have also significant aspects in Iran, and the presence of politically connected managers and owners of most companies which is due to the governmental nature of those companies and large industries as **well as the Iran's governing** economic system economy altogether are translated into the governmental economy.

The positive relationship between political connections, economic criteria and the company**'s value** is clearly visible. Given that the political connections of a company with the government are the important fa**ctor in determining the company'**s value, this study tries to investigate whether the improvement of political connections with government is directly reflected in **company's** stock returns?

Previous research has indicated that the relationship between stock returns and the political connection of companies with government is a direct one. (Civilize et al., 2015); however, the type of political connections is examined in this study.

2. THEORETICAL FOUNDATIONS

Political connections and relationship-based economic systems: relationship-based economic systems are known by weak legal requirements and lack of transparency (Rajan and Zingales, 2008). People in this system require a degree of ambiguity in order to protect their connection against a healthy competition (Aning Sejaty, 2009). The economic systems of some East Asian countries have achieved impressive economic growth in recent decades. The World Bank **published a report titled "East Asian miracle"** in 1993. This report represents 8 countries that achieved miraculous economic growth between 1965 and 1990. These countries were Japan, Hong Kong, Singapore, South Korea, Taiwan, Indonesia, Thailand and Malaysia. The economic systems of these countries are fully relationship-based. The Malaysian government assists and protects the companies having close connections with key government officials (Aning Sejaty, 2009). Fisman believes that political connections while compare with the economic base of a company is the major determinant of the profitability of companies in the developing and East Asian countries. He believes that the gain of the politically connected companies is largely dependent on the decision of the government which highly respects them (Fisman, 2001). In politically connected companies, the access to capital resources is not much dependent on the reported earnings because the political connections lead to easy access to credit and the capital resources of government-owned banks (Boubakri et al., 2012, Chin and John 2004, Cull and Xu 2005).

Accruals quality and political connections: Many studies indicate that compliance with accounting standards alone cannot guarantee the quality of the financial statements and the items included because other factors also influence the quality of financial statements and reporting. Financial statements prepared by an economic unit are under the influence of various factors in addition to accounting standards. The lobbying activities of managers and owners of financial firms in political circles is an important and considerable factor (Aning Sejaty 2009; Faccio, 2006; Cheney et al., 2012). The political influence and connections not only affect the financial position of financial firms, but also affect the motivation of managers as to the preparation of financial statement and reporting; hence, a dramatic difference between the quality of financial statements of politically connected companies and that of non-connected ones is anticipated. The quality of financial statements is an interesting issue in the accounting literature, which has attracted the attention of many experimental researchers in the context of positive accounting theory. The quality of financial statements is mainly measured through accruals quality (Palepu, 2003). Ball et al. argue that accrual quality is under the influence of extra- and intra-organizational factors. According to the political cost hypothesis presented by Watts and Zimmerman, politicians are capable of influencing **company's resources** by employing the wealth distribution policies. Cash rewards are also one of the main factors contributing to managers' **wealth**. Changes in cash flow can be influenced by tax, specific regulations and related information to political costs; therefore, managers are forced to consider regulation and rules that influence company and control them if it is possible.

The hypothesis claiming that larger companies suffer more political costs than smaller ones is not rejected regarding the research conducted by Watts and Zimmerman about the relationship between political costs and the size of companies. They concluded that tax rates over time and between all companies and industries is not the same (Digan, 2003)

Digan and Hallam (1991) indicated that companies with higher market share related to their industry will most likely have more political costs. (Digan, 2003)

In another study conducted in Australia, Panchapaksan and McKinnen employed other criteria to measure the size of co**mpany. These criteria included "**the market share of relevant industry, return on investment, the number of employees, the number of shareholders, social responsibility reporting and news **coverage"**.

In sum, the hypothesis of this study was the relationship between market share, the number of employees, the number of shareholders, social responsibility reporting, news coverage and the amount of political costs, and the results showed that company size, market share, the number of employees, the number of shareholders, social responsibility reporting and news coverage have a similar effect on the political costs (Pour Heydari and Hemmati, 2004)

The definition of political costs: Zimmerman defines the political costs as follows: politicians and customers often use accounting information in order to compare the efforts made for the reallocation of resources among themselves as the company cost. This reallocation may be made by government regulations and rules (tax rates, import and export taxes, customs duties, the right to property and company's asset) or by custodian groups and legislators such as labor unions. Therefore, any successful attempt for the redistribution of company resources to outside is known as the political costs (Zimmerman, 1986)

Accounting and the political process: the benefits of the information obtained from the political process are not fully captured because of the cost of information, the absence of effective market for the capitalization of future flows resulted from it as well as transaction costs.

Individual voters are not encouraged to vote because they suspect that their votes be ignored while observing the absent service. Moreover, vote buying is illegal and there are incentives for politicians to disclose, and therefore vote buying is costly. Land bargain is also costlier than securities one.

The shareholders, in the market, who own a small part of the company have little incentive to monitor company managers, and in the political process the voters, too, are not determined to monitor government agents and their representatives; however, it is assumed that these two processes are also different in terms of centralizing costs of the benefits of additional monitoring.

According to the hypothesis, the centralizing costs of the benefits gained from reduced management expediency (negligence) are lower in the market process than that of the political process. It should be noted that the difference between the political and market processes is due to differences in transaction costs and property rights for improved monitoring. If the costs in both processes are equal and positive, people have the same motivation for collecting data.

Accounting research to date has assumed that transaction costs in the political process are extremely larger than those in the market process; therefore, voters are less inclined to acquire knowledge.

In the economic theories related to the political process it is assumed that politicians are looking to maximize their wealth; therefore, the political process hypothesis is a competition for transferring wealth.

Taxes and regulations lead to wealth movement through government services, subsidies, tariffs, etc. Participation in the political process is not free of charge and requires affording information reception costs. Companies, too, operate in a political environment and necessarily incur costs through the financial process. Consequently, companies in order to carry on their activities are forced to negotiate with authorities and justify them to continue their activities. Even companies participate in the political activities related to elections to take benefit from legislation advantages, and they incur costs (Marx 2001).

The nature of the political process: the political process makes politically sensitive companies to choose methods to delay earnings. However, it is likely that the political process creates incentives to reduce the variance of reported earnings. Variance is significant in cases where it is likely for the regulations to be set in the period of high earnings while being ignored in later periods with lower earnings. This asymmetry is consistent with the cost of information. The media often calculate the percentage increase in comparison with the same period in the previous year.

This usage type of accounting figures causes managers to strive for reducing the variance in reported earnings. Higher percentage and increase usually attract attention and are used as an evidence of the presence of a crisis or monopolization.

Two theories are introduced in the political process, and according to one of them, the political process is a method to deal with the known weaknesses in the market (protecting the public interest) while the other shows self-interest is the case in the political process as in the market and the political process is a field for creating wealth (Solomons, 1978).

The impact of the political processes on accounting methods: in this part, the economic theories of the political process in accounting are used and developed. In particular, what incentives for mangers will be

created in choosing accounting methods if accounting figures (for example, earnings) are employed in the political process for supporting government regulation (for example, taxing on windfall profits) or in the management of existing regulations (for example, the pricing of public goods and services)? Some of the incentives of method selection are created as a result of the political process (Shabahang, 2002).

The usage of earnings figures by politicians and legislators has introduced the hypothesis that the managers of companies are encouraged to use those accounting methods (for example, accelerated depreciation method) that reduce reported earnings. Low reported earnings reduce the adverse measures taken by the government, whereas they increase the chance of establishment of governmental subsidies. If politicians and legislators do not adjust the earnings figures to choose reducing accounting methods of earnings, the management will be motivated to choose earnings reducing methods in the current year not until the nullification of choosing the methods of accounting for third parties incur costs.

Politicians try to reduce inflation through various programs and legislation (for example, wage and price controls, fuel price controls, restrictions on the imports and fiscal and monetary policies). Some of these programs employ accounting figures.

For example, the executive order 12092 was issued in 1978. The aim of this order was to reduce inflation through controlling government contracts pricing. However, companies that had not increased the amount of their earnings were not subject to this order. This is another example of how the political process creates incentives for managers to choose accounting methods that reduce earnings. (Arnold 1990)

The Effects of Political Connections: Ball et al. (2006) suggested that financial reporting practices in Malaysia are heavily influenced by political factors. Chaney et al. (2012) examined the relationship between political connections and accruals quality. Using the multi-country data analysis, the mentioned study indicated that accruals quality of politically connected companies is lower than that of the non-connected ones. Moreover, developing connections with the stronger political centers has a lower correlation with accruals quality. Finally, they found that only the non-connected companies have a negative correlation between accruals quality and cost of debt. They believe that the negative consequences of low quality reporting are very low for the politically connected companies. Carretta (2012) examined the relationship between audit committee independence and demand for higher quality audit. The results indicated a positive relationship between audit committee independence and audit fees. The findings support the hypothesis that audit committees with greater independence demand higher audit quality. Secondly, this relationship is weaker in politically connected companies. Moreover, the selection of large audit institutions in companies with political connections has negatively influenced the attitudes of the audit committee as well as audit quality. Boubakri et al. (2012) investigated the effects of political connections on the company performance and the financing decisions. They found that the companies firstly improve their performance by establishing political connections and increase their debts. Secondly, political connections have a strong correlation with the changes in operating leverage and performance. Thirdly, politically connected companies have easier access to credit resources. Datta and Gong Li (2012) examined political connections and the value of companies. The results indicated that the political connections influence the value of companies and leads to fluctuations in the value of politically connected companies, more than what the market can explain. They suggested that the efficiency of the politically connected companies is significantly different from their non-connected counterparts. They concluded that the existence of such connections in each country leads to the growth of the global corruption index and crony capitalism, and higher probability of renterism. Boubakri et al. (2012) examined political connections and the cost of capital. The results show that politically connected companies have lower capital cost than their non-connected counterparts. Therefore, the investors also expect lower cost of capital. This indicates that politically connected companies are less risky. The findings indicate that the benefits of the political connections outweigh the costs of its political connections. Politically connected companies generally benefit from soft budget constraints and in recessionary times, the government helps them financially.

According to the political cost hypothesis proposed by Watts and Zimmerman (1978), politicians have the power to affect upon company resources by using wealth re-distribution policies. Moreover, the main

factors affecting company wealth are the cash rewards. Changes in cash flows can be affected by taxes, specific regulations and information about the political costs. Therefore, managers must consider the laws and regulations that affect them, and control them if it is possible.

According to the research conducted by Watts and Zimmerman (1978) on the relationship between political costs and company size, larger companies incur greater political costs. Watts and Zimmerman concluded that tax rates vary over time and across companies and industries.

Having the knowledge about the impact of political decisions and procedures on the company's cash flows is of particular importance and is considered to be one of the critical resources of each commercial entity since in order to influence the political process, political groups incur costs that can include the costs of campaigns and supporting politicians, part of which are normally incurred by the companies over time.
This study may increase managers' knowledge and help them recognize the importance of political costs.

Bellis and Gul (2012) examined the relationships between political connections and costs of debt. The findings indicated that from the viewpoint of the capital market and auditing firms, politically connected companies are riskier than other companies.

Boubakri et al (2012) suggested that the politically connected companies have lower costs of ordinary shares in comparison with other companies.

Stock Returns: There are many studies in the literature of financial management and accounting that have been conducted to identify the effective factors in stock returns. Sharpe (1964), Lintner (1965), and Mossin (1966) presented the capital asset pricing model based on the Markowitz framework. This model assumes that investors use the Markowitz logic to set up the portfolio. It also assumes that there is an asset (risk-free asset) which has a certain return. This assumption is very important since it helps us in determining the value of the assets through a desirable discount rate that is used in the valuation model. In other words, if the rate of return on an investment is estimated, it can be compared with its expected rate of return calculated by CAPM model, and therefore, it is determined whether these assets are underpriced, overpriced or properly priced.

The early cross-sectional studies on stock returns such as the one done by Nicholson (1960) did not sufficiently receive attention because of the small samples used to perform empirical tests. Since the Compustat and CRSP databases appeared, researchers have been able to create samples large enough (and of sufficient quality) to provide reliable results. Therefore, some years after the development of CAPM model, there was no reliable way to test the capability of model to predict variables such as price-earnings and book-to-market ratio.

3. RESEARCH HYPOTHESES

Based on the research, hypotheses are formulated as follows:

Stock returns are directly related to the political connections of the companies.

Stock return premiums of politically connected companies are different among industries.

Stock return premiums of politically connected companies are higher when governmental institutions hold an equity stake in the company.

4. METHODOLOGY:

This study examines the relationship of political connections and shareholder value added with stock returns. For this purpose, models and variables are used that are summarized in table 1.

Table 1. List of variables and the methods used to measure them

Variable	Variable name	symbol	Measuring methods
Dependent	Stock returns	Rit	Stock returns of company
Independent	political connections	HighConnit	The level of political connections is calculated by adding the amount paid by the company to the government as stated, divided by total assets.
Controlled	Company size	Sizeit	Natural logarithm of total assets
	Book-to-market ratio	B/Mit	The ratio of book value to market value of equity
	Shareholder value added	SVAit	Shareholder value added is a measure of a company's performance and return. The term is used to describe the difference between the wealth held by the shareholders at the end of a given year and the wealth they held the previous year. In this study, the following equation was used to calculate it: (Rahnamay Roudposhti, Fereydoun; Nikoumaram, Hashem; and Shahroudiyani, Shadi (2006)) Market value of total debts - Market Value of the company = SVA
	Operating return	ORit	Operating return on equity is calculated by dividing operating profit by equity.
	Financial leverage	Levit	Ratio of total liabilities to total assets

Source: Author

Hypothesis test

To test the research hypotheses, following the regression models of Civilize et al. (2015), the relationship between political connections and stock returns has been measured.

In order to test the first and second hypotheses, the following multiple regression (model 1) is used:

Model (1)

Rit = α + β1 HighConnit + β2 SVAit + β3ORit +β4 Sizeit + β5 B/Mit + β6 Levit + εit

To test the second hypothesis, model (1) was estimated separately in different industries. Then, the mean paired difference test was carried out.

To test the third hypothesis, we classified the study population into two classes based on equity ownership and relationship with government (one class consists of the bureaucratic state shareholders in the board while the other consists of the bureaucratic state shareholders among shareholders), and model (1) was estimated.

Study population and sample: The study population consists of all the companies listed in the Tehran Stock Exchange. The scope of research is extended from 2010 to 2015, including 5 years, and the samples are selected according to the following criteria:

(1) to be listed in the Tehran Stock Exchange from 2009

(2) does not have more than 3-month trading delay

(3) the company's fiscal year to end in March.

(4) the selected companies are not of investment companies or financial intermediaries.

Finally, regarding the above conditions, 116 companies were selected as the final sample among the companies listed in the Tehran Stock Exchange.

Findings: Descriptive statistics of the variables used in the study is provided in table (2):

Table 2. Descriptive statistics of the variables

Variable name	Levit	Bmit	Sizeit	Orit	SVAit	HighConnit	Rit
Number of samples	580	580	580	580	580	580	580
Average	0.579	2.604	12.520	0213	0.194	0.285	0310
Middle	0.603	2.422	12.485	0.165	0.159	0.240	0.255
Mod	0.381	1.552	10.501	0.00	0.00	0.080	0.42
SD	0.121	1.018	1.000	0.167	0.160	0.190	0.243
Coefficient of skewness	-0.357	0.971	0.196	1.0126	0.176	0.960	0.690
Slenderness ratio	1.206	1.145	-0.104	0.936	1.251	0.810	-0.601
Range	0.382	6.320	6.720	0.900	0.780	0.962	0.992
Minimum	0.380	0950	10.030	0.00	0.00	0.00	0.00
Maximum	0752	7.471	16.742	0.902	0.780	0.962	0.990
Quarter	0.482	1.825	11.847	1.089	0.072	0.142	0.116
	0.603	2.423	12.487	0.165	0.162	0.252	0.256
	0.680	3.235	13.190	0.293	0.269	0.381	0.512

Source: Author

The correlation coefficients of the variables are presented in table 3:

Table 3. Correlation coefficient matrix of the variables

Variable name	Levit	Bmit	Sizeit	Orit	SVAit	HighConnit	Rit
Rit	0.017	0.042	0.005	-0.053	-0.012	0.038	1.0000
	0.625	0.285	0.0886	0.175	0.765	0.314	
HighConnit	-0.014	0.001	-0.050	0.010	0.011	1.000	0.040
	0.685	0.976	0.185	0.0802	0.765		0.0316
SVAit	-0.013	-0.034	-0.056	0.014	1.000	0.013	-0.012
	0.475	0.378	0.144	0.741		0.0765	0.765

Variable name	Levit	Bmit	Sizeit	Orit	SVAit	HighConnit	Rit
Orit	0.069	-0.008	0.035	1.000	0.014	0.011	-0.053
	0.069	0.0846	0.351		0.742	0.0805	0.0175
Sizeit	0.91*	-0.038	1.000	0.035	-0.054	-0.051	0.004
	0.017	0.335		0.351	0.0144	0.0182	0.0886
Bmit	0.0137**	1.000	-0.038	-0.006	-0.034	0.001	0.042
	0.000		0. 335	0.845	0.0379	0.0974	0.0285
Levit	1.000	-0.0137**	0.091*	0.069	-0.013	-0.014	0.019
		0.000	0.017	0.069	0.746	0.0684	0.0628

Source: Author

The significance level (P_Value) of correlation coefficients between the variables is shown in parentheses in the above table. (**: Significance level of 1% (99% confidence level) *: significance level of 5% (95%))

The results of tests are:

First hypothesis: The results of model (1) regression analysis are provided in table (4):

Table 4. Model (1) estimation results

Explanatory variables	Model variable coefficient (β_i)	Predicted mark	T-statistic	P-value
(Constant)	0. 241	-	1.845	0.065
HighConnit	0.052	+	1.041	0.299
SVAit	-0.015	-	-0.235	0.816
Orit	-0.080	-	-1.412	0.160
Sizeit	0.002	-	0.209	0.835
Bmit	0.012	-	1.147	0.252
Levit	0.056	-	0.725	0.468
"Durbin-Watson" statistic = 2.147 F- statistic = 0.790 and P-value = 0.576			Adjusted R^2 = 0.002 R = 0.822	

Source: Author

The target coefficient in the above table to test the first hypothesis is:

β_8: Coefficient of the relationship between stock returns and political connections of companies

As can be seen in table 4, F-statistic is equal to 0.789 and P-value is equal to 0.576, which indicates that the linear regression model is not statistically significant at the 99% confidence level.

T-statistic for HighConnit explanatory variable (beta=0.051) is equal to 0.1041 and the significance level of the variable is equal to 0.298, which is not statistically significant at the confidence level of 95%. Therefore, there is no direct relationship between stock returns and political connections since the HighConnit explanatory variable beta is equal to 0.051 and t-statistic is equal to 1.041, which is not significant at the confidence level of 95%.

Moreover, according to the model (1) "Durbin - Watson" statistic, which is indicated in table (4), the value of this statistic is equal to 2.147 which is within the range of 1.5-2.5. Therefore, it can be stated that in model (1), there is no autocorrelation between the observations.

The second hypothesis: the second hypothesis test results are provided in table (5).

Table 5. The second hypothesis test results

Sig. (2-tailed)	df	t	95% Confidence Interval of the Difference		Std. Error Mean	Std. Deviation	Mean		
			Paired Differences						
			Upper	Lower					
0.367	349000	-0.916	0.021	-0.057	0.018	0.360	-0.018	Rpol - RnonPol	Pair 1

Source: Author

As can be seen in table (5), we have the degrees of freedom of 349 and P-value is equal to 0.365. This indicates that at a confidence level of 99%, the stock return premium of politically connected companies in different industries is not different.

The third hypothesis: The third hypothesis test results are provided in table (6).

Table 6. The third hypothesis test results

Explanatory variables	Model variable coefficient (β_i)	Predicted mark	T-statistic	P-value
(Constant)	0.168	-	0.819	0.415
HighConnit	0.068	+	0.751	0.455
SVAit	-0.131	-	-1.451	0.146
Orit	-0.010	-	-0.110	0.914
Sizeit	0.012	-	0.781	0.435
Bmit	0.010	-	0.594	0.555
Levit	-0.009	-	-0.063	0.951
"Durbin-Watson" statistic = 2.073 F- statistic = 0.775 and P-value = 0.671			Adjusted R^2 = 0.006 R = 0.107	

Source: Author

As can be seen in table (6), the F-statistic is equal to 0.676 and P-value is equal to 0.670. This indicates that the linear regression model is not statistically significant at a confidence level of 99%.

Regarding the third hypothesis, it can be concluded that the stock return premium of politically connected companies does not increase when the governmental institutions hold an equity stake in the company because the HighConnit explanatory variable beta is equal to 0.067, t-statistic is equal to 0.750 and the significance level of the variable is equal to 0.457, which is not significant at the confidence level of 95%.

Moreover, the "Durbin - Watson" statistic in table (6) indicates the absence of autocorrelation between the observations.

5. CONCLUSIONS

This study tries to investigate the relationship between political connections and the stock returns of companies. It is based on the research conducted by Civilize et al (2015). The results of the analysis indicate that the hypotheses are rejected. This means that there is no direct relationship between stock returns and political connections. Moreover, stock return premium of the politically connected companies vary in different industries, and stock return premium of the politically connected companies also does not increase when governmental institutions hold an equity stake in the company.

The reason that the results of this study is not consistent with the results obtained by Civilize et al. (2015) can be traced back to the population used in both studies while employing the same tested model; however, civilize et al. (2015) has used the data gathered from the American companies listed in the US

stock market. However, this study collected data from the companies listed in the Tehran Stock Exchange. Given that the only fundamental difference in the two studies is the population, therefore, the difference in the structure of capital markets of these two countries can be considered to be one of the reasons for the lack of consistency in the results of the two studies.

According to the results of the hypotheses, it is recommended that companies not seek any political connections with the government so as to enjoy the government supports and increase its stock price because the political connections with the government does not affect the stock prices and the shareholders do not consider these relationships in the stock pricing.

5.1. SUGGESTIONS FOR FUTURE RESEARCH

According to the numerous studies conducted abroad on political connections with government, since this topic has not received the due attention in Iran, it is recommended to put more effort into this field given its competitive potential for research in Iran. The topics that can be further investigated in this field are to determine the relationship of political connections with government and the borrowing costs, audit fees, financial leverage, and corporate governance.

Moreover, it is recommended that the impact of political connections with government on accounting practices such as conservatism be investigated. The impact of political connections with the government on the competitiveness of the market and financial reporting quality can also be studied.

REFERENCES

Ball, R., A. Robin, and J. S. Wu. 2006. Incentives versus standards: properties of accounting income in four East Asian countries. Journal of Accounting & Economics 36 (1-3):235-270.

Bliss, M.A. & Gul, F.A., (2012). Political connection and cost of debt: Some Malaysian evidence. Journal of Banking and Finance, 36 (5): 1520–1527

Boubakri, N., Guedhami, O., Mishra, D., Saffar, W. (2012). Political connections and the cost of equity capital. Journal of Corporate Finance, 18 (3): 541–559.

Boubakri, Narjess, Omrane Guedhami Dev Mishra, Walid Saffar,(2012), Political connections and the cost of equity capital Journal of Corporate Finance journal homepage: www.elsevier.com/locate/jcorpfin

Bushman, R. M., J. D. Piotroski, and A. J. Smith. 2004. What Determines Corporate Transparency? Journal of Accounting Research 42 (2):207-252

Boubakri. N, Claude.J, Saffar.W, 2012, The impact of political connections on firms operating performance and financing decisions, **The Journal of Financial Research • Vol. XXXV, No. 3 • 397**-423.

Carretta.A, 2012 Do Political Connections Affect Banking - Wiley Online Library onlinelibrary.wiley.com/doi/10.1111/j.1740-4762.2012...x/pdf

Chaney, P. K., M. Faccio, and D. C. Parsley. 2012. The Quality of Accounting Information in Politically Connected Firms. Working paper, Vanderbilt University.

Chen, C. J. P., Y. Ding, and C. Kim. 2011. Political connection, legal enforcement and analysts' forecast characteristics. Working paper, City University of Hong Kong.

Civilize.S, Wongchoti.U, and Young,M. (2015). Political Connection and Stock Return:ALongitudinal Study. Financial Review, Vol. 50, Issue 1, pp. 89-119, 2015

Cull, R., and L. C. Xu. 2005. Institutions, ownership, and finance: the determinants of profit reinvestment among Chinese firms. Journal of Financial Economics 77 (1):117-146.

Datta .D, 2012 Political Connection and Firm Value – Theory and Indian Evidence papers.ssrn.com/sol3/papers.cfm

Deegan Craig, H-. (2003) -Financial accounting theory Australia Mc Graw -Hill NO.1

Ebrahimi, Mohammad and Shahriari, Nader, (2008), Barresi-ye Rabete-ye Beyn-e Hazineha-ye Siyasi va Mohafezeh Kari dar Sherkatha-ye Irani [The Relationship between Political Costs and Conservatism in the Iranian Companies], MA thesis of the Islamic Azad University, Science and Research Branch.

Faccio, M. (2006). Politically connected firms. American Economic Review, 96 (1): 369-386

Fisman, R. 2001. Estimating the value of political connections. The American Economic Review 91 (4).

Nikoumaram, H., Banimahd, B., Rahnamay R., Fereydoun, and Kiai, A., (2013). Eghtesad-e Mobtani bar Ravabet, Ravabet-e Siyasi va Keyfiyat-e Aghlam-e Ta'ahodi. [The relationship-based economics, political connections and accruals quality]. Journal of Audit Science. 13:12 (50), 148.

Palepu, K., P. M. Healy, and V. L. Bernard. (2003). Business analysis & Valuation: Using Financial Statements Text and Cases. 3 ed: Thomson Learning.evidence of patronage in Indonesia., University of Colorado at Boulder, Boulder

Pour H., Omid, D., (2007), Barresi-ye Gharardadha-ye Bedehi, Hazineha-ye Siyasi, Tarh-e Padash va Malekiyat bar Modiriyat [A Study of Debt Contracts, Political Costs, Bonus Plan and Ownership of the Management].

Shabahang, R., (2002), Teoriye Hesabdari [The Accounting Theory], second volume, the research center for accounting and auditing, auditing organization

Watts, R., Zimmerman, J., (1986) " Positive accounting theory " NO.1.

THE IMPACT OF LEADERSHIP STYLES ON CORPORATE ENTREPRENEURSHIP AND ORGANIZATIONAL INNOVATION (CASE STUDY: BRANCES OF BANK MELLAT IN KERMANSHAH CITY)

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Abstract

Studies on different leadership styles have a long history in the field of industrial psychology and organizational research. Being one of the determinants of how things work in the organization, different leadership styles such as transactional, transformational, authentic or paternalistic leadership have different effects on organizational outcomes. The current article seeks to examine the impact of leadership styles on corporate entrepreneurship and organizational innovation through knowledge management and the atmosphere of organizational entrepreneur. The research is a descriptive-analytic survey, and a questionnaire was applied for data collection. The research statistical

population is comprised of the official staff working in Bank Mellat in Kermanshah city, which the sample size was 152 based on Cochran formula. The research's findings indicated a significant relationship between leadership styles,

corporate entrepreneurship, organizational innovation, knowledge management, and the atmosphere of organizational entrepreneur at the confidence level 95%. The findings indicate that, taking into account mediatory variables, the variable namely leadership style influences the atmosphere of organizational entrepreneur, corporate

entrepreneurship, and then other variables in the article, respectively.

1. INTRODUCTION

Although the number of the people who seek to provide a definition of leadership is as many as the ones who attempt to define leadership, the term **'leadership'** is a process to conduct and influence the activities of groups or members of organization. And how to use this influence is called leadership style. In other words, leadership style reflects the way the leader resorts to it in dealing with subordinates (Robbins, 2001). The current approaches to leadership adopt an inclusive, democratic and transformational view of management and the employees are expected to exert control and initiative over the work they do, get notified of potential problems in their line of work, and encouraged to come up with proposals, use their own skills and abilities and to develop alternative ways of performing. Through this inclusive, cooperative and transformational approach to management, employees can create alternative and innovative ways to solve problems on their own. They are provided with information about the specifics of a given situation and encouraged to put forward and discuss their insights and suggestions (Newstorm and Davis, 1993).

Innovativeness while confronting turbulent external environment enables organization to deal with rapidly increasing complexity and change. Under such a situation, companies that benefit from innovation

capacity are able to quickly respond to challenges, extract new products and provide better market opportunities than the firms that **lack innovation (Jiménez & Valle, 2011)**. Innovation is broadly seen as an

essential component for competitiveness and survival, embedded in organizational structures, processes,

products, and services within the organization (Gunday, Ulusoy, Kilic & Alpkan, 2011). As a result, innovation is considered by many scholars as one of the most important determinants of firm performance (Adegoke, Walumbwa & Myers, 2012; **Durán**-**Vázquez, Lorenzo**-**Valdés & Moreno**-Quezada, 2012; Grant, 2012).

In order to survive, firms should consistently be changed, but the change is not solely sufficient. The change should be built upon the collection of proper data obtained from external and internal environment and converting them into knowledge (Fadaei et al. 2011). In recent decades, with the widespread increase in the use of different communication channels and in the ease of access to information, the information age has brought its own leadership requirements (Tiwana, 1999). Knowledge management refers to the processes related to the acquisition, storage and effective use of organizational knowledge to meet organizational objectives. As the definition implies, it requires both a top-down approach in organizing the available information as well as a bottom-up cooperation in order to access to the most useful information.

Furthermore, limited extent of empirical research has been performed on organizational atmosphere and staff**'s intention** to become entrepreneurs and real participation in such activities. But organization as a social subsystem has the closest relationship with entrepreneurs (Peters, T. & Waterman, 1982), and finally, for the promotion of entrepreneurs and institutionalization of entrepreneurship in organizations, we require an environment consistent with this matter. In total, entrepreneurship research has indicated that environmental conditions and organizational atmosphere play more significant roles in enhancing the growth of corporate entrepreneurship (Wee-Liang, Teck-Meng, 2002). At the bottom line, two variables are at the focus in the present study. One is organizational innovation and the other is corporate entrepreneurship. Although they refer to different processes, they also share some common aspects in terms of employee attitudes and organizational outcomes. They both require employees to behave proactively and they both lead to organizational development when managed properly.

2. LITERATURE REVIEW AND HYPOTHESES

Several approaches to leadership are tested and modeled in order to investigate their effects on corporate entrepreneurship and organizational innovation as well as knowledge management, atmosphere of organizational entrepreneur. The purpose of the present study is briefly reviewed in terms of their relationship with corporate entrepreneurship, organizational innovation and knowledge management, atmosphere of organizational entrepreneur**.**

Leadership styles

Leadership as a topic of research goes back to 1950's when trait theorists studied to find out characteristics

of a successful leader. Behavioral and style theorists focused on behavior and style rather than characteristics of a person to define successful leader **(Gençer, Samur, 2016).** Leadership style is a

combination of characteristics, skills and behaviors that the managers uses them in order to interact with his employees (Golmoradi, Sattari Ardabilia, 2016). The leadership style in the theory of Hersey and Blanchard (1969) emphasizes the combination of task-based and relation-based behavior. Task-based behavior is identified through carrying responsibilities, particular and exact organizational patterns, communicational channels and successful methods and relation-based behavior is identified through open communicational channels, emotional and mental supports, active listening and facilitating behavior

(Swansburg & Swansburg, 1999). Hersey and Blanchard (1969) have found four methods for efficient **leadership. According to this pattern, there is no "best way" in** order to affect people (Hersey & Blanchard, 1991). Those four methods include telling leadership, selling leadership, participating leadership and delegating leadership. In telling leadership, the leader defines the roles explicitly and gives some instructions if necessary. In selling leadership, the leader provides guidance on new responsibilities. In participating leadership, the leader cooperates with the members, shares ideas with them and facilitates decision-making. In delegating leadership, the leader allows people to make decision if necessary and encourages them to accept responsibilities as far as possible.

Various leadership theories have been developed and leadership styles have been defined by scientists. For **instance, Burns' (1978) study on Tr**ansformational Leadership Theory defines transformational leadership

as reaching higher levels of motivation and morality when one or more people engage with each other, whereas transactional leaders have formal power and control and focus on short term goals. In addition, Burns introduced constructs of transforming and transactional leadership as a single continuum. On the **other hand, Bass's** (1985) Transformational Leadership Theory suggest Transformational and Transactional Leadership styles as two separate dimensions of leadership style even though Bass developed Multi-Factor Leadership Questionnaire to measure leadership styles, takes Burns' description of transforming leadership as a conceptual basis. Transactional leadership is the leadership style that focuses on the role of supervision. It is about keeping things as they are and as predicted. Therefore, the orientation in transactional leadership is a static one compared to other types of leadership which are focused on development and change. The three components of transactional leadership are contingent reward, active management by exception, and passive management by exception (Bass, 1985). Taken together, these three factors emphasize the supervisory power of the leader.

Knowledge Management

The rapid development of information and communication technologies have been changing the organizational structure, business and work methods, manager and employee profile, and in general work life, and have been bringing out new models particularly in communication in inside and outside the organization**.** Knowledge management is defined as **"**the management function responsible for regular selection, implementation and evaluation of knowledge strategies that aim at creating an environment to support work with knowledge internal and external to the organization in order to improve organizational **performance" (Maier, 2005).** Knowledge management refers to efforts made systematically to find, organize and ease the accessibility of the organization's intangible capital, to foster a culture of continuous learning and knowledge sharing within the organization. With a focus on knowledge management and massive investment in information technology, many organizations seek to achieve the benefits of knowledge management (Shih, Chiang, 2005).

In the knowledge management activities, communication methods, techniques, and channels are heavily utilized, and because of this reason, it is emphasized that the communication aspect has a stronger influence than the management aspect of knowledge management, meaning that knowledge management applications especially through communication influences outcomes. As a result of this, in order for the information to be shared in the institutions, managers who understand the importance of social interactions and communication with the employees and an institutional management are needed, because socialization of the individuals in the business is one of the dynamics of the knowledge management (Nonaka & Takeuchi, 1995). On the other hand, knowledge management system emphasizes knowledge processes that can increase the ability to learn. Such issues constitute the bases of organization, learning from the perspective of acquisition, dissemination, interpretation and optimization of business information. By improving the ability to collect, organize and disseminate information and knowledge, knowledge management can reinforce learning. Therefore, proper management of learning and decision-making can be a solution to business problems and thus improve the competitive advantages (Belbaly, 2008). In fact, knowledge management is developed to support and strengthen the processes including creation, storage, retrieval and use of knowledge.

The atmosphere of corporate entrepreneur

The concept of the atmosphere of entrepreneur refers to the fact that human behavior in organizations is not formed merely by interacting with immediate events, and it is also influenced by an interaction between organizational intangible and invisible drivers. Organizational atmosphere is the perceptions that people have of various aspects of the environment (Mozdarani, 1999). There should be suitable conditions in the organization to promote organizational entrepreneur. The factors that affect the range of entrepreneur are called atmosphere or environment of entrepreneur (Wee-Liang, Teck-Meng, 2002). These factors including managerial support, accessibility, flexibility of the borders of organization, working independency (having the power) and reward and strengthening are among the indices of the atmosphere of organizational entrepreneur (Hornsby, J.S., D.F. Kuratko, and R.V. Montagno, 1999).

Corporate entrepreneurship

Corporate entrepreneurship is defined as the entrepreneurial behavior amongst the employees in an organization, large or small (Morris et al., 2011). Corporate entrepreneurship refers to the nurturing of new ideas and exploitation of opportunities within a business, directed to improve the organizational profitability and strengthening of competitive position in the market (Kuratko et al., 2015).

The management plays a critical role for employee contributions to corporate entrepreneurship (Scheepers et. al.,2008) by encouraging the employee initiatives and offering the necessary resources for the feasible business ideas, avoiding sanctions in case of initiative failure and delegating employees to find innovative solutions to certain business challenges within the company**)** Tantau , et al, 2015).

Corporate entrepreneurship is the process through which an organization explores new knowledge and makes use of existing knowledge in order to pursue new business opportunities (Hayton, 2005). In fact, Hayton (2005) emphasizes the role of information processing and knowledge management in corporate entrepreneurship by positioning i**t as being "dependent upon a firm's ability to continuously learn and unlearn, by creating and exploiting new combinations of knowledge". Therefore, as it is the case for** organizational innovation, knowledge management seems to be a likely mediator in the relationship between leadership styles and corporate entrepreneurship.

Lumpkin and Dess (1996) have defined the corporate entrepreneurship as a "new entry" referring the first entry to new or established market with new or current goods/services. Corporate entrepreneurship includes to the product innovation, risk taking and proactive behaving (Covin and Slevin, 1991); in addition to these, entering new job, entrepreneurship (Kuratko, Montagno, Hornsby, 1990) and organizational innovation (Sathe, 1989; Guth and Ginsberg, 1991). Innovation in terms of corporate entrepreneurship refers to persistence of organization in terms of formation and introduction of products, production processes and organizational systems (Lumpkin and Dess, 1996).

Since corporate entrepreneurship is a strategic orientation (Covin & Miles, 1999) which involves a continuous reevaluation of the products, processes, services, and strategies of the organization, it is affected both by management practices such as leadership styles as well as the employee attitudes. In hence corporate entrepreneurship is a behavioral concept and all organization place in continuum **extending from "highly conservative" to "highly entrepreneur".**

Organizational innovation

As Peter Drucker suggests, every organization requires an important competency known as innovation (Chang & Lee, 2008). The innovation enables companies to achieve competitive advantage in an uncertain environment, and to be able to prevail the competitors, and this can have long-term impacts on firm performance, and it is also the main factor that can contribute to the growth of businesses (Li, Zhao & Liu, 2006). **Organizational innovativeness is defined as "an organization's** overall innovative capability of introducing new products to the market, or opening up new markets, through combining strategic orientation with innovative behavior and process**"** (Wang & Ahmed, 2004). Innovation helps the companies to gain competitive benefit in an insecure environment and overcome their competitors. And this can affect the performance of the organization in a long term period. Also the main factor to improve the business is innovation (Li, Zhao and YLiu, 2006). So innovation is divided to technological innovation, innovation in the products, and innovation in the process at the organization**.**

Goldsmith and Hofacker (1991) defined innovativeness as an attitude as well as a behavior. The conceptualization proposed by Berthon et al. (1999) has several components such as open-mindedness, willingness to change and abil**ity to innovate. Therefore, as an organizational "attitude" directly related to** dealing with and making use of available information with an open-minded approach, organizational innovativeness can be conceptualized as a specific Organizational approach to information processing. In this respect, knowledge management practices in the organization constitute one of the likely antecedents of organizational innovativeness. Intrapreneurship can be described as the involvement of the employees in the innovation activities of the firms mentally.

In the study for analyzing the influence of knowledge management on corporate entrepreneurship, organizational innovation and organizational entrepreneur atmosphere on organizational innovation a significant relationship is found. Knowledge management is a mean to encourage corporate entrepreneurship in the companies. In addition, corporate entrepreneurship can progress organizational activities toward creativity, innovation, risk-taking and supremacy, and it occurs in balance with the environment. Some areas such as organizational atmosphere, organizational strategies and management activities are the factors that affect the corporate entrepreneurship. Thus, it seems that the environment has an important role in the process of entrepreneurship.

Although the effects of leadership styles on organizational outcomes such as organizational innovation and corporate entrepreneurship are well documented, knowledge management and organizational entrepreneur atmosphere seems to be a more immediate antecedent which, in turn, likely to be affected by leadership styles. Therefore, in the present study we tested the mediation effect of knowledge management in the relationship between leadership styles and organizational innovation and corporate entrepreneurship and the mediation effect of organizational entrepreneur atmosphere in the relationship between leadership styles and organizational innovation (fig.1).
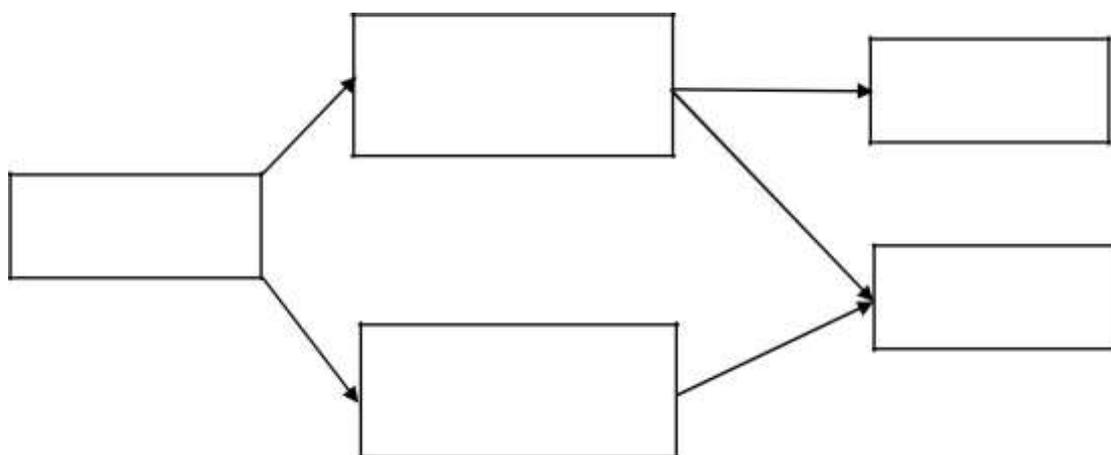
Fig. 1. Model of the research.

The following hypotheses are given to test the research model.

H1: A positive relationship exists between leadership styles and knowledge management

H2: A positive relationship exists between leadership styles and the atmosphere of organizational entrepreneur

H3: A positive relationship exists between knowledge management and corporate entrepreneurship

H4: A positive relationship exists between knowledge management and organizational innovation

H5: A positive relationship exists the atmosphere of organizational entrepreneur and organizational innovation

H6: Knowledge management mediates the relationship between leadership styles and corporate entrepreneurship

H7: knowledge management mediates the relationship between leadership styles and organizational innovation

H8: Atmosphere of organizational entrepreneur mediates the relationship between leadership styles and organizational innovation

3. METHODOLOGY

Since the current article seeks to examine the impact of leadership styles on organizational entrepreneurship and corporate innovation through knowledge management and entrepreneurial atmosphere, given the proposed hypotheses, the current research is an analytical-descriptive survey, and it is a correlation-oriented research in terms of data type. Thus, to collect data, researcher-made

questionnaire consisting of 20 items with 20-item Likert (ranging from very low to very high) was used. **To examine the questionnaire's vali**dity, formal and content-based method was used. Thus, all of the items

were authenticated by experts and practitioners, were also confirmed and in terms of content using factor analysis. In addition, to examine the ratability of the questionnaire, Cronbach's alpha was used, and the total alpha coefficient was obtained to be 0.934. Thus, the questionnaire benefitted from required reliability.

The statistical population in the current research is composed of the official staff working in the branches of Kermanshah Bank-e-Mellat, and sampling method used in the current method is clustering sampling. As a complete list of the people in the studied population was not available, the researchers divided the population into four clusters in North, South and East and West, and then out of the branches, some were randomly selected, and the questionnaire was presented to the official staff in the banks. The sample size was calculated to be 152 persons using Cochran formula. Data analysis was performed using SPSS and AMOS software. First, using SPSS software, the data normality was examined, and given the normality of the data, Pearson correlation test (see Table 1) was used to determine the relationship between variables, and then using AMOS, the impact of the variables was measured.

4. ANALYSES AND RESULTS

Table1. Variable`s Correlations

Leadersh ip.styl	Org.entrepren eur.atmo	Org.inno vation	Cor.entrepre neurship	Knowled ge.m	Variables	
.839	.736	.603	.559	1	Pearson Correlatio n	Knowledge. m
.000	.000	.000	.000	.000	Sig	
.606	.558	.790	1	.559	Pearson Correlatio n	Cor.entrepr eneurship
.000	.000	.000		.000	sig	
.621	.619	1	.790	.603	Pearson Correlatio n	Org.innovat ion
.000	.000		.000	.000	sig	
.790	1	.619	.558	.736	Pearson Correlatio n	Org.entrepr eneur.atmo
.000		.000	.000	.000	sig	
1	.790	.621	.606	.839	Pearson Correlatio n	Leadership. styl
	.000	.000	.000	.000	Sig	

Source: Author

To examine the relationships among the variables and their impact, structural equation modeling was used. After determining the research variables based on the hypotheses, Amos software version 22 run. Table 2 shows the overall model codes in Figure 2 relevant to the structural equation modeling.

Table 2. Name the Codes Relevant to the Research's Overall Model

Variable	Code	Num
knowledge management	Knowledge.m	1
corporate entrepreneurship	Cor.entrepreneurship	2
organizational innovation	Org.innovation	3
organizational entrepreneur atmosphere	Org.entrepreneur.atmo	4
leadership styles	Leadership.styl	5

Source: Author
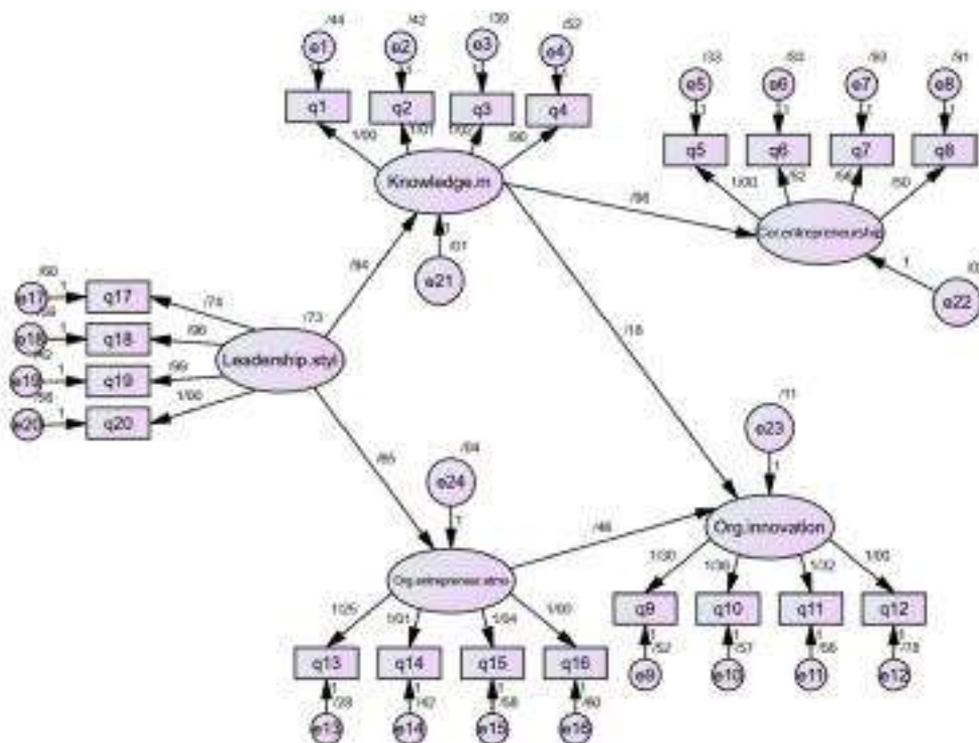
Figure 2: Structural Equation Model Relevant to the Research's Hypotheses

Table 3 shows the parameters **relevant to the model's fitness. The table indicates that the** structural equation model chi-square to degrees of freedom was obtained to be 3.108, and that the comparative indices are less than 90% and inappropriate. RMSEA index is higher than 0.05 and is inappropriate, then the model should be modified.

Table 3. The Observed Indicators Relevant to the Model's Fitness

RMSEA	AGFI	GFI	RFI	NFI	IFI	CFI	CMIN/DF	Model's Indicators
0.05>	0.9<	0.9<	0.9<	0.9<	0.9<	0.9<	3>	Considerable Extent
.118	.645	.721	.684	.726	.796	.793	3.108	Calculated Values

Source: Author

Given the inappropriateness of the observed indicat**ors relevant to the model's fitness**, the model should be modified to some extent. Thus, using Amos modification indicators, the model was modified. Figure 3 **shows the modified model of the research's hypotheses structural modeling, and Figure 3 shows the** coefficients of the relationships between the variables in the modified model.
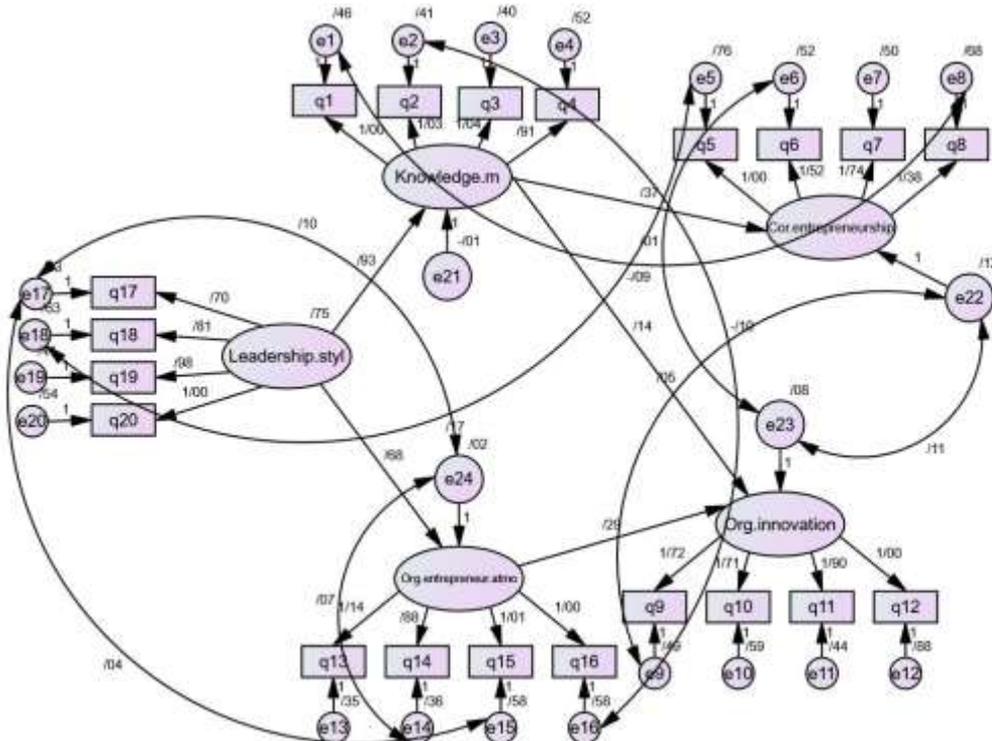
Figure 3: The modified model of the research's hypotheses structural modeling

Table 4. The coefficients of the relationships between the variables in the modified model

Estimate	p	Relationship	Num
.932	.000	Knowledge.m <--- Leadership.styl	1
.676	.000	Org.entrepreneur.atmo <--- Leadership.styl	2
.370	.000	Cor.entrepreneurship <--- Knowledge.m	3
.137	.034	Org.innovation <--- Knowledge.m	4
.292	.292	Org.innovation <--- Org.entrepreneur.atmo	5

Source: Author

Given the data obtained from Amos Software in Table 5, the model benefits from an acceptable fitness. Whatever the value of the indicators is closer to 1, the model would be more acceptable. As it can be seen, the values obtained in the fitness show the appropriateness of the model.

The current research sought to examine the impact of leadership styles on organizational entrepreneurship and innovation through knowledge management and entrepreneurial atmosphere at branches of Bank Mellat in Kermanshah, in the form of the research hypotheses. The first hypothesis analyzes the impact of leadership styles on knowledge management. Given the Model 1, there is a highly significant correlation

coefficient between the two variables at the confidence level 0.95. Furthermore, in the structural equation model, the extent of the impact of leadership styles on knowledge management was obtained to be 0.93. Thus, the research first hypothesis is confirmed. In other words, the leadership styles can explain knowledge management by the extent 93%.

Table 5: The indicators obtained relevant to the modified model fitness

RMSEA	AGFI	GFI	RFI	NFI	IFI	CFI	CMIN/DF	Model Indicators
0.05>	0.9<	0.9<	0.9<	0.9<	0.9<	0.9<	3>	Extent of Acceptability
.041	.936	.904	.941	.987	.959	.956	1.920	Calculated Values

Source: Author

The second hypothesis analyzes the impact of leadership styles on the atmosphere of organizational entrepreneur, which there is a highly significant correlation coefficient between the two variables at the confidence level 0.95. Furthermore, in the structural equation model, the extent of the impact of leadership styles on the atmosphere of organizational entrepreneur was obtained to be 0.68. Thus, the research second hypothesis is confirmed.

The third hypothesis analyzes the impact of knowledge management on corporate entrepreneurship, which there is a highly significant correlation coefficient between the two variables at the confidence level 0.95. Furthermore, in the structural equation model, the extent of the impact of knowledge management on corporate entrepreneurship was obtained to be 0.37. Thus, the research third hypothesis is confirmed. In other words, the knowledge management can explain organizational entrepreneurship to the extent 0.37.

The fourth hypothesis analyzes the impact of knowledge management on organizational innovation, which there is a highly significant correlation coefficient between the two variables at the confidence level 0.95. Furthermore, in the structural equation model, the load factor relevant to the two variables namely knowledge management and organizational innovation was obtained to be 0.14, which is indicative of the extent of knowledge management on organizational innovation. Thus, the research third hypothesis is confirmed. In other words, knowledge management can explain organizational innovation in this research to some extent.

The fifth hypothesis analyzes the impact of the atmosphere of organizational entrepreneur on organizational innovation, which there is a highly significant correlation coefficient between the two variables at the confidence level 0.95. Furthermore, in the structural equation model, the extent of the impact of entrepreneurial atmosphere on organizational innovation was obtained to be 0.29. Thus, the research fifth hypothesis is confirmed. In other words, the atmosphere of organizational entrepreneur can explain organizational innovation in this research to some extent.

The sixth hypothesis analyzes the impact of leadership styles through knowledge management on corporate entrepreneurship, which as there is a highly significant correlation coefficient and also an acceptable significance level, there is a positive and significant relationship between the variables. Furthermore, the results obtained from the structural equation model indicates that the variable namely leadership styles impacted knowledge management by 0.93, and extent of the impact of knowledge management on corporate entrepreneurship was obtained to be 37%. Thus, the extent of the impact of leadership styles through knowledge management on corporate entrepreneurship was obtained to be 0.93×0.37×=0.34. Thus, the research sixth hypothesis is confirmed.

The seventh hypothesis analyzes the impact of leadership styles through knowledge engagement on organizational innovation, which as there is a highly significant correlation coefficient and also an acceptable significance level, there is a positive and significant relationship between the variables. Furthermore, the results obtained from the structural equation model indicates that the variable namely leadership styles impacted knowledge management by 0.93, and extent of the impact of knowledge management on organizational entrepreneurship was obtained to be 14%. Thus, the extent of the impact

of leadership styles through knowledge management on organizational innovation was obtained to be 0.93×0.14=0.13. Thus, the research seventh hypothesis is confirmed.

The eight hypothesis analyzes the impact of leadership styles through the atmosphere of organizational entrepreneur on organizational innovation, which as there is a highly significant correlation coefficient and also an acceptable significance level, there is a positive and significant relationship between the variables. Furthermore, the results obtained from the structural equation model indicates that the variable namely leadership styles impacted organization entrepreneurship atmosphere by 0.68, and extent of the impact of the atmosphere of organizational entrepreneur on organizational innovation was obtained to be 0.29. Thus, the extent of the impact of leadership styles through the atmosphere of organizational entrepreneur on organizational innovation was obtained to be 0.68×0.29=0.20. Thus, the research eighth hypothesis is confirmed.

5. CONCLUSIONS

As new and complex contemporary conditions have led the organizations to encounter competitive and technological difficulties, and hindered the continuity of traditional methods, many managers have realized the necessity of innovation and entrepreneurship in their organization. Accordingly, this situation entices managers and researchers to examine and identify the factors leading to innovation and entrepreneurship in organizations. It is important to note that innovation, creativity and change do not occur easily, and even in most cases, it is a stressful experience for employees. Innovative behavior shown by staff significantly requires motivation and idealist morale and potential to take risks and also inspiration and encouragement.

In this regard, leadership plays a critical part, and leadership styles have been regarded as one of the most important factors affecting innovation and entrepreneurship. Today, competitiveness of organizations and industries is less dependent upon traditional factors (capital, land, labor), and knowledge management and the creation of atmosphere of entrepreneur have been largely supplanted traditional factors.

By creating a cooperative environment and based on trust and knowledge, organizational leaders can significantly contribute to the enhancement of knowledge management practices, and by encouraging and influencing the perception of staff, enable them be more motivated to create and share knowledge. In fact, through making staff informed of organizational objectives and missions, increase motivation and interest among the staff and the promotion of the idea that they must always think of collective interests rather than personal ones, leaders can contribute to the creation, dissemination and application of knowledge in the organization. This is because, knowledge sharing and generation requires the existence of an intimate atmosphere, close and open interactions and trust in the good will of staff and organization members and the presence of a motivating environment.

In today's chaotic and competitive world, the knowledge is extensively considered the major source of competitive advantage among the firms, and intellectual and knowledge capital are regarded as assets in any organization. On the other hand, the organization responsiveness to social needs and innovation is a function of professional quality of staff and managers. Thus, the quest for promotion of innovation can be accomplished through the acquisition, creation, storage, sharing and application of knowledge by individuals and groups. On the other hand, due to increasing evolutions in the present era and intense competition between organizations, appropriate response to the changing environment and also ability to develop new capabilities seems necessary. However, innovative and entrepreneurial behavior, especially at the group level cannot be easily accomplished, because each organization (group) is composed of different members with different expectations, features and capabilities. Thus, to develop innovation and corporate entrepreneurship, an entrepreneurial atmosphere should be created in the organization, and suitable conditions be provided within the organization. People involved in each organization should be united by a powerful factor and guided in a specified direction.

Accordingly, by prompting and increase motivation, intellectual stimulation and creation of vision, leaders **can empower employees, and also to raise staff's potential and readiness to encounter challenging and**

complex situations, and also provide an effective basis for long-term organizational changes that can provide access to higher goals for organizational system. Thus, one of the most effective factors in creating and fostering innovation and entrepreneurship among the staff is leadership by which leader can influence, excite, inspire, and persuade the staff internally, and also prompt their self-confidence and potential to effectively deal with innovative responses.

It should be noted that the creation, dissemination and application of knowledge and also creation of an entrepreneurial atmosphere in organization is a challenging act, and even there are a variety of obstacles ahead in some cases. As a result, the role played by organizational leaders is highly crucial, because it can contribute to the creation and dissemination of knowledge management and the atmosphere of organizational entrepreneur. Under this condition, by promoting, persuading, and inspiring the staff and also creating an environment built upon mutual trust and respect for ideas, the leaders can pave the way for creation, sharing, and proper and purposive application of knowledge management and the atmosphere of organizational entrepreneur to be able to create innovation and entrepreneurship in the organization. The results obtained from the current research are consistent with those carried out by Farzaneh et al. (2016), Nahid et al. (2013), Hayat et al. (2015), Birasnov et al. (2013), Delgado et al. (2011), Sobodova et al. (2011), Schippers et al. (2008), and Zhao Fang (2005).

REFERENCES

ADEGOKE, O., WALUMBWA, F.O. & MYERS, A. 2012. Innovation strategy, human resource policy, and firms' revenue growth: The roles of environmental uncertainty and innovation performance. A Journal of Decision Sciences Institute, 43(2):273-301.

Bass, B.M. (1985). Leadership and performance beyond expectations. New York: Free Press.

Belbaly, Nassim (2008). KMS Quality? Impact on Competitive Advantage. hicss, pp.356, Proceedings of the 41st Annual Hawaii International Conference on System Sciences (HICSS 2008),

Berthon, P., Hulbert, J.M. & Pitt, L.F. (1999). To Serve or Create? Strategic Orientations toward Customers and Innovation, California Management Review, 42 (1): 37-58.

Birasnav, M., Albufalasa, M., & Bader, Y. (2013). The role of transformational leadership and knowledge management processes on predicting product and process innovation: An empirical study developed in Kingdom of Bahrain. Review of Applied Management Studies, 11 (2): 64-75.

Burns, J. M. (1978). Leadership New York. NY: Harper and Row Publishers

Chang, S. C., & Lee, M. S. (2008). "The linkage between knowledge accumulation capability and organizational innovation", Journal of Knowledge Management, VOL. 12, NO. 1, PP. 3 – 20.

Covin J.G., And Slevin, D.P., 1991, A Conceptual Model of Entrepreneurship as Firm Behavior, Entrepreneurship Theory and Practice, 16, 7-25.

Covin, J.G., & Miles, M.P. (1999). Corporate entrepreneurship and the pursuit of competitive advantage, Entrepreneurship Theory and Practice,23(3), 47-63.

Delgado-Verde, M., Martı´n-de Castro ,G., and Navas-Lo´pez, J. E. (2011). Organizational knowledge assets and innovation capability. Journal of Intellectual Capital, 12 (1): 5-19.

DURÁN-VÁZQUEZ, R., LORENZO-VALDÉS, A. & MORENO-QUEZADA, G.E. 2012. Innovation and CSR impact on financial performance of selected companies in Mexico. Journal of Entrepreneurship, Management and Innovation, 8(3):5-20.

Fadaei, Gholamreaza. Hasanzadeh, Mohammad. Zarati, Mashaalah (2011). The concept of knowledge management systems. Journal of information and public libraries. 17. Number of 4.P.p.553-580.

Fang Zhao, (2005). "Exploring the synergy between entrepreneurship and innovation", International Journal of Entrepreneurial Behaviour & Research, Vol. 11, Iss: 1, pp. 25 – 41.

Farzaneh, Mohammad. RouhBakhsh, Hajar. BazrAfshan,Mojtaba (2016). Examine the mediating role of knowledge management in the relationship between transformational leadership and organizational innovation. Quarterly mission of public administration, 7th , No. 23, 67-51.

Gençer, Mehmet Salih. Samur, Yavuz(2016). Leadership Styles and Technology: Leadership Competency Level of Educational Leaders. Social and Behavioral Sciences 229 . 226 – 233.

Goldsmith R.E. & Hofacker C.F. (1991). Measuring consumer innovativeness, Journal of Academy of Marketing Science, 19 (3), 209-221.

Golmoradi, Roya. Sattari Ardabilia, Farzad(2016). The effects of Social Capital and Leadership Styles on Organizational Learning. Social and Behavioral Sciences 230 .372 – 378.

GRANT, R. 2012. Contemporary strategy analysis: Text and cases. Malden, MA: Blackwell.

GUNDAY, G., ULUSOY, G., KILIC, K. & ALPKAN, L. 2011. Effects of innovation types on firm performance. International Journal of Production, 133(2):662-676.

Guth, W.D., And Ginsberg, A., 1990, Guest Editor's Introduction, Corporate Entrepreneurship, Strategic Management Journal, 11, 5-15.

Hayat, A., Hasanvand, M. M., Nikakhlag, S., & Dehghani, M. R. (2015). The role of leadership styles in knowledge management processes. Journal of Health Management and Informatics, 2 (2), 41-46.

Hayton, J.C. (2005). Promoting corporate entrepreneurship through human resource management practices: A review of empirical research. Human Resource Management Review, 15, 21-41.

Hornsby, J.S., D.F. Kuratko, and R.V. Montagno(1999). Perception of internal factors for corporate entrepreneurship: A comparison of Canadian and U.S. managers. Entrepreneurship Theory and Practice. 24(2).

Intrapreneurship: Differences Between Public and Private Sector in Turkey, 4th International Conference on Leadership, Technology, Innovation and Business Management. Yildiz Technical University, Istanbul, 457-465.

Jiménez - Jiménez, D., & Valle, R.S. (2011), Innovation, organizational learning, & performance, Journal of Business Research, Vol. 64, No.4, pp. 408-417.

Kuratko, D.F., Montagno, R.V., Hornsby, J.S., 1990, Developing, an Entrepreneurial Assessment Instrument for an Effective Corporate Entrepreneurial Environment, Strategic Management Journal, 11, 49-58.

Kuratko, D. F., Hornsby, J. S., & Hayton, J. (2015). Corporate entrepreneurship: the innovative challenge for a new global economic reality. Small Business Economics, 1-9.

Li, Y., Y., Zhao, and Y. Liu, (2006). The relationship between HRM, technology innovation and performance in China. International Journal of Manpower.27(7). PP. 679–697.

Lumpkin, G.T. And Dess G.G., 1996, Clarifying the Entrepreneurial Orientation Construct and Linking it to Performance, Academy of Management Review, 21, 135-172.

Maier, R. (2005). Modeling knowledge work for the design of knowledge infrastructures. Journal of Universal Computer Science, 11, 429-451.

Morris, M.H., Kuratko, D.F., Covin, J.G. (2011). Corporate Entrepreneurship & Innovation, Entrepreneurial Development within Organizations. Mason: Thomson South-Western.

Mozdarani, Kamran (1999). Examine the relationship between organizational atmosphere and conflict of Damavand`s teachers. graduate thesis, Ferdowsi University of Mashhad.

Nahid, Mojtaba. Zali, Mohammadreza. Hosseinzadeh, Majid. Sajedniya, firozeh (2013). The effect of corporate entrepreneurship atmosphere on innovation (case study: Islamic Culture and Thought Research Center). Development of entrepreneurship, 6th, third number, 66-47.

Newstorm, J.W. & Keith, D. (1993). Organizational Behavior, New York: McGraw-Hill Inc.

Nonaka, I. & Takeuchi, H. (1995). The Knowledge Creating Company: How Japanese Companies Create the Dynamics of Innovation, NewYork: Oxford University Press.

Peters, T. & Waterman, R. (1982). In search of excellence. NYC: Harper& Row.

Robbins, Stefan (2001). organizational behavior. translator Ali Parsaeyan and Seyd Mohammad Arabi. Tehran: Cultural Research Bureau. 13th Edition.

Sathe, V., 1989, Fostering Entrepreneurship in the Large, Diversified Firm, Organizational Dynamics, 18 (1) , 20-32.

Scheepers, M.J, Hough, J, Bloom, J.Z. 2008. Nurturing the corporate entrepreneurship capability. South African Business Review, 12(3): 50-75.

Shih, H.A. & Chiang, Y.H. (2005). Strategy alignment between HRM, KM and corporate development. International Journal of Manpower, 26 (6), 582-603.

Svobodova, A. & koudelkova, P. (2011), collective intelligence and knowledge management as a tool for innovations, economics and management, 16: 942-946.

Tantaua, Adrian. Chiniea, Alexandra. Carleab, Filip (2015). Corporate Entrepreneurship and Innovation in the Renewable Energy Field. Procedia Economics and Finance 22.353 – 362.

Uslu, T. Erygit,N & Çubuk, D. (2014). Individual and Organizational Effects of the Corporate Practices with the Mediating Role of Lean

Wang, C.L. & Ahmed, P.K. (2004). The development and validation of the organizational innovativeness construct using confirmatory factor analysis, European Journal of Innovation Management, 7(4), 303-313.

Wee-Liang, T., and T. Teck-Meng (2002). The Antecedents of Value Creation in Singapore Corporations. Singapore Management University.

THE EFFECT OF BOARD OF DIRECTORS STRUCTURE ON MANAGERIAL ABILITY (SOME EVIDENCE FROM IRAN)

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Abstract

Structure of boards refers to one of the effective factors in managerial ability; in this research effect of structure of boards on three factors including non-executive members, CEO Tenure and Management Ownership is measured. This research intends to examine structure of boards on managerial ability in companies listed in Tehran stock exchange. In this research, firstly, company's performance using data envelopment analysis is measured and then the managerial ability using the model proposed by Demerjian et al on 119 companies during 2009-2014 is calculated. To calculate managerial ability and study structure of boards, combined data regression and software Eviews9 had been used. Results indicate that management ownership puts a positive significant effect on managerial ability, indicated that the managerial ability will increase by increasing the management ownership and the managerial ability will reduce by increasing number of non-executive members. Findings indicate that there is a significant positive relationship between ratio of non-executive members and managerial ability and there is not a significant relationship between CEO tenure and managerial ability.

1. INTRODUCTION

Stock Exchange is considered a place to mobilize savings and conduct it towards productive and useful investment (Barr, et al1997). Thus, the study on subjects associated to this organization is of great importance. Measuring the managerial ability is the core of many important research questions such as: review the company's performance, investment decisions, executive compensation, corporate governance, and the economic impacts on the company's ownership and productivity differences on mutual economy. Findings of these studies indicate that special components of CEO including ability, talent, reputation and managerial practice play a major role in economy, finance and management. (Andreou, et al, 2013). Management refers to the process of effective use of human resources and material facilities to achieve organizational goals. This process comes to realize by means of managers' major tasks, i.e. planning, organizing, leadership and control regarding the value system governing the organization; the efficient CEO have the ability for better use of the existing resources in the research process of organizational goals. In other words, efficient CEO is called to a person who enables to make the most benefit at organization using the least facilities (Brett Cantrell, 2012). Management process to the effective deployment of human resources and material resources to achieve organizational goals. In other words, an effective manager is one who can with minimum effort, maximum benefit to his organization (Hendrickson and Van Breda, 1992). The main cause of the lack of supervision over the management of the condition known scandals. Due to a change in the role of the board, shareholders are looking strong as the board that can properly monitor the performance of their managers. The board of management has been closely so that in fact a strategic partner to manage accordingly. The partnership board management, strategic planning, risk management and performance, make better decisions and drove us up to now brought this transaction induce surveillance more convenient has been the extreme case monitoring by

shareholders had been destroyed (Abor, J. 2002). In most countries, such thinking, beliefs and behavior of managers that collectively placed on governance and its relationship with the management board agree. Managers and board members believe that board members should, in matters relating to the company as managing partners act in fact, they should be more powerful, with greater confidence, involvement, more knowledge and more salient role in the program strategic planning, as the primary source of advice and raised his discerning and work. Most managers, the board when at the peak of ability and impressive finds from senior executives as a strategic asset for the CEO to be seen (Bichara, 2008). The board on behalf of the shareholders, monitoring and control are doing. The most important function of the board deciding and evaluating the CEO is qualified and competent and ethically approved by the members. The senior management team appointed by the Board and is approved. Managers set of experiences, knowledge and judgment to bring your company, so you should only consider the specific interests of shareholders in corporate governance (Abdelsalam et al 2008).

The board should ask questions and the answers about how managers project the company managed to get so that in addition to reports that the board offered suggestions and decision-making managers are aware of. as well as board and committee whenever they need to know they can get help from independent consultants. Board members with responsibility for having their supervisory role to shareholders and other company founders of the possibility that the company managers expect diligent and with power on the current activities and supervise the company. But they should not expect board members to do exactly the same as managing director of the team and senior managers do the level of governance and management of the company's business, small and rubbish into account (Vafeas, N. 2000).

CEOs refer to the agents who are assigned to gain maximum welfare by the owners of economic enterprises to manage their resources, which this relationship between owners and agents is called the agency relationship. In other words, agency relationship refers to a contract by which various groups and individuals select a person or group as their agent and assign him with providing a series of certain services. In line with making the agency tasks, managers should adhere to how to use economic resources under their control against owners. Efficiency and development of each organization largely depend on proper use of manpower; CEOs at organizations refer to the owners of power and performance of organizations associate to their power. CEOs by using resources can pave the way for excellence or deviation at organization, which this depends on existential nature and how to use their benefits and power (Silva, A. C.2010). By examining the conditions, the main cause has been recognized as the lack of monitoring of management. With regard to the change in process of role of boards, shareholders seek empowering the boards in a way to have a proper monitoring on CEOs' performance. Board has approached to CEO in a way that it has appeared with the strategic partner of CEO. The partnership between board and CEO has led to strategic planning, risk management, better decision making and higher efficiency for the company and this mutual interaction has caused easier monitoring. In most of countries CEOs' thinking, beliefs and behavior indicated that they agreed on board governance and its relationship with CEO. CEOs and board members believe that board members should more likely engage in affairs related to company as the CEO partners; indeed, they have engage in strategic planning with more self-confidence and salient role as the primary source of counseling (Leverty and Grace, 2012). A majority of CEOs witnesses the board at the climax of ability and influence when the senior executive directors witness them as a strategic asset to CEO. At management area, senior managers almost had control on goals, strategies, planning and governing organization; they had total governance by taking board seats and played role of leadership by lack of board's involvement. CEOs developed their professional relationship with board and founded a new collaboration. They sought new strategic data and gained better

information. CEOs and board accept more responsibility in access to the results and cooperate with each other to achieve organizational goals. **In recent years, the board has drawn attention to the shareholders'** demands. The more ability and understanding of the board and CEOs from domestic and foreign conditions and their high estimation power on accruals. Competent CEOs make high quality estimations to detect profitability projects by their power of understanding and improve operating cash flow with investing in them (Hajiha, Z. and Gilavi, M,2012). Managerial ability affects cash and accrual part of earnings, which lead to earnings stability; more competent CEOs by better understanding of risk might

select better projects and manage the company's operations more efficiently; the better managerial ability, the performance of com**pany will be better and CEO's ability will have a direct relationship with company's performance (Demerjian,** et al 2008). CEO who has more managerial ability regardless of company size will be more effective in prediction of company mechanisms, negotiation with customers and suppliers of products. CEO always intends to bring about the best performance for the company by selecting the suitable strategy; **selection of a suitable strategy largely depends on CEO's abilities in** analysis of the existing space and selection of suitable methods for company governance.

2. GOALS OF RESEARCH

Since structure of board is one of the effective elements in corporate governance in addition to shareholders and CEO with a major role in performance of company, whether the structure of board causes increase in managerial ability in organizations? The main purpose of this research is to examine the structure of board which examines the factors including Composition of the Board of Directors, non-executive members, CEO Tenure and Management Ownership. Since increase in managerial ability causes improvement in proper performance of company, this causes reduction in lack of investment, profitability and improvement in borrowing and reduction in information asymmetry. it is expected that the results from this research have the scientific achievement as follow: results from this research can extend theoretical background of related works on non-executive members; evidence on this research will indicate to which extent evaluation of CEO tenure as a goal of structure of board is true; this issue as a scientific achievement can provide beneficial information for financial decision makers at capital market;

results from research can suggest new ideas to conduct new research on accounting; ultimately this **research intends to give response to the major research question "whether structure of board affects managerial ability or not".**

3. LITERATURE REVIEW

Demerjian et al (2013) in a research examined effect of the managerial ability on four qualitative characteristics of profit including diversity of restated financial statements, earnings persistence, quality of accruals and estimated error rate in bad debts and concluded that there is a positive relationship between extent of managerial ability and each of four above characteristics.

Andreou et al (2013) used the model of Demerjian et al (2012) to measure managerial ability and examined the relationship between managerial ability and company performance during the world crisis during 2008. Results indicate that there is a positive relationship between managerial ability and company performance and CEOs that are more competent have managed the resources of company, debts and capital expenditure in a more efficient way than the CEOs with lower ability.

Demerjian et al (2012) examined the relationship between managerial ability and earnings quality and concluded that there is a positive relationship between managerial ability and earnings quality. Particularly, they proposed a measure of managerial ability, based on managers' efficiency in generating revenues, which is available for a large sample of firms and outperforms existing ability measures. They found that our measure is strongly associated with manager fixed effects and that the stock price reactions to chief executive officer (CEO) turnovers are positive (negative) when we assess the outgoing CEO as low (high) ability. They also found that replacing CEOs with more (less) able CEOs is associated with improvements (declines) in subsequent firm performance. They concluded with a demonstration of the potential of the measure. They found that the negative relation between equity financing and future abnormal returns documented in prior research is mitigated by managerial ability. Specifically, managers that are abler appear to utilize equity issuance proceeds more effectively, illustrating that our more precise measure of managerial ability will allow researchers to pursue studies that were previously difficult to conduct.

McVeigh & Leeves (2012) examined how managerial ability affects the Intentional distortions of financial statements. They perceived that the managers with higher ability more likely use the commitment profits; further, they have perceived that negative outcomes of the earnings management reduce among managers **with greater ability; more specifically, they found the evidences on competent managers' more successful** management of earnings.

Baik et al (2012) examined an unresolved issue in the literature on the relation between managerial ability **and earnings quality. We also examine whether the strength of a country's investor protection system** impacts this relation. Using multiple measures of earnings quality and managerial ability, we report that earnings quality is negatively associated with managerial ability. We also find that a strong system of investor protection mitigates this negative relation. Overall, our study adds to the literature on the impact of managerial characteristics on financial reporting decisions.

Chou & Ota **(2012) in a research examined whether CEOs' ability provide beneficial information on company's future profits to the capital market?** The results indicate that the return on stock in companies with competent managers than companies with poor managers reflect further future profits. Further they **have shown that the CEO's ability puts a positive effect on analysts' remarks on company and persuades** the investors to invest in company.

DeJong and Ling (2009) examine manager effects on accruals through both investment and accounting choices. As previously noted, this approach allows researchers to document a manager-specific effect, but it is constrained to managers who switch employers among the sample firms.

Francis et al (2008) examine the relation between earnings quality and CEO reputation, measured by the number of business press articles mentioning each CEO. The authors conduct their analysis for a sample of about 2,000 firm-year observations from the S&P 500 over 1992 –2001 and find a negative relation between CEO reputation and earnings quality. **They conclude that "boards of directors hire specific** managers due to the reputation and expertise these individuals bring to managing the more complex and volatile operating **environments of these firms."** In other words, they suggest that the volatile operating environments or other innate characteristics of the firm are causing the lower earnings quality, not managerial actions.

Frank Yu (2008) examines the relationship between corporate governance and earnings management of the corporate governance variables separated into two categories: internal and external. Internal factors include the concentration of ownership and board structure and external variables, including institutional ownership. The results of his study showed that companies with strong domestic factors than external variable stronger now that they have more to earnings management.

Aier et al (2005) examine 456 firm-year observations over 1997–2002 and document an association between CFO expertise (e.g., years worked as CFO, experience at another company, advanced degrees and professional certifications) and restatements; they find that firms with CFOs with greater expertise experience fewer restatements.

Chemmanura & Paeglis (2005), showed that companies that administrators quality run in the initial public offering, forced to sell their shares at a price lower than the market price not as well as institutional investors authentic, interested in buying shares that leads them to reduce the cost of underwriting the stock.

Fee and Hadlock (2003), to evaluate the ability of management to measure stock returns are examined to assess the return on equity in the past because one of the criteria for assessing the ability of management. They concluded that firms with high efficiency have capable managers.

Davidson and DaDalt (2003) in an article called "earnings management" corporate governance "The role of the board of directors and audit committee" to examine the role of the Board of Directors, Audit Committee and the Executive Committee for the Prevention of earnings management paid. The results of their study showed that the composition of the Board of Directors and Audit Committee is encouraged by the possibility that a company's earnings management is related. The members of the Audit Committee

and the Board of Directors have corporate and financial knowledge with optional current accruals, less relevant.

Koh (2003) to examine the relationship between the institutional ownership and management of revenue in Australian companies and research results showed that the reduction of institutional ownership has led to an increase in the management of the profits and increase the ownership of institutional led to a decline in interest management.

Barr and Siems (1997), in the insurance and banking industry, worried about possible insurer found that the ability to manage and reduce the time taken for concern. In this study they used data analysis are covered. To determine the company's performance in accordance with industry specific inputs and outputs in terms of capable managers who effectively use the inputs in the production process.

4. RESEARCH METHOD

The present research is an applied study in sake of type and nature and a prospective study, which examines the hypotheses, based on the last financial data. In this research, underlying information includes data of audited financial statements and information on Composition of the Board of Directors, non-executive members, CEO Tenure and Management Ownership, which will be extracted and calculated with referral to the database, and the research models will be estimated based on it to provide the basis for hypotheses testing. The statistical population consists of the companies listed in Tehran stock exchange. The research time scope has been determined by considering the information close to the research and availability of associated information has been determined during a period of 5 years since the early 2009 until the end of 2014.

Statistical population and sample group

The statistical population consists of the companies listed in stock exchange during 2009-2014. The research sample consists of the companies, which has been selected among the statistical population based on the conditions and features below:

-they should be active in stock exchange during 2009-2014

-in terms of increase in comparability, their financial period ends in the last day of last month of the year

-they should not be among banks and financial institutions (Investment companies, financial intermediaries, holding companies, banks and leasing).

-the companies which their information is available

-they should not have change in financial year or activity during the years under study

Data analysis instruments

Descriptive and inferential statistics will be used to analyze the research data. To explain the collected data, descriptive statistics (Mean, Median, quartiles, variance) are used; to analyze the hypotheses testing, inferential statistics (multivariate regression analysis, t-test and f-test) are used. Further, software Excel and Eviews9 will be used to analyze data and extract results of research.

The research model

In this research, the model below is used:

$$MA_{i,t} = B_0 + B_1\, Nonduty_{i,t} + B_1\, MPP_{i,t} + B_1\, MO_{i,t} + B_2\, Size_{i,t} + B_3\, Pvat_{i,t} + B_4\, Instock\ holder_{i,t} + B_5\, Lev_{i,t} + B_6\, Age_{i,t} + \varepsilon_{i,t}$$

The number of non-executive members divided by the total number of board: Nonduty

CEO's tenure as the number of years that CEO has involved in a company: MPP

Percent of ownership of board members to the company: MO

The natural logarithm of total assets per company per year: Size

Leverage ratio of total debt to total assets per company per year: Lev

Percent Of institutional shareholders in any company: In stockholder

History of acceptance in stock (difference between T year and the accepted years in stock): ANTIC

Book value to market value: B/M

Study on normality of variables

Before calculating the regression coefficients and regression model fit, normality of variables should be examined; if the mean of errors approaches to 0 and standard deviation equals to 1, this will be normal (Brooks, 2008).

The first stage: 1) data matrix -F Limer test

To examine use of panel data method with fixed effects against integrated data method, F Limer test is used. If the calculated p-value falls greater than 5%, null hypothesis is not rejected and the panel data method should be used, otherwise panel data method will be used (Brooks, 2008).

Regression model specification - Hausman test

Hausman test is used to determine use of panel data model with fixed effects against panel data model with random effects. if the calculated p-value falls greater than error level (5%), null hypothesis based on acceptance of random effects cannot be rejected, thus random effects method is used, otherwise fixed effects method is used(Brooks,2008).

Second stage: the variance consistency Test-White test

One of the assumptions in fixed regression equation is the error variance, which is recognized as the consistency assumption of variances; if the errors have not the fixed variance, it is called that there is variance inconsistency. White test is useful due to limited assumptions among other tests (Brooks, 2008).

The third stage: collinearity Test

A variety of criteria has been presented to detect collinearity, which the most important ones include:

1. Eigen value: Eigen value close to zero indicate that there is high internal correlation in the predictions and small changes in data values lead to great changes in estimation of regression equation coefficients.

2. Condition Index: Condition indices with value greater than 15 indicate collinearity between independent variables and value greater than 30 indicates serious problem in use of regression in existing status.

3. Tolerance test: for each independent tolerance variable, a ratio of dispersion of that variable is not justified by the linear relationship of that variable with other existing variables in the model. Since tolerance is a ratio, its value changes between 0 to 1.

4. The value close to one indicates that a small part of the dispersion of that variable is justified by other independent variables in an independent variable, i.e. there is not collinearity. The value close to zero indicates that a variable is a linear composition of other independent variables.

5. Variance Inflation Factor (VIF): this evaluates the severity of multicollinearity in typical regression analysis. If VIF statistics were close to one, this indicates lack of collinearity. The

more this value falls above two, collinearity increases. Thus, the more variance inflation factor goes beyond for an independent variable, it is concluded that the variable has not a large contribution in model than other variables.

The fourth stage: correlation

Correlation refers to a type of statistical analysis, which is largely used for estimation and prediction; regression and correlation analysis is used to determine the extent to which the relationship exists between variables and the extent to which independent variable affects dependent variable (Adel, A. 2004).

Lack of autocorrelation error test - Durbin – Watson test

To examine independent of errors from each other, Durbin – Watson test is used; if this value ranges between 1.5-2.5, this indicates lack of error autocorrelation. To judge on existence or lack of serial correlation, Durbin-Watson statistics compared to the table related to it can be used.

If	Decision making
< d < du	Evidence on positive autocorrelation
d ≤ d ≤ du	Lack of decision making
٤-d < d < ٤	Evidence on negative autocorrelation
٤-du ≤ d ≤ ٤-	Lack of decision making
du < d < ٤-d	Lack of positive or negative autocorrelation

The fifth stage: test the relationship between variables

Correlation coefficient test

Correlation coefficient displays the severity of relationship and type of relationship (direct or inverse) and represents the second root of the determination coefficient. Thus, correlation coefficient can be positive or negative ranging between one and one. Correlation coefficient represents a mathematical index, which describes the direction and value of relationship between two variables. Correlation coefficient is used on distribution of two or several variables. If values of two variables similar to each other change, i.e. their relationship can be stated as an equation, it can say that there is a correlation between these two variables. Correlation coefficient test is one of the tests used in this research (Adel, A. 2004).

R^2 Determination coefficient and R^2 Adj adjusted determination coefficient

In addition to significance test on the special estimation parameters, it can test explanation power of the

regression. This test is made by calculating the determination coefficient and displayed with R^2. If the samples increase, is used.

The sixth stage: significance test of F-regression equation

Null hypothesis in this test indicates significance of regression model and alternative hypothesis indicates significance of regression model. The test is made in a way that the calculated f-statistics becomes greater than the value in table, null hypothesis is rejected and it is concluded that the considered regression model is significant, i.e. the regression model will be significant at error level (5%) and confidence level (95%).

The seventh stage: significance test of independent variable Coefficient-T

After testing significance of regression, significance of each of the coefficients should be tested. This test is targeted in specifying whether the independent variables are significant or not at considered confidence level (95%).

Results from research hypotheses testing

Before presenting the main research model and hypotheses related to it, firstly the results related to the efficiency model of the company have been presented in table 1.

Table 1. Results from research model estimation

Variable		Symbol	Coefficient	Standard deviation	t-Value	Prob
Company size		SIZE	0.003	0.004	0.792	0.429
Foreign investment		FOREIGN	0.003	0.001	2.103	0.036
Company share		MS	0.012	0.004	3.062	0.002
Acceptance years at company		T	-0.001	0.000	-3.954	0.000
Operating profit		FCF	0.002	0.001	1.597	0.111
Width of origin		C	0.646	0.021	31.093	0.000
Determination coefficient	Adjusted determination coefficient		Durbin-Watson		F-value	f-value
0.996	0.995		1.732		1100.141	0.000

Source: research findings

In table 1, f value has equaled to 0.0000 and since this value is under 0.05, null hypothesis is rejected at confidence level (95%), i.e. the model is significant. value of Durbin-Watson equals to 1.732 which this value displays lack of autocorrelation. results related to R^2 determination coefficient indicate that almost 99% of the changes in dependent variable are explained via independent and control variables of model. adjusted R^2 is at 99% which indicates high explanation of independent variables on dependent variable. after estimating the efficiency model of company, the error term of this model has been considered as the managerial ability and the main research model is made to test hypotheses.

Research hypotheses are as follows:

1-Ratio of non-executive members of the sample companies puts a positive significant effect on managerial ability

2-**CEO's tenure of the sample companies puts a positive significant effect on managerial ability**

3-Management ownership of sample companies puts a positive significant effect on managerial ability

To test this hypothesis, the results from estimation of the presented model in table 2 have been used. f value equals to 0.000 and since this value is under 0.05, null hypothesis is rejected at confidence level (95%), i.e. the model is significant. value of Durbin-Watson statistics equals to 2.277 which this value indicates lack of autocorrelation. the results related to determination coefficient and adjusted determination coefficient indicate that almost 99% of changes in dependent variable are explained via independent and control variables of model. with regard to t-values at confidence level (95%), it can observe that most of the variables of model have become significant. further, the results indicate that the management ownership has a positive significant effect on managerial ability. this significance is confirmed at confidence level (5%). positive effect of this variable indicates that the managerial ability will increase by increasing the management ownership. thus, it can accept the third research hypothesis under positive effect of management ownership of sample companies on managerial ability. With regard to the coefficient of number of non-executive members, it can perceive a significant relationship at confidence level (95%). negative effect of this variable indicates that the managerial ability will reduce by increasing the number of non-executive members. in this regards, with regard to significance of this variable and its negative influence, it can reject the first research hypothesis, i.e. there is not a positive significant relationship between number of non-executive members and managerial ability. Results indicate that CEO Tenure has not become significant at confidence level (95%). indeed, however, CEO Tenure has a positive influence on managerial ability, this influence is not significant. with regard to the

coefficient of CEO Tenure and its insignificance at confidence level (95%), the second research hypothesis is rejected, i.e. there is not a significant relationship between CEO tenure and managerial ability. the company size has become significant at confidence level (10%), i.e. if the company size increases, the managerial ability decreases. further, negative and significant coefficient of the institutional shareholders indicate that the managerial ability will reduce by increasing the percent of institutional shareholders. effect of number of acceptance years in exchange has been positive and significant on managerial ability. this variable indicates that the managerial ability increases by increasing number of acceptance years of company at stock exchange. indeed, the managerial ability increases by stable position of companies at stock exchange after various years.

Table 3. Results from estimation of model for managerial ability

Variables	Symbol	Coefficient	Standard deviation	t-value	Prob
Management ownership	MO	0.992	0.002	399.388	0.000
Non-executive members	NonDuty	-0.004	0.002	-2.206	0.028
CEO Tenure	MPP	0.000	0.000	0.599	0.550
Company size	SIZE	-0.005	0.001	-4.388	0.000
Leverage degree	LEV	-0.0001	0.001	-0.273	0.785
Institutional shareholders	STOCK HOLDER	-0.004	0.002	-2.348	0.019
Acceptance history in stock exchange	T	0.001	0.000	9.594	0.000
Book value of share to market value	BM	0.000	0.000	0.867	0.387
Width of origin	C	-0.638	0.006	-102.339	0.000
Determination coefficient	Adjusted Determination coefficient	Durbin-Watson		F-value	f-value prob
0.997	0.997	2.277		1796.514	0.000

Source: research findings

Summary of results from hypotheses testing has been displayed in table 4.

Table 4. Summary of results from hypotheses testing

Hypothesis	Title	Type of influence	Significance/insignificance	Acceptance/lack of acceptance
The first	ratio of non-executive members of the sample companies puts a positive significant effect on managerial ability	Negative	Significant	Lack of acceptance
The second	**CEO's tenure of the** sample companies puts a positive significant effect on managerial ability	Positive	insignificant	Lack of acceptance
The third	management	Positive	significant	Acceptance

Hypothesis	Title	Type of influence	Significance/insignificance	Acceptance/lack of acceptance
	ownership of sample companies puts a positive significant effect on managerial ability			

5. CONCLUSIONS

In today's turbulent world where the organizations and communities have faced great changes in environment and technology as well as the global trade and the globalization, the power to access the desired level of performance is immersed in doubt; in this regards, powerful and efficient management capabilities refer to what can guarantee the existence of thriving and growing lifetime of organization. In other words, under authority and capability, management is the main element, which can expect the proper performance of organizations under current conditions. Structure of board of directors refers to one of the factors affecting managerial ability, which in this research structure of board of directors on three factors of Composition of the Board of Directors, non-executive members, CEO Tenure and Management Ownership has been measured. With regard to theory of agency, presence of Non-executive members and their monitoring performance cause reducing the conflict of interest among shareholders and managers at companies. Non-executive members have a major role in resolving the problem of agency between owners and managers. In this regards, some studies have concluded that the boards with presence of outside **members have more likely taken step in favor of shareholders' benefits and avoid poor performance of** board members. Further, it has been specified that the companies with boards with majority of outside members less likely involve in accounting frauds. However, some studies such as Hermalin and colleagues failed to report a significant relationship between non-executive members and company performance. The reasons for influence of executive managers on non- executive managers include lack of sufficient **knowledge and expertise to evaluate managers' decisions, lack of motivation in challenging these** decisions. CEO tenure refers to the number of years that the CEO has involved in a company; one of the **conflicts of interests between managers and beneficiaries of company is that the managers'** decision-making **horizon for company is shorter than the shareholders' investment horizon. Managers' claim to** company is just limited to their tenure period and this has caused reducing efficiency at managerial ability, **shareholders' benefits and company value.**

Management ownership: it indicates percent of board **member's** ownership; if managers be shareholders of their company, their motivation for monitoring increases, because under the more ownership, they try more for increasing efficiency, performance and value of company and conflict of interests between shareholders and agency problems reduce. It should be noted that studies have not been conducted on structure of board on managerial ability, aimed to examine the relationship between structure of boards and managerial ability. In this study, an emphasis has been put on structure of boards as the independent variable on managerial ability as dependent variable. This research intends to examine effect of structure of boards on managerial ability in companies listed in Tehran stock exchange. Thus, this research is an applied study since its results can be used in formulation of the rules and regulations of the stock exchange. Further, since this research intends to find a relationship between several variables, it is a correlation conducted via prospective method. To prepare the theoretical background and literature review, associated books, articles and theses as well as the websites containing the articles related to the variables under study have been used. In this section, the financial statements of companies and their notes have been used to collect data and information for analysis, under which access to information has paved the way via website of Stock exchange organization and software Excel has been used to calculate variables and process them. Multivariate regression model has been used to test the research hypotheses. In this method, a multivariate regression equation is calculated which summarizes the measured prediction values in a formula. The equation coefficients for each variable are calculated and specified based on its

significance in prediction of criterion variable. Correlation degree between predictive variables in multivariate regression equation is displayed via coefficient.

REFERENCES

Abdelsalam, O; EL-Masry, A, and Elsegini, S. (2008). Board Composition, Ownership structure and dividend policies in an emerging Market. Journal of Managerial Finance. Vol. 34, No. 12, pp. 953-964.

Abor, J. (2002). Corporate Governance and Financing Decisions of Ghanaian Listed Firms, Corporate Governance: International Journal of Business in Society, 2.

Andreou, P., Ehrlich, D., and Louca, C. (2013). Managerial ability and firm Performance: Evidence from the global financial crisis. Working paper. http://www.mfsociety.org

Baik, B., Choi,S., Farber, D. and Zhang, J., (2012). "Managerial Ability and Earning Quality: An International Analysis". Working Paper, Seoul National University, Presented Singapore Management University, PP 1-43.

Barr, R.; & T. Siems. **(1997)." Bank Failure Prediction Using DEA to Measure Management Quality." Interfaces in Computer Science and Operations Research, Vol.7: pp.341**–366.

Bichara, L. (2008). Institutional Ownership and Dividend Policy: A Framework based on tax clientele, information signals and Agency costs. Ph. D Dissertation. University of North Texas.

B Xie, WN Davidson, PJ DaDalt (2003) Earnings management and corporate governance: the role of the board and the audit committee - Journal of corporate finance, 2003.

Chemmanur, T. and I. Paeglis (2005). "Management Quality, Certification, and Initial Public Offerings". Journal of Financial Economics, Vol .76, pp. 331-368.

Charnes, A.; Cooper, W. and Rhodes, E. (1978), Measuring the Efficiency of Decision-Making Units; European Journal of Operational Research Vol. 2, pp. 429-444.

Dechow, P., and Dichev, I. (2002). The quality of accruals and earnings: The role of accrual estimation errors. The Accounting Review 77 (4): pp 35–59.

Demerjian, P., Lewis, M., Lev, B. and Mc Vay, S., 2010. "Managerial Ability and Earning Quality". Working Paper, Emory University, PP 1-33.

Demerjian, P., Lewis, M., Lev, B. and Mc Vay, S., 2012. "Managerial Ability and Earning Quality". Working Paper, Emory University, PP 1-50.

Demerjian, P., Lev, B. and Mc Vay, S., 2012. "Quantifying Management Ability: A New Measure and Validity Tests". Management Science, Vol 58, No 7, PP 1229-1248.

Demerjian, P., Lev, B. Lewis, M. and MacVay, S. (2013). Managerial ability and earnings quality. The Accounting Review, 88 (2): 463-498.

Fee, C., and C. Hadlock. (2003)." Raids, rewards, and reputations in the market for managerial talent", Review of Financial Studies 16 (4): 1315–1357.

Francis, J., Huang, A., Rajgopal, S. and Zang, A. (2008). CEO reputation and Earnings quality. Contemporary Accounting Research, 25 (1): 109–147.

Frank Yu. (2006). "Corporate Governance and Earnings Management", working paper.

Hajiha, Z. and Gilavi, M., (2012). " The Effect of Management Ability on Earning Persistence in Production Companies Listed in Tehran Stock Exchange". European Journal of Economics, Finance and Administrative Sciences, PP 88-99.

Hendrickson. Eldon. S –Michael. F. van breda. (1992). Accounting Theory, 5. Aufl., Homewood/Boston 1992 (Accounting).

Koh, P. S. (2003). "On the Association between Institutional Ownership and Aggressive Corporate Earnings Management in Australia", The British Accounting Review, vol. 35, pp. 105–128.

Leverty, T.; & M.Grace (2012). "Dupes or Incompetents? An Examination of Management's Impact on Firm Distress." The Journal of Risk Insurance, Vol.79, No.3: PP. 751-783.

Panayiotis C. A.,Daphna ,E. and L., Christodoulos (2013). Managerial Ability and Firm Performance: Evidence from the Global Financial Crisis". Available at www.efm aefm.org.

Vafeas, N. (2000). Board Structure and the Informativeness of Earnings, Journal of Accounting and Public Policy, Vol. 19, PP. 139-160.

ORIGINAL RESEARCH PAPER

FUTURE STUDY APPROACH FOR HOUSING DEMAND VIA EMPLOYEE HOUSING COOPERATIONS IN THE CITY SANANDAJ OF IRAN

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Abstract

*Cooperation Sector in the National Economy of Iran must Empower and Enhanced because can Reduce Prime Cost of Services and Goods. This Study is its Goals, Identification Probable Futures and Desirable Future of Housing Demand Via Employee Housing **Cooperation's** in The City Sanandaj of Iran. Method of Research according to Goal is Applied and according to Type is Descriptive and Explorative that with Future Statistic Approach Used from Scenario Making. Collected Data Are Via Environmental Scanning and Delphi Techniqe. Sampling Method is Non Random That Done into Definitive and Judgmental. Result of Research Drivers Obtained Based on Two Critical Uncertainly that Lead Finally at Scenario Four Future of Housing Demand Via Employee Housing Coope**ration's** in The City Sanandaj. Scenario Four Following of Paradise, Night light, Mis Opportunity and Depression.*

JEL classification: R21

Keywords: *Future Study, Cooperation, Housing Demand, Sanandaj City of Iran*

1. INTRODUCTION

Access to housing is a key conceptual element which Mulder and Billari call homeownership. In their view, the easiest access to housing is when a housing market has a large rental segment at the same time (Mulder &Nathonael, 2010). It can be said that housing problem exists in all countries over the world, but in developing countries, this problem is more serious and critical due to the rapid growth of population and urbanization, internal migration, lack of adequate financial resources, problems related to the supply of land, the provision of building materials, and the shortage of specialized human resources, and most importantly, lack of appropriate policies and programs on land and housing. Cooperatives are acceptable as one of the mechanisms for providing services or goods scientifically, religiously and customarily and it has been emphasized in the upstream documents of the Islamic Republic such as the constitution, the Mega Policy, Principle 44 of the Iranian Constitution, and the Development Cooperation Act document of Iran. The formation of a cooperative in developing countries, as in developed countries, is an inevitable necessity. Future study is one of the most important tools of the knowledge age. One of the methods of futures studies is scenario making. Scenarios give insight into managers who have no or little previous understanding of issues. It can be said that for comprehensive planning, scenario methodology is the most powerful and useful method in future studies. Scenarios show the uncertainty in the future (Khazaee, 2012). Scenarios are stories of the complementary dynamism of intermodal forces instead of the fixed image of a one-way final future (Robbston and Wilson, 2012). Thus, through the scenario method, some relative insight can be gained about the future uncertainty of the demand for housing through cooperative companies in the city of Sanandaj in Iran, so that effective and robust Strategies can be developed.

Literature and theoretical foundations

Today, half the seven billion population of the earth live in cities. The majority of the world and the earth is being converted to city. In 1800, only 3% of the world's population lived in cities, by 1950 it was 29% and in 2000 it was 50%. Meanwhile, the United Nations predicts 80% of the future population growth will

occur in cities, not villages. Certainly, what has happened to the development and expansion of city and urbanization has been unprecedented in human history. However, the process of urbanization of the human society as well as the globalization of the economy has created the phenomenon of metropolitan areas, which itself has serious challenges and crises on the path to the third millennium (Vatanpour, 2007). By 2025, over 80% of the population of developed and advanced countries and about 70% of the population of developing countries will live in cities. In the last 50 years, the population of Iran has tripled, but the urban population of Iran has increased by 6 ties (Ahmadi, 1394). The city of Sanandaj in 1956 had a population of about 35 thousand people. This figure increased to 414 thousand people in 2016, which is approximately 12 ties. It is one of the cities of Iran where urban population growth was fast and growing. Some of the trends that can affect the level of demand for housing in Iran, and somewhat challenges the planning in this area include:

- The increasing trend of the population in Iran: the population of Iran in 1986 equaled 49445010 while in 2016 it reached 79926270 people. Similarly, Kurdistan province with a population of 1493645 in 2006 reached a population of 1603011 in 2016. Sanandaj, in 2006 had a population of 375280 thousand. The figure reached 414 thousand in 2016.

- An increasing trend of urban population in the Iran: as in 1986, about 552,000 households lived in cities, but in 2016 about 1, 812 thousand households with a population of 59146847 people lived in cities. This accounts for74% of the population of Iran while in 1390, 71.4% lived in cities. In Kurdistan, 471310 households or 1134229 people out of 1603,011 people live in cities. In Sanandaj, with a population of 501,402,000, about 41,406 people live in the city. In other words, Sanandaj has 126630 households and 82% urbanization

- The increase in the tendency to live in apartments in Iran: in the year 2011, there were about 6342387 residential apartments inhabited, but in 2016, this figure rose to 8975624 apartment units inhabited, excluding vacant flats. In Iran, in addition to 8975624 existing apartments, there are approximately 8815619 non-apartment units, which is a proportion of 50 to 50, which means half of the residential units in Iran are apartments and half are non-apartments, but in Kurdistan province this proportion is 70 to 30, that is, only 30% of residential units are apartment buildings in Kurdestan. In 2016, 21% of apartments had an area of about 80 to 100 square meters. This figure increased to 25% in 2016, which means that the demand for this type of apartment has been higher, which is also in the capacity of the activity of cooperative housing companies.

- The increasing trend in the number of small-scale households in Iran: the number of single-family households in the year 2006 was 5.2% which rose to 8.5% in 2016. The number of two-person families also rose from 15.3% in 2006 to 20.7% in 2016. The number of three-person households has also risen from 23% in 2006 to 28% in 2016. However, the number of families with five or more members decreased from 32.3% in the year 1385 to 14.7% of the total population of the country in 2016. The average annual population growth rate of the country is 1.24, but in the Kurdistan province it is 1.42.

The increasing trend of urbanization and urbanization is the phenomenon of the last two or three decades, even the last century is sometimes called the century of metropolis (Smith, 2012). The trend towards industrialization and the rise of the middle class in recent years in the province of Sanandaj have led to an increase in urban population with housing demand, which is not readily satisfiable because the per capita income of Kurdistan province and even the citizens of Sanandaj is less than national average. However, in urban inflation, it is among the first seven provinces in the country. Therefore, providing housing is difficult in the usual way but the formation of a cooperative company and the provision of housing through a cooperative path for workers and employees is more affordable and economical. The performed studies show that the average housing cost in Iranian family budget is about 30%, while for low-income groups, this can increase to about 40% on average (Safi Khani, 2008). It is worth mentioning that the thirty-first principle of the Constitution of the Islamic Republic of Iran states that every Iranian family has the right to have access to adequate housing. However, a mechanism has to be found which is more economical and reliable for households. Among the various mechanisms for housing, cooperatives are one of the significant solutions that can be considered. The tendency of the Sanandaj citizens to form a cooperative orientation is such that it can be said that the ratio of the total non-cooperative enterprises

registered in this city to the total population of Sanandaj is 0.022, and the ratio of the total registered cooperative companies to the total population of Sanandaj city is 0.003. The gap is relatively big. In this research, the decreasing trend of the voluntary appeal of Sanandaji citizens to the formation of a cooperative organization in recent years and the reluctance and low tendency of these citizens to set up a cooperative company has been raised as the main concern. The research focuses on why it is the case. Therefore, the research seeks to identify the factors that determine the tendency of citizens to cooperate and aims at finding out what scenarios are the most likely for the future tendency of the citizens of Sanandaj to the cooperative and cooperative sector. To do this, it will adopt a futuristic approach to provide scenarios of possible future prospects.

2. METHODOLOGY OF RESEARCH

The purpose of this study is to identify future scenarios or housing demand scenarios through cooperative housing companies in Sanandaj, Iran. In terms of purpose, the research is applied; in terms of methodology, it is descriptive research and exploratory; considering the time of data collection, it is multi-sectional research; and in strategy, it is a qualitative study. The statistical population of the research is the employees and workers in the city of Sanandaj who do not own a house. For sampling, 12 experts were used who were selected through verifiable sampling method in order to collect data in the Delphi method and to convert tacit information to explicit information and achieve theoretical competence in the contributing factors. In terms of future research methodology, Delphi method, environmental monitoring, cross-impact analysis, and scenario planning have been used in this research.

3. DATA ANALYSIS

Data analysis is a multi-stage process in which data collected through the use of collection tools in the statistical sample are summarized, encoded, and categorized and ultimately processed to provide a variety of analyzes. In this process, data is refined both conceptually and empirically, and various statistical techniques play a significant role in deductions and generalizations (Khaki, 2003). Using field studies, through two or more rounds of questionnaires distributed to identify the factors affecting the housing demand situation through employee cooperatives in Sanandaj and through using the Delphi method and library studies and environmental monitoring methods, ultimately the contributing factors were identified. These factors can be considered as the driving force behind the status of this demand in Sanandaj. In order to identify the factors that can be important, binomial or binomial tests were used. Finally, in order to confirm the hypotheses, each of the factors were tested at 95% confidence level and the value of the test was considered equal to 5%, which means if the level of significance of each factor is less than and less than .05%, it is significant.Otherwise it is not significant. In the table below, the results of the test of the confirmed factors obtained by the Binomial test are present.

Table 1. Binomial test table

Intended sentence or factor	Number	Significance level (sig)
Trend of urbanization in Sanandaj	17	0.001
Prices for rental housing in the city of Sanandaj	17	0.000
The number of Maskanemehr housing units built in the city of Sanandaj	17	0.000
The purchasing power of employees and workers who do not own a house in Sanandaj	17	0.000
Perceived relative economic prosperity of the citizens of Sanandaj	17	0.000
Loan allowance housing	17	0.000
The position of the cooperative sector in economy	17	0.000

Intended sentence or factor	Number	Significance level (sig)
Marriage rate in Sanandaj	17	0.000
Birth rate in Sanandaj	17	0.000
Final cost of housing in Sanandaj	17	0.000
Increase the number of middle class households in Sanandaj	17	0.000
Reduced rainfall and economic vulnerability of rural areas of Kurdistan	17	0.000
Topological conditions and limitations of land in the city of Sanandaj	17	0.000
The household size and number of members of a typical Sanandaji family	17	0.000
The number of households in Sanandaj	17	0.000
Mortgage broker market in Sanandaj	17	0.000
Currency increased sales and popularity as an alternative to investment in the housing sector	17	0.000
Increased interest rates and tendency to deposit as an alternative to investment in the housing sector	17	0.000
Boosting of stock prices and increase in the number of branches of stock markets as an alternative to investment in the housing sector in Sanandaj	17	0.000
Performance and high speed of housing cooperatives especially in the city of Sanandaj	17	0.000
Advertising power of housing cooperative companies in Sanandaj	17	0.000
Perceived transparency of housing cooperatives for employees and workers who do not own a house in Sanandaj	17	0.000
Effective cooperation between Directorate General for Cooperation and Housing Cooperatives	17	0.000
Growing marginalization in Sanandaj and construction of non-standard housing	17	0.005
Continuity of state policies in the housing sector, such as Maskanemehr housing, social housing and ...	17	0.000
Introduction of new technologies aimed at lowering the cost and time of delivery, such as prefabricated housing, housing of three-dimensional printers in the future	17	0.008
The existence of housing units and apartments under construction in the city of Sanandaj	17	0.000
Capacity development of tourism in the city of Sanandaj and increased popularity of renting hotel apartments	17	0.000
Poor management of housing cooperatives in previous years	17	0.000
Increasing multiplicity of housing construction companies in Sanandaj	17	0.000
The existence of a significant difference in lower final cost of housing through cooperative company than through other means	17	0.001

Intended sentence or factor	Number	Significance level (sig)
Government agency executives' belief in the cooperative housing organization	**17**	0.000
Financial and credit support of Directorate General for Cooperation to Housing co-operatives in Sanandaj	**17**	0.000
Urban development plan of the Municipality and the relevant authorities in Sanandaj	**17**	0.002

Source: Author

Consensus does not necessarily mean finding the answer. it is merely an agreement between participants on a particular level on a subject, proposition or a factor. Of course, due to the plurality and diversity of experts' expertise, there is no 100% agreement, and the level of consensus agreed upon in a research can range from 50% to 100%. The Kendall correlation coefficient represents the level of agreement between the experts on a given factor or proposition. To interpret the Kendall Coordinate Coefficient, the following scale is used conventionally.

Table 2. Interpretation of Kendall's coefficient table

Coordinate of Kenall's coefficient	Interpretation	Confidence level on identified factor
0.1	Very weak consensus	Does not exist
0.3	weak consensus	Low
0.5	Average consensus	Medium
0.7	Strong consensus	High
0.9	Very Strong consensus	Very high

Source: Author

This coefficient is a good criterion for explaining the amount of consensus or the statement of the theoretical qualities of each of the factors. The following results were obtained through the two rounds of the Delphi method asking for the opinion of the experts:

Table 3. Test status of Kendall coefficient in two rounds of the Delphi method

The Drivers factor	Kendall coefficient In the first round	Kendall coefficient In the second round	Interpretation	Confidence level to factor
Urbanization trend in Sanandaj	**79%**	**80%**	Very strong consensus	Very high
House rent prices in Sanandaj	**77%**	**77%**	Very strong consensus	Very high
Number of units made in Mehr housing in Sanandaj	**88%**	**88%**	Very strong consensus	Very high
The purchasing power of Sanandaj employees and workers who do not house	**91%**	**91%**	Very strong consensus	Very high
The relative economic prosperity perceived by the citizens of Sanandaj	**73%**	**74%**	Very strong consensus	Very high
The amount of bank loan is a housing allowance	**89%**	**89%**	Very strong consensus	Very high
The position of the cooperative sector in the economy	**79%**	**79%**	Very strong consensus	Very high

The Drivers factor	Kendall coefficient In the first round	Kendall coefficient In the second round	Interpretation	Confidence level to factor
Marriage rate of Sanandaj citizens	77%	78%	Very strong consensus	Very high
Birth rate of Sanandaj citizens	77%	78%	Very strong consensus	Very high
Housing price in Sanandaj	87%	87%	Very strong consensus	Very high
Increasing the number of middle class households in Sanandaj	72%	72%	Very strong consensus	Very high
Reduction of rainfall and vulnerability of rural economy in Kurdistan province	68%	69%	Very strong consensus	Very high
Topological state and land constraints in Sanandaj	79%	79%	Very strong consensus	Very high
Family size and number of members of a Sanandaj family	78%	78%	Very strong consensus	Very high
Number of households in Sanandaj	78%	78%	Very strong consensus	Very high
The prevalence of housing dealership market in Sanandaj	81%	82%	Very strong consensus	Very high
increasing foreign currency and the prevalence of its sales as a substitute for investment in housing	81%	81%	Very strong consensus	Very high
Increasing bank interest rates and a willingness to deposit as an alternative to investment in the housing sector	80%	81%	Very strong consensus	Very high
The stock price rise and the increase of stock brokerage branches in Sanandaj as an alternative to investing in the housing sector	81%	81%	Very strong consensus	Very high
Promotional Capacity of Sanandaj Housing Cooperative Companies	85%	85%	Very strong consensus	Very high
Perceived Transparency of Housing Cooperative Companies by Staff and sanandajiWorkers who do not ownHouse	87%	88%	Very strong consensus	Very high
Performance and speed of housing cooperatives, especially in Sanandaj	89%	89%	Very strong consensus	Very high
Cooperation and Effective Interaction with Housing Cooperative Companies	82%	83%	Very strong consensus	Very high
The marginalization growth in Sanandaj and the construction of non-standard housing	77%	77%	Very strong consensus	Very high
The continuation of government policies in the housing sector such	91%	91%	Very strong consensus	Very high

The Drivers factor	Kendall coefficient In the first round	Kendall coefficient In the second round	Interpretation	Confidence level to factor
as Mehr housing, social housing and**...**				
The prevalence of new technologies to reduce the cost and delivery time, such as prefabricated housing, housing made by 3D printers in the future	79%	80%	Very strong consensus	Very high
The existence of housing and apartment currently under construction in Sanandaj	88%	88%	Very strong consensus	Very high
Developing tourism capacities in Sanandaj and renting hotel apartments	78%	79%	Very strong consensus	Very high
Poor management of housing cooperatives in previous years	80%	81%	Very strong consensus	Very high
Increasing plurality of housing contractors in Sanandaj	76%	77%	Very strong consensus	Very high
Significant difference in the final cost of housing through co-operatives compared to other ways	77%	77%	Very strong consensus	Very high
The belief and credence of government agencies managers in the organization's housing cooperative company	81%	81%	Very strong consensus	Very high
The financial and credit support of the Cooperative Directorate General to Sanandaj Housing Cooperative Companies	81%	81%	Very strong consensus	Very high
Urban Development Plan by the Municipality and relevant organizations of the city of Sanandaj	78%	78%	Very strong consensus	Very high

Source: Author

In the table below, the percentage of respondents' perception of the impact of each of the environmental factors on the demand of workers and employees for housing by cooperative companies in Sanandaj city is identified, which, of course, helps identifying the key factors.

Table 4. Percentage of frequency of respondents for the environmental factors affecting the demand for housing in the residential housing cooperatives in Sanandaj

	Factor	Very high effectiveness	High effectiveness	Somewhat effective	Low Effectiveness	very low Effectiveness	Total
1	Urbanization trend in Sanandaj	23.5	47.1	23.5	0	5.8	100%
2	House rent in sanandaj	17.6	52.9	23.5	5.8	5.8	100%
3	Number of units made in Mehr housing	11.7	76.4	5.8	5.8	0	100%

	Factor	Very high effectiveness	High effectiveness	Somewhat effective	Low Effectiveness	very low Effectiveness	Total
	in Sanandaj						
4	The purchasing power of Sanandaj employees and workers who do not house	17.6	58.8	17.6	5.8	0	100%
5	The relative economic prosperity perceived by the citizens of Sanandaj	5.8	47.1	35.3	11.7	5.8	100%
6	The amount of bank loan is a housing allowance	35.5	41.2	17.6	5.8	0	100%
7	The position of the cooperative sector in economy	11.7	41.7	41.2	0	0	100%
8	marriage rate of Sanandaj citizens	17.6	41.2	29.5	5.8	5.8	100%
9	Birth rate of Sanandaj citizens	11.7	35.3	23.5	23.5	5.8	100%
10	Housing price in Sanandaj	17.6	70.6	5.8	5.8	0	100%
11	Increasing the number of middle class households in Sanandaj	11.7	58.8	5.8	17.6	5.8	100%
12	Reducing rainfall and vulnerability of rural economy in Kurdistan	5.8	17.6	47.1	0	29.5	100%
13	Topological status and land constraints in Sanandaj	17.6	64.7	11.7	5.8	0	100%
14	Postpartum rates and the number of members of a Sanandaj family	11.7	47.1	35.3	5.8	0	100%
15	Number of households in Sanandaj	5.8	52.9	35.3	5.8	0	100%
16	The prevalence of housing dealership market in Sanandaj	11.7	29.5	29.5	29.5	8.4%	100%
17	Increasing foreign currency and the prevalence of its sales as a substitute for investment in housing	0	17.6	35.5	23.5	23.5	100%
18	increasing bank interest rates and a willingness to deposit as an alternative to investment in the housing sector	17.6	23.5	29.5	29.5	0	100%
19	The stock price rise and the increase of stock brokerage branches in Sanandaj as an alternative to investing in the housing sector	0	29.5	29.5	5.8	35.5	100%
20	Promotional power Capacity of Sanandaj Housing Cooperative Companies	0	35.3	23.5	29.5	11.7	100%
21	Perceived Transparency of Housing Cooperative Companies by Staffs and Workers Without Sanandaj Housing	23.5	35.3	29.5	5.8	5.8	100%
22	Performance and speed of housing cooperatives, especially in Sanandaj	23.5	58.8	5.8	5.8	0	100%
23	Cooperation and Effective Interaction with Housing Cooperative Companies	23.5	35.3	29.5	0	0	100%
24	The marginalization growth in Sanandaj and the construction of non-standard housing	0	64.7	17.6	11.7	5.8	100%
25	Government policies in the housing	5.8	82.3	11.7	0	0	100%

	Factor	Very high effectiveness	High effectiveness	Somewhat effective	Low Effectiveness	very low Effectiveness	Total
	sector, such as housing estate, social housing and**...**						
26	The prevalence of new technologies, such as prefabricated housing, housing made by 3D printers in the future	0	58.8	35.3	5.8	0	100%
27	The existence of housing and apartment currently under construction in Sanandaj	0	17.6	52.9	23.5	5.8	100%
28	Developing tourism capacities in Sanandaj and renting hotel apartments	17.6	41.2	17.6	17.6	11.7	100%
29	Poor management of housing cooperatives in previous years	17.6	41.2	41.2	0	0	100%
30	Increasing plurality of housing contractors in Sanandaj	0	52.9	41.2	5.8	0	100%
31	significant difference in the final cost of housing through co-operatives compared to other ways	23.5	47.1	29.5	0	0	100%
32	The beliefs and faith of government agencies managers in the organization's housing cooperative company	0	82.3	5.8	11.7	0	100%
33	The financial and credit support of the Cooperative Directorate General to Sanandaj Housing Cooperative Companies	11.7	70.6	17.6	0	0	100%
34	Urban Development Plan by the Municipality and relevant organizations of the city of Sanandaj	0	64.7	17.6	17.6	0	100%

Source: Author

Based on the table above, the 34 main factors identified can be ranked from those with greatest impact to those with the least im**pact based on the experts' opinions. based on the table, 27 out of the 39 identified factors affecting the employees' demand for housing through the mechanisms of cooperatives in Sanandaj,**
Iran, have a total effectiveness of over 50%, which constitutes 73% of the total factors and can be used in management decisions and efforts of Cooperatives and housing organization to increase the effectiveness and efficiency of the decisions.

Table 5.

Rating	Factor	Average factor effect	Severity of effect factor
1	Cost of Housing in Sanandaj, Iran	7	Great impact Scope of 6.5 and more
2	The amount of bank loan is a housing allowance	6.94	
3	Number of units made in Mehr housing in Sanandaj	6.88	
	Government policies in the housing sector, such asMehr housing, social housing and ...		
	Topological state and land constraints in Sanandaj		
	The financial and credit support of the Cooperative Directorate General to Sanandaj Housing Cooperative Companies		

Rating	Factor	Average factor effect	Severity of effect factor
	significant difference in the final cost of housing through co-operatives compared to other ways		
4	The purchasing power of Sanandaj employees and workers who do not house	6.76	
5	Performance and speed of housing cooperatives, especially in Sanandaj	6.71	
	House rent in sanandaj		
6	Urbanization in Sanandaj	6.64	
7	Poor management of housing cooperatives in previous years	6.53	
8	Promoting the status of the cooperative sector in the economy	6.41	
	The belief and faith of government agencies managers in the organization's housing cooperative company		
9	Perceived Transparency of Housing Cooperative Companies by staffs and Workers Without Sanandaj Housing	6.29	
	Family size and number of members of a Sanandaj family		
10	Marriage rate of Sanandaj citizens	6.17	
	Number of households in Sanandaj		
11	Cooperation and Effective Interaction with Housing Cooperative Companies	6.06	Great impact Scope of 5- 6.5
	The emergence of new technologies such as prefabricated housing, the construction of housing with three-dimensional printers in the future of Sanandaj in the direction of faster and lower prices for housing		
	Increasing the number of middle-class households in Sanandaj		
12	Developing tourism capacities in Sanandaj and renting hotel apartments	6	
13	Urban Development Plan by the Municipality and relevant organs of the city of Sanandaj	5.94	
	The relative economic prosperity perceived by the citizens of Sanandaj		
	The increasing plurality of housing contractors in Sanandaj		
15	The marginalization growth in Sanandaj and the construction of non-standard housing	5.83	
16	Birth rate of Sanandaj citizens	5.76	
17	Increasing bank interest rates and a willingness to deposit as an alternative to investment in the housing sector	5.59	
18	The prevalence of housing dealership market in Sanandaj	5.47	
19	Promotional power Capacity of Sanandaj Housing Cooperative Companies	4.64	Moderate impact Scope 3- 4.9
	The existence of housing and apartment currently		

Rating	Factor	Average factor effect	Severity of effect factor
	under construction in Sanandaj		
	Stock price rise and stock exchange brokerage increase as an alternative to housing investment		
20	Reduction of rainfall and vulnerability of rural economy in Kurdistan province	**4.41**	
21	Increasing foreign currency and the prevalence of its sales as a substitute for investment in housing	**3.94**	

Prioritizing identified environmental factors affecting demand for housing in the cooperative sector (from the most effective to the least effective)

Source: Author

In the table below, the percentage of frequency of respondents' opinions about the degree of unpredictability of each of the environmental factors affecting the demand for housing through the mechanism of cooperative companies in Sanandaj has been presented which helps the identification of factors with more crucial certainty.

Table 6. Percentage of frequency of unpredictability of each of the factors affecting the demand for housing in the cooperative sector of labor

	Factor	Very high Predict-ability	High Predict-ability	Some what Predict-ability	Low Predict-ability	Very low	Aggregation percentage
1	Urbanization in Sanandaj	5.8	82.3	0	11.7	0	100%
2	House rent in sanandaj	17.6	47.1	5.8	17.6	0	100%
3	Number of units made in Mehr housing in Sanandaj	58.8	17.6	11.7	17.6	0	100%
4	The purchasing power of Sanandaj employees and workers who do not house	11.7	23.5	41.2	23.5	0	100%
5	The relative economic prosperity perceived by the citizens of Sanandaj	5.8	41.2	29.4	17.6	5.8	100%
6	The amount of bank loan is a housing allowance	5.8	64.7	11.7	11.7	5.8	100%
7	The position of the cooperative sector in the economy	17.6	29.4	29.4	23.5	0	100%
8	marriage rate of Sanandaj citizens	0	29.4	29.4	29.4	11.7	100%
9	Birth rate of Sanandaj citizens	0	35.3	29.4	29.4	5.8	100%
10	Housing price in Sanandaj	17.6	35.3	11.7	17.6	23.5	100%
11	Increasing the number of middle class households in Sanandaj	0	70.6	11.7	23.5	0	100%
12	Reduction of rainfall and vulnerability of rural economy in Kurdistan province	5.8	29.4	35.3	29.4	0	100%
13	Topological state and land constraints in Sanandaj	17.6	58.8	5.8	5.8	0	100%
14	Family size and number of members of a Sanandaj family	0	23.5	35.3	35.3	0	100%
15	Number of households in Sanandaj	0	29.4	5.8	70.6	0	100%

	Factor	Very high Predict-ability	High Predict-ability	Some what Predict-ability	Low Predict-ability	Very low	Aggregation percentage
16	The prevalence of housing dealership market in Sanandaj	5.8	47.1	5.8	47.1	0	100%
17	Increasing foreign currency and the prevalence of its sales as a substitute for investment in housing	23.5	17.6	17.6	41.1	0	100%
18	Increasing bank interest rates and a willingness to deposit as an alternative to investment in the housing sector	17.6	23.5	23.5	29.4	5.8	100%
19	The stock price rise and the increase of stock brokerage branches in Sanandaj as an alternative to investing in the housing sector	0	29.4	17.6	41.1	23.5	100%
20	Promotional power Capacity of Sanandaj Housing Cooperative Companies	0	23.5	17.6	58.8	0	100%
21	Perceived Transparency of Housing Cooperative Companies by Workers and Workers who do not own house in sanandaj	11.7	17.6	29.4	35.3	5.8	100%
22	Performance and speed of housing cooperatives, especially in Sanandaj	5.8	23.5	29.4	35.3	5.8	100%
23	Cooperation and Effective Interaction with Housing Cooperative Companies	5.8	47.1	11.7	29.4	5.8	100%
24	The marginalization growth in Sanandaj and the construction of non-standard housing	0	76.4	5.8	17.6	5.8	100%
25	Government policies in the housing sector, such as Mehr housing, social housing and ...	17.6	47.1	17.6	23.5	0	100%
26	The prevalence of new technologies, such as prefabricated housing, housing made by 3D printers in the future	23.5	35.3	17.6	23.5	0	100%
27	The existence of housing and apartment currently under construction in Sanandaj	11.7	47.1	17.6	23.5	0	100%
28	Developing tourism capacities in Sanandaj and renting hotel apartments	5.8	52.9	5.8	35.3	0	100%
29	Poor management of housing cooperatives in previous years	5.8	35.3	23.5	35.3	0	100%
30	Increasing plurality of housing contractors in Sanandaj	0	64.7	5.8	41.1	0	100%
31	significant difference in the final cost of housing through co-operatives compared to other ways	11.7	52.9	0	23.5	5.8	100%
32	The belief and faith of government agencies managers in the organization's housing cooperative company	11.7	47.1	23.5	11.7	5.8	100%
33	The financial and credit support of the Cooperative Directorate General to	17.6	47.1	5.8	23.5	5.8	100%

		Factor	Very high Predict-ability	High Predict-ability	Some what Predict-ability	Low Predict-ability	Very low	Aggregation percentage
		Sanandaj Housing Cooperative Companies						
34		Urban Development Plan by the Municipality and relevant organs of the city of Sanandaj	11.7	64.7	5.8	17.6	0	100%

Source: Author

Table 7.

		Factor	Mean Factor Prediction	Unpredictable factor
1		Stock price boom and stock exchange brokerage increase in Sanandaj as an alternative to investing in the housing sector The number of households in Sanandaj in the next 10 years	6.76	High unpredictability Score of 6.5 up
2		Increasing the number of Sanandaj households in the next 10 years	6.11	High unpredictability Scope 5 to 6.5
3		Improving the performance and speed of cooperative housing companies especially in Sanandaj in the next 10 years	5.82	
4		Increasing the transparency of housing cooperatives for workers and workers without Sanandaj housing in the next 10 years	5.70	
		Promotional power Capacity of Sanandaj Housing Cooperative Companies in the next 10 years		
5		Increasing marriage rates for Sanandaj citizens in the next 10 years	5.47	
6		Increasing the birthrate of Sanandaj citizens in the next 10 years	5.11	
		Increased housing prices in Sanandaj in the next 10 years		
7		The prosperity of the mortgage brokerage market in Sanandaj over the next 10 years	5.05	
8		Family size and number of members of a Sanandaj family within the next 10 years	4.94	Moderate unpredictability Scope of 3.5 to 5
9		The increasing plurality of housing contractors in Sanandaj in the next 10 years	4.82	
10		Poor management of housing cooperatives in the next 10 years	4.76	
		Reducing rainfall and vulnerability of rural economy in Kurdistan province in the next 10 years		
11		Enhance cooperation and effective interaction between the General Directorate of Cooperatives and Housing Cooperatives	4.65	
		Increasing bank interest rates and a willingness to deposit as an alternative to investing in the housing sector in the next 10 years		

	Factor	Mean Factor Prediction	Unpredictable factor
12	Increasing exchange rate and the prevalence of its sale as an alternative to investing in the housing sector in the next 10 years	4.52	
	Increasing the purchasing power of Sanandaj employees and workers without housing in the next 10 years		
	The relative economic prosperity perceived by the citizens of Sanandaj in the next 10 years		
13	Development of tourism capacities in Sanandaj and the prosperity of renting hotel apartments in the next 10 years	4.41	
14	Increasing the number of middle class households in Sanandaj in the next 10 years	4.35	
	The marginalization growth in Sanandaj and the construction of non-standard housing		
15	Improve the position of the cooperative sector in the national economy over the next 10 years	4.17	
16	The continuation of government policies in the housing sector such as Mehr housing, social housing and**...**	4.11	
17	Increasing belief and faith of government executives in the organization's housing cooperative company over the next 10 years	4.06	
	The financial and credit support of the Cooperative Department of the Cooperative Housing Corporation of Sanandaj in the next 10 years		
	The existence of housing and apartment currently under construction in Sanandajin the next 10 years		
18	The amount of bank loan will help to purchase housing in the next 10 years	3.95	
19	Significant differences in less costly housing through co-optation over other methods over the next 10 years	3.88	
20	The prevalence of new technologies, such as prefabricated housing, housing made by 3D printers in the next 10 years	3.82	
21	Urban Development Plan by the Municipality and relevant organizations of the city of Sanandajin the next 10 years	3.59	
22	An increasing urbanization trend in Sanandaj over the next 10 years	3.35	
23	Rising House rent in sanandajin the next 10 years	3.23	
24	Delivered unit made Mehr housing in Sanandaj in the next 10 years	2.95	Low unpredictability (High predictability)
25	Improving the topological and land constraints in Sanandaj over the next 10 years	2.76	

Prioritizing Identified Factors Affecting the Housing Demand of the Cooperative sector of labor (from the most Unpredictable to the Most Predictable)

Source: Author

According to the above table, taken from the experts' point of view, only one of the 34 factors identified has a very high unpredictability degree, which constitutes about 2.5% of the total factors and can be taken into account in cooperative management decisions, policies, and efforts to increase housing demand for workers who do not own a house through the mechanism of cooperative companies in the city of Sanandaj. The table shows that 13 factors out of 34 identified factors affecting the demand for housing for

workers without housing and through the mechanism of cooperative companies in Sanandaj have a high unpredictability rate of about 33% and can be used in cooperative management decisions and policies to increase housing demand of workers for housing through the mechanism of cooperative companies in the city of Sanandaj and should be considered in order to make more realistic decisions. The table shows that 4 factors out of 39 identified factors affecting the demand of workers who do not own a house for housing through the mechanism of cooperative companies in Sanandaj have a moderate impact intensity of about 10% of the factors, and can in any way contribute to cooperative management decisions and policies to increase housing demand of workers through the mechanism of cooperative companies in Sanandaj. By taking them into account, more realistic decisions can be made and the various dimensions of the phenomenon and the focal area of research are covered.

Given the multiplicity of the identified factors, each of them can be considered in decision making. However, since the aim is scenario planning, the separation and highlighting of factors with very high and high severity of impact and unpredictability are taken into consideration.

Table 8. Environmental factors with high impact and unpredictability

Row	Factor with high impact and unpredictability	The degree of affinity between factors
1	Number of households in Sanandaj	6، 8، 5
2	Performance and speed of housing cooperatives, especially in Sanandaj	11، 3،9،10
3	Perceived Transparency of Housing Cooperative Companies by Workers Without Sanandaj Housing	11، 2،9،10
4	The cost of cooperative housing in Sanandaj	7
5	marriage rate of Sanandaj citizens	8، 1 ، 6
6	Birth rate of citizens of Sanandaj	1، 8، 5
7	Housing dealership market in Sanandaj	4
8	Family size and plurality of members of a Sanandaj family	6، 1، 5
9	Promotional power and Capacity of Sanandaj Housing Cooperative Companies	11، 3،2،10
10	Management Capacity of Housing Cooperative Companies	11، 3،9،2
11	Level of effective cooperation and cooperation of the General Directorate of Cooperatives with Housing Cooperatives	2، 3،9،10

Source: Author

At this stage, it is necessary to create a detailed conceptual belt to find similarities in value, application and so on in factors having very high unpredictability and effectiveness so that a key category can be obtained.

Table 9. Morphology of environmental factors with high impact and unpredictability in the form of key uncertainties

Row	Factor with high impact and unpredictability	The name of the key Uncertainties
1	Number of households in Sanandaj	
	marriage rate of Sanandaj citizens	Key Uncertainty 1:
	Birth rate of citizens of Sanandaj	Morphology of Household
	Family size and plurality of members of a Sanandaj family	
2	Performance and speed of housing cooperatives, especially in Sanandaj	
	Perceived Transparency of Housing Cooperative Companies by Workers Without Sanandaj Housing	Key Uncertainty 2: Capability of cooperatives
	Promotional power Capacity of Sanandaj Housing	

Row	Factor with high impact and unpredictability	The name of the key Uncertainties
	Cooperative Companies	
	Management Capacity of Housing Cooperative Companies	
	Level of effective cooperation and cooperation of the General Directorate of Cooperatives with Housing Cooperatives	
	The cost of cooperative housing in Sanandaj	
	Housing dealership market in Sanandaj	

Source: Author

In scenario-writing as an art, one should be able to make a sort of collage and pair-matching in the creation of the convergence and aggregation between highly effective but unpredictable identified factors, so that through this aggregation and combination, two to three key uncertainties can be found. These uncertainties that will turn the future of the focal issue into a few parts.

Capability and Competence of Sanandaj
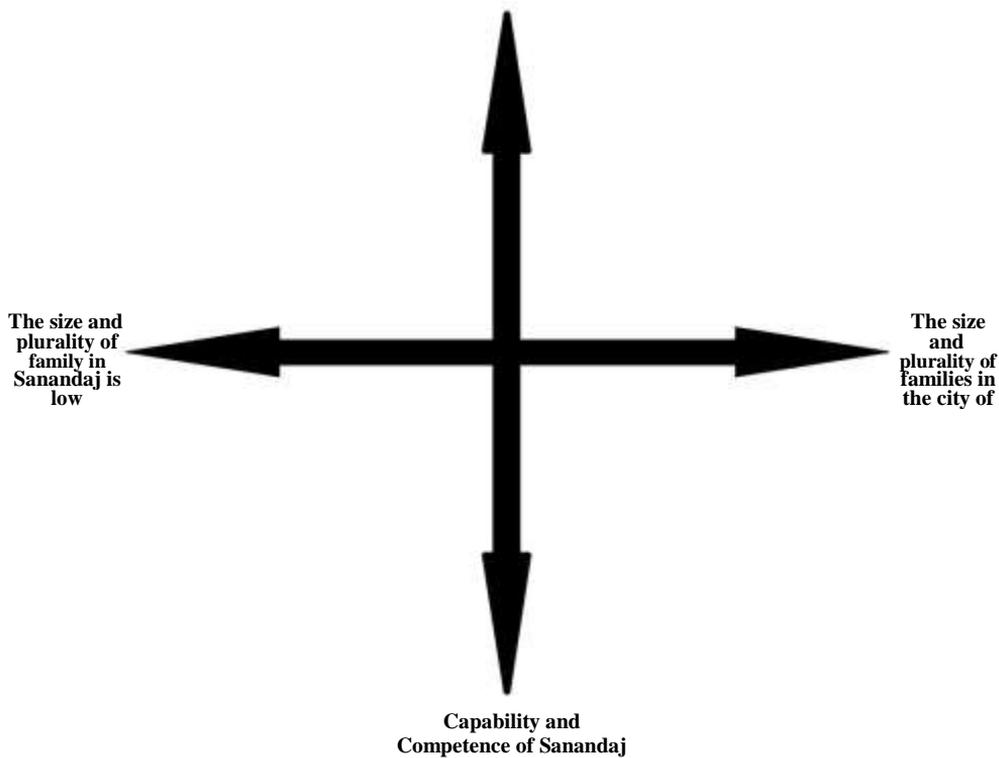
Finally, based on an analysis of the relationships and interactions between the identified factors, as well as the key uncertainties extracted, the story and narrative of each scenario was considered as a possible future for the housing demand situation for employees and workers who do not own a house, through the mechanism of cooperative companies in Sanandaj.

Future No. 1: Paradise of Cooperative Scenario

In the year 1404, the city of Sanandaj will have a faster and more pharyngeal growth than the national average, which is much more significant than the 1.4% annual growth rate of 1395, as the 41406 people population of Sanandaj had a relative rise in 1395. The growth of marriage is quite tangible due to proper government policies and family support. The number of households has increased satisfactorily from 126630 households in 1395. Large-scale families have declined, but families with Small scale, one to four

members, have been growing and increasing thanks to the use of the capacities and advantages of the province such as tourism and agriculture and borderline. The economic and social level of households in the province and the city of Sanandaj have had significant improvement compared to the past, leading to the increased number of middle-class households in Sanandaj. This, in turn, has increased purchasing power of housing in many families without a house.

Housing is one of the main needs of middle-class households and is seen in the demand basket of the majority of working and middle-class families. In addition, the increasing level of awareness and futurism of the middle classes in Sanandaj has caused the demand for an additional house to be provided for their children. As a result, the demand for housing is in an acceptable and justifiable level now. The good performance and speed of Sanandaj Housing Cooperative Companies in recent years, as well as improvements in their transparency and financial health, as well as the support and cooperation of the General Directorate of Cooperatives, Labor and Social Welfare with the Union of Housing Cooperatives and cooperative societies of Sanandaj have promoted the trust of government executives. This, in turn, has led to the establishment of a strong and experienced management in cooperative housing.

Housing cooperatives have achieved a social status, credit and relative reputation among employees and workers. The credibility of housing cooperatives has improved dramatically among the public and households. The level of demand from the path and the mechanism of housing cooperatives is increasing. A financial and credit boom for these cooperatives is expected. These housing cooperatives have been able to reduce the final cost of housing for members through performance, transparency, and responsible use of resources. This has made a significant difference between the cost of housing through cooperative housing companies and through other methods. therefore, cooperative housing companies have become the first choice and priority for every family of workers and employees who do not own a house. The financial prosperity and proper executive capacity, as well as the inter-organizational relationship between these cooperatives and other agencies, have increased their promotional capacity and has eliminated middlemen and mortgage brokers. Therefore, by direct purchasing of land, buying bulky materials, and using governmental and non-governmental facilities and loans, cheaper and more immediate housing for workers and employees is provided.

Future No. 2: Incentive Scenario

In the year 1404, the city of Sanandaj has a faster and bigger growth than the national average. The growth rate in this year is much bigger than the growth rate of 1.4% in the year 1395 and the population of the city of Sanandaj has risen dramatically from 414069 people in 1395. The growth of marriage rate is easily significant thanks to the proper policies of the government and the necessary cultural development and family support. The number of households has risen satisfactorily from 126630 households in 1395. Large-scale families have declined, but families with Small scale, one to four members, have been growing and increasing thanks to the use of the capacities and advantages of the province such as tourism and agriculture and borderline. The economic and social level of households in the province and the city of Sanandaj have had significant improvement compared to the past, leading to the increased number of middle-class households in Sanandaj. This, in turn, has increased purchasing power of housing in many families without a house.

Housing is one of the main needs of middle-class households and is seen in the demand basket of the majority of working and middle-class families. In addition, the increasing level of awareness and futurism of the middle classes in Sanandaj has caused the demand for an additional house to be provided for their children. As a result, the demand for housing is in an acceptable and justifiable level now. Poor management, and in particular poor performance of housing cooperatives, has caused considerable delays in the construction and delivery of housing for applicants and former members of the cooperative company. The confusion of government policies in terms of housing, the lack of re-engineering and reallocation of capacities in housing cooperatives, the lack of effective supervision by the cooperative administration, the cooperative chamber, and the union have made ambiguity and uncertainty about the transparency and health of these housing cooperatives. The applicants and employees have no trust and confidence in these cooperative companies. Often, the managers of governmental agencies do not have much knowledge, belief, and confidence in these organizations in their respective departments because

they are not justified enough and aware of the cooperative sector. The reality is that the cooperative sector, in a large scale, does not have a good status and position in national economy and public eye, and it remains relatively vague, unclear, and premature.

Other mechanisms have been thriving because of the large number of contractors, contracting companies, and apartment-making companies and are generally preferred by housing applicants. Therefore, opportunities that are potentially beneficial to cooperative companies are eliminated from the housing cooperatives. considering the likelihood of a low rate of replacement and population growth, especially in the city of Sanandaj, and the saturation of housing demand, such an opportunity will come to an end in the future. The relationship between housing cooperatives and the General Office of Cooperatives of Labor and Social Welfare is at a minimal and ineffective level. The Union and the Cooperative Chamber follow their traditional and minimalist routines. Management weaknesses, lack of effective internal support and external support from the side of the relevant government agency, from the side of Sanandaj Cooperative Office, and from the side of the union and cooperative chamber as well as other organizations and institutions, such as urban planning, municipalities, etc. have weakened the promotional and publicity of cooperative housing companies in the city of Sanandaj so they miss opportunities for population growth and housing demand one after another.

Future No. 3: Slack Market scenario

In the year 1404, the city of Sanandaj has a population growth that is lower than the national average, and this figure is much lower than the 1.4% growth rate in 1395, so the population of Sanandaj which was 41,406 people in 1395 has not had sufficient growth. The declining trend of marriage rates is quite noticeable which is due to the lack of proper and systematic policies of the government, lack of necessary cultural development, lack of support from families, as well as the high unemployment rate of young people in Sanandaj. The number of households has not increased from 126630 households in 1395. Large-scale families have declined, but small-scale households, having one to four members, have not had significant growth. The income and economic levels of Sanandaji households have not grown. The emigration of the working class from Sanandaj to the industrial provinces is noticeable.

Reducing rainfall and vulnerability of the rural economy have led to an increase in marginalization and urbanization in Sanandaj. The lack of affordable housing in many families has resulted in low-standard and affordable housing available on the outskirts of the city even for the Sanandaji citizens. As a result, the margin of the city is widening, that is, the increase of urbanization in Sanandaj is more marginal, which does not have a significant effect on the effective demand of housing in the form and mechanism of cooperative housing companies. The increase in the number of unemployed youth and the lack of sustainable employment in the city has reduced purchasing power of many families who do not own a house, including workers and employees. Despite the fact that housing is a main requirement for all middle-class households and should be seen and included in the demand basket of the majority of working families, the reduction in per capita income of Sanandaji household has decreased the demand for housing. Along with these factors, the demographic changes in Sanandaj have also been the driving force behind the reduction in housing demand, especially through cooperative housing companies

Housing cooperative companies in Sanandaj have, in recent years, been able to play an acceptable role in fulfilling their commitments and satisfying the needs. Through having good performance and speed, as well as having transparency and financial health, these companies have managed to obtain support from the General Directorate Cooperatives, Social Work and Social Welfare, and the Housing Union. although the level of housing demand through the path and mechanism of cooperatives Housing is limited and weak, housing cooperatives are still relatively active. That is, although factors such as demographic changes, the plurality of contracting and apartment-building companies, recession and lack of economic prosperity, and the lack of adequate purchasing power of employees and workers, have kept the level of housing demand down, community-based housing cooperatives are still relatively active and they occasionally provide housing for members. Membership exists but on a small and limited scale. This has led to a not-so-bright future for such companies. the cooperative sector is more or less supported by the government but the housing market is slack. Lack of proper population growth, lack of proper growth in

the number of households, and immigration of low income groups to Sanandaj have significant and meaningful impact on the reduction of housing demand.

Future No. 4: The Half-Burned Lantern scenario

In this year, i.e 1404, the city of Sanandaj has had a population growth below the national average. Unfortunately, many of the overall population policies were not well understood and applied in the province, and in particular in Sanandaj. This is even much lower than a growth rate of 1.4%, ten years ago, in the year 1395. The 414069-people population of the city of Sanandaj in 1395 has faced a lack of adequate growth. Unwillingness or the inability to form a family and the decreasing trend of marriage rates due to the weakness of effective and systematic government policies as well as the policies of non-governmental institutions and the lack of support of families and the high youth unemployment rate in Sanandaj is quite tangible. The number of households has not increased much from 126630 households in 1395. Large-scale families, families with five or more members, have declined but small-scale families, families with one to four members, have not had a significant growth and increase.

The income and economic levels of the Sanandaj households have not grown significantly compared to the past. Reducing rainfall and vulnerability of the rural economy have led to an increase in marginalization and urbanization in Sanandaj. The lack of affordable housing in many families has resulted in low-standard and affordable housing available on the outskirts of the city even for the Sanandaji citizens. As a result, the margin of the city is widening, that is, the increase of urbanization in Sanandaj is more marginal, which does not have a significant effect on the effective demand of housing in the form and mechanism of cooperative housing companies. The increase in the number of unemployed youth and the lack of sustainable employment in the city has reduced purchasing power of many families who do not own a house, including workers and employees. Despite the fact that housing is a main requirement for all middle-class households and should be seen and included in the demand basket of the majority of working families, the reduction in per capita income of Sanandaji household has decreased the demand for housing. Along with these factors, the demographic changes in Sanandaj have also been the driving force behind the reduction in housing demand, especially through cooperative housing companies.

Poor management, and in particular poor performance of housing cooperatives, has caused considerable delays in the construction and delivery of housing for applicants and former members of the cooperative company. The confusion of government policies in terms of housing, the lack of re-engineering and reallocation of capacities in housing cooperatives, the lack of effective supervision by the cooperative administration, the cooperative chamber, and the union have made ambiguity and uncertainty about the transparency and health of these housing cooperatives. The applicants and employees have no trust and confidence in these cooperative companies. Often, the managers of governmental agencies do not have much knowledge, belief, and confidence in these organizations in their respective departments because they are not justified enough and aware of the cooperative sector. The reality is that the cooperative sector, in a large scale, does not have a good status and position in national economy and public eye, and it remains relatively vague, unclear, and premature.

Other mechanisms have been thriving because of the large number of contractors, contracting companies, and apartment-making companies that consist of many graduates of engineering, and are generally preferred by housing applicants. Therefore, opportunities that are potentially beneficial to cooperative companies are eliminated from the housing cooperatives. considering the likelihood of a low rate of replacement and population growth, especially in the city of Sanandaj, and the saturation of housing demand, such an opportunity will come to an end in the future. The relationship between housing cooperatives and the General Office of Cooperatives of Labor and Social Welfare is at a minimal and ineffective level. This is because the Cooperative Directorate also does not have the required level of satisfaction with the level of influence of this cooperative on the housing market. The union also follows traditional and minimalist activities.

Poor management, lack of effective internal support and external support from the side of the relevant government agency, from the side of Sanandaj Cooperative Office, and from the side of the union and cooperative chamber as well as other organizations and institutions, such as urban planning, municipalities, etc. have weakened the promotional and publicity of cooperative housing companies in the

city of Sanandaj so they miss opportunities for population growth and housing demand one after another. There are some case projects and some new housing cooperatives will form and some former housing cooperatives continue to operate, but most housing cooperatives with completed projects are shutting down because they are mission-oriented and have carried out their mission. Perhaps housing cooperatives will soon join the history.

REFERENCES

Ahmadi, K (2015). Organization Future Studies; Terme Publishing

Khazaee,S(2012). Future study; methodology, Shakhes Pazhoh.

Office of Infrastructure Studies of the Iranian Parliament (2008). Reviewing supply and demand policies in the housing sector in Iran and reviewing the experience of countries, Subject code 220 / Issue 9374, Iranian Parliament Research Center

Ralston, B., and Wilson, I. (2012). Guide to Scenario Planning; translation of Massoud Monzavi, Defense Industry Research and Development Research Center, Center for Future Studies in Defense Science and Technology**.**

Robinson, A., & Wilson, N. (1994). Co-operative vs. Private Firms: An Empirical Comparison of Cooperative and Private Small Firms in Britain. International Business Review, 2 (3), 281-296.

Smith, D (2013). World in 2050, Agah Publishing

ORIGINAL RESEARCH PAPER

THE ROLE OF EMPLOYEE EMPOWERMENT AND ITS RELATIONSHIP WITH JOB SATISFACTION (CASE STUDY: 15 KHORDAD HOSPITALS IN VARAMIN CITY)

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Abstract

This study aimed to investigate the role of personnel empowerment on job satisfaction in personal of 15 KHORDAD hospitals in city of Varamin. For this purpose, the three-component model of Kmieciak and colleagues (2012) was used to measure employee empowerment that includes: the space and conditions for empowerment, recognition and trends of empowerment and concentration level. In addition to measuring job satisfaction, questionnaire presented by Smith and colleagues (1969) was used and its components were: satisfaction with working conditions, satisfaction with supervisor, satisfaction with coworkers, satisfaction with promotion opportunities and salary bonuses. For perform this research, 98 people were selected from staff of the hospital and needed data were collected by questionnaire. Then the collected data was analyzed using regression models. The results show that among of 5 hypotheses, 3 hypotheses are accepted and the role of empowerment on satisfaction with coworkers, satisfaction with promotion opportunities and salary bonuses was confirmed. Also the results show that personnel empowerment has **greatest impact on work conditions' satisfactio***n. In fact, increase skills; make more attractive work in organization and especially perception of working conditions, in the working environment. Employee empowerment, better get more positive feedback from the environment and the organization receives as a result of working conditions, they will be more satisfied. Finally, it is suggested to pay more attention on the implementation of empowerment programs carried out in the hospital.*

JEL classification: E24

Key words: *Job satisfaction, Personnel empowerment, 15KHORDAD hospital*

1. INTRODUCTION

Job satisfaction among concepts is easily understood but difficult to define. Limbu et al. (2014) job satisfaction and perception of the appropriateness of the definition:

The proportion of the payroll and volume, balance of empowerment and job expectations; fitness skills and position; mental fitness the job conditions and so on. From another perspective, job satisfaction, the feeling is desirable that one by working and employment conditions that arises from working conditions and perceptions and expectations which significantly to their work environment, co-workers, payment and depends on a person's perception (Gunlu et al., 2010). Job satisfaction, directly related to the level of motivation (Jain et al., 2009); job performance, discipline and reduce absenteeism and delays (Jonason et al., 2015); health and organizational commitment (Saleem, 2015). In fact, the results and the importance of job satisfaction, the general consensus among experts and researchers, but about, how to improve job satisfaction, views and different views are presented. One of the things that in recent years, there has been much emphasis on it, empower employees. In this study, we have tried to strengthen the role of employees' job satisfaction parameters, be examined.

2. LITERATURE REVIEW

The concept of job satisfaction

Maamari and Chaanin (2013), an employee job satisfaction to feel that their work is defined by the balance between individual interests, abilities, powers and duties of the individual is achieved. In other words, Bigliardi et al (2012), job satisfaction and active engagement as the person has a job. In their view, job satisfaction is achieved compared to what a person has gained from his job with what that person is expected to obtain it. In general, job satisfaction, employee fulfillment, is accompanied by considerable advantages to organizations so that job satisfaction as one of the key elements in improving the performance and organizational effectiveness has been proposed. One of the primary effects of job satisfaction that the person tries to move towards achieving organizational goals and a strong desire to maintain membership in the organization (Jain et al., 2009) due to the high costs of attracting, training and retaining forces, it is important and necessary.

It also makes the job satisfaction increases individual productivity, person committed to the organization, the physical and mental health is assured, the spirit of man rises happy new life and job skills to quickly train.

Robbins believes managers have three reasons to care about job satisfaction:

• **There is ample evidence that people leave dissatisfied and percentage of dropouts among them far more.**

• **proven that happy employees are better health and feel bet**ter about the organization and therefore act more effectively.

• **Job satisfaction is a phenomenon that goes beyond organization boundaries** and its effects on the private life of the individual and can also be seen outside the organization (Amin – Bidokhti, Salehpour, 2007).

Components of job satisfaction

Hung and Lou (2007) main factors affecting job satisfaction in the form of 10 factors are present: working conditions, interaction with colleagues, jobs, wages and benefits, advancement and promotion; appreciation; control and accountability; job security; leadership style and policy agencies (Mir Kamali et al., 2008). Working conditions that contribute to job satisfaction throughout the day, a significant portion of the employees in the workplace is going on. The working conditions are causing job satisfaction is more favorable, because in desirable working conditions, physical and mental relaxation provided better person. Promotion (or the advancement and promotion) refers to an increase in salary or the organization. Usually monitor individual promotions will be reduced. The increased scope of responsibility of the individual and the individual's powers increased. As a result, it is easier for individual decision-making process. Such a situation will lead to an increase in the spirit of the individual and his consent (Josuh et al., 2011). Organizational policies refer the rules and policies of the organization. For example, bureaucratic and bureaucratic systems that often do routine protocol, adverse relationships with clients and individuals is low flexibility, it has a negative impact on employee satisfaction (Homborstad, Perry, 2011).

As well as leadership style and behavior of personnel managers have a significant impact on improving job satisfaction. The behavior of supervisors with employees, support, naturally, employees will be more satisfied (Carrier et al., 2009).

Size and quality of communication within the group also plays an important role in employee satisfaction. The working group is larger; job satisfaction is also reduced. For personal communications weaker and solidarity can be reduced (Homborstad, Perry, 2011). On the other hand, the work itself is one of the determinants of job satisfaction is considered. The nature of the work that refers more to the area of responsibility and action, it can satisfy individual requirements at a high level. Consultants are also things that have a greater variety of activities, most of the people are accepted (Homborstad, Perry, 2011). While the external environment and the nature of the job, are determining factors in job satisfaction, personal characteristics also play an important role in it. People generally have a negative attitude, always from anything that is acting jobs, complain. It does not matter how the job is, they are always looking for an excuse to pay to complain. Age, seniority and experience have significant impact on job satisfaction.

Employees who have age and experience are high, expect more satisfied with their jobs. Also, some characteristic personality traits so that job satisfaction is increased. In addition, it can be concluded that people who have higher levels of Maslow's hierarchy of needs, they will feel more satisfied (Foote et al., 2008).

In order to assess job satisfaction, different opinions by different authors are presented. However, in this study a questionnaire Smith et al (1969) was used to measure job satisfaction and job satisfaction is divided into five components which are:

• Work satisfaction: satisfaction of a job generally refers to tasks and activities that are binding on the staff. Job satisfaction depends entirely on the individual's viewpoint. To what extent do the activities relate to the job, attractive and interesting for them. It may be the same tasks, but the tasks for an attractive person to person, the charm is not enough.

• Boss satisfaction: superiors and directors, which has a range of tasks, organizations of all sizes and all staff in place. At the same time, there are personal feelings towards the knowledge, skills and ability of managers from the staff. Satisfaction of the above is to point out how far the feeling and belief of the directors, is desirable.

• Promotion satisfaction: no one of those always stay on one side, and organization, not satisfied. There is desire to progress and improve in all areas and almost everyone. The desire to better the working environment to be fulfilled, promotion satisfaction among employees will be higher.

• **Satisfaction of partner's** usually high level of employee relations with their colleagues. The quality of this relationship is important and will play an important role in promoting their consent.

• Satisfaction of rights: without doubt one of the main motivations for working is economic security. Satisfaction with salaries meets the financial needs of the job. In addition to downloads, pay equity is also one of the factors affecting the satisfaction of rights.

Empowerment

Empowerment means increasing the skills and knowledge to do their business activities. Also, enabling the use of methods to improve self-esteem, psychological acceptance and motivation in ways prepare employees to assume more difficult tasks, and therefore (Kmieciak et al., 2012). Empowerment means cultivating talents and capabilities of staff so that productivity and creativity at the highest level possible in order to achieve organizational goals and lead to better organizational activities. Theoretically, it enables the transfer of knowledge and skills as well as confidence in the ability of the staff so they can cope with the outcome. In the next step of enabling the delegation of authority and freedom to employees acquired skills put to the disposal which trust in the shadow of the cabinet officers realized (Fernandes, Kim, 2013). Empowerment is a comprehensive issue and many factors can play a role. Empowerment can be achieved with training and educational functions or motivation of staff and space to themselves, seeking to improve their capabilities. Also, empowerment can be achieved by providing knowledge and information sharing or simply by delegating more authority, witnessed the presence of capable staff in our organization. In a comprehensive definition, the process is called empowerment which, by providing conditions, employees to learn and develop skills pushed to the readiness of their way to do their jobs more. Usually this is the difference with education in empowerment; his desire to develop staff skills training courses is much higher than (Pelit et al., 2011).

Components of Empowerment

Spreitzer (1992) four main factors for empowerment, provided later Vaton and Cameron, an additional component added to it, and thus, 5 main factors for empowerment that these five components are:

• **feeling effectiveness: the belief in a particular per**son about his ability to create change in the desired direction

• **Feel meaningful: the significance of the opportunity that people feel they have career goals are important** and valuable

• **Competence: Self**-efficacy or competence is a personal belief that a person feels can be assigned tasks to perform successfully

• Sense of autonomy: autonomy means and systems experience the feeling of choice in the run up to its own activities

• Sense of trust: people capable of sensing the trust. Confident they will be treated fairly and equally. They are confident that even in the hands of the end result of their work will not harm the justice and fairness. Trust relationships between elites and subordinates returns as well as the favorites, competence, openness and trust in others concerned (Hosseini et al., 2012). From another perspective, empowerment is (Hossaini, Arsalan, 2009): Efficacy, Self-Organizing feeling; Personal accept the result, sense of meaning, a sense of trust in others.

In this study, to measure three components of employee empowerment model Kmieciak et al (2012) have been used. Components of this model are:

• **Space and terms of empowerment: the organization, to what extent the conditions needed to anticipate** and provide empowerment. Time, organizational support and financial resources are among these conditions. The managers with continuous monitoring and control, to minimize operator error and by providing in-service training, empowerment pave their path to recovery. Employee participation in goal setting and planning, include effective measures in this regard.

• **R**ecognize and practice of empowerment: This component shows how in enterprise applications; empowerment is taken into consideration. To what extent do the job description of each person specifically identified and empowerment as a principle is taken into consideration. It is in the face of anything, extent reasonably has been foreseen and staff behaviors based on preset patterns can act.

• Decentralization of decision-making: the staff how much decision-making power is delegated to them and can be different in terms of their decisions. It is the autonomy and employees.

If they can about the various causes related to their duties, personally act (Kmieciak et al., 2012).

Hypotheses and research model

As mentioned, the aim of this study was to investigate the relationship between empowerment and job satisfaction of employees. According to the five components of job satisfaction, hypotheses are:

• **There is a significant relationship between employ**ee empowerment and satisfaction of superiors.

• **There is a significant relationship between employee empowerment and satisfaction with salary and** bonuses.

• **There is a significant relationship between employee empowerment and satisfaction of the upgrade.**

• There is a significant relationship between employee empowerment and satisfaction of partners.

• **There is a significant relationship between employee empowerment and job satisfaction.**
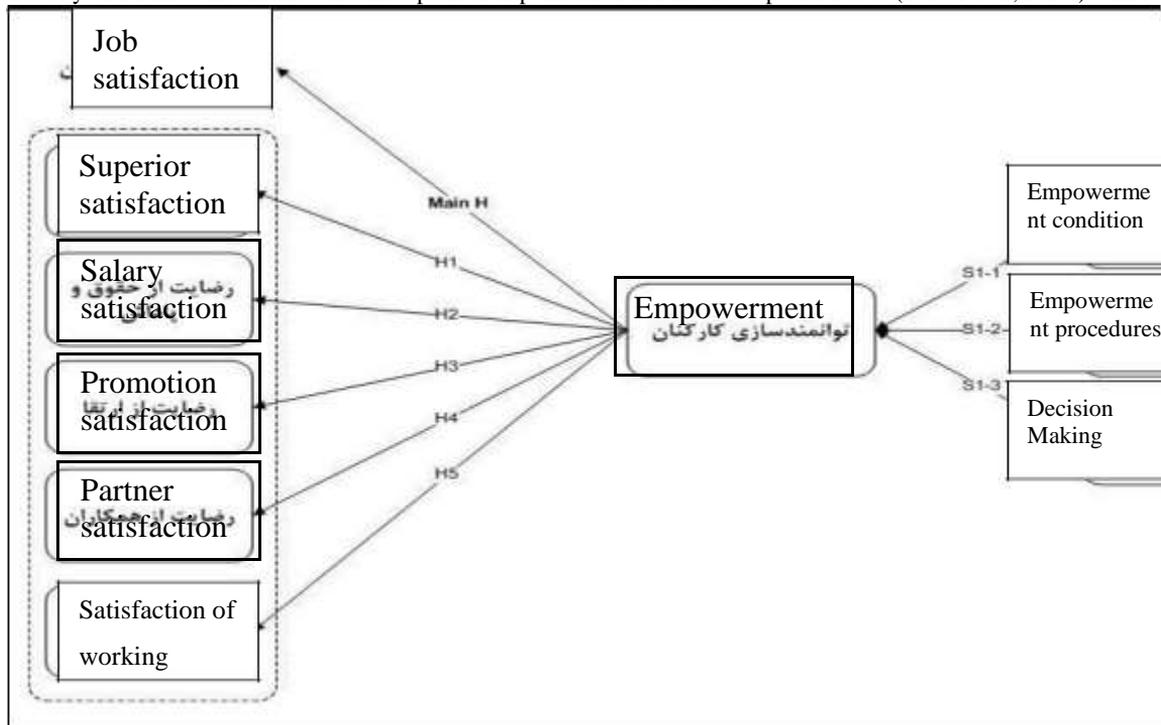
Figure 1: Research model

3. RESEARCH METHOD

This study is applied because it results directly in 15 KHORDAD Hospital of Varamin has been used. The preferred method in this research is descriptive - survey and correlation / regression, respectively. The study population consisted of all employees, nurses and physicians 15 KHORDAD Hospitals, which equates to 125 people. Sampling was also randomly. The sample size was 92 is based on Morgan table in order to increase fault coverage and quality of work, the number of samples from 100 patients were considered. To collect data, the standard questionnaire (Table 1) based on the whole five-level Likert assessed. This questionnaire has been prepared based on Likert scale of five times before its distribution; its validity by experts (professors and two experts) was confirmed. Then, to make sure about the reliability of the questionnaire, 20 copies were distributed among the population. The results of Cronbach's alpha coefficient and confirmed the reliability of the questionnaire are presented in Table 1.

Table 1 Sources questionnaire developed to assess the reliability and normality of variables

	Job satisfaction	Promotion satisfaction	Salary satisfaction	Partner satisfaction	Superior satisfaction	Satisfaction of conditions	Empowerment
Reference	Smith et al (1969)						Kmieciak et al (2012)
Cronbach's alpha	0.759	0.784	0.799	0.730	0.863	0.871	0.802
Kolmogorov-Smirnov statistic	0.740	1.102	1.196	0.677	0.800	0.984	0.584

	Job satisfaction	Promotion satisfaction	Salary satisfaction	Partner satisfaction	Superior satisfaction	Satisfaction of conditions	Empowerment
Sig	0.644	0.176	0.114	0.750	0.544	0.287	0.884

Source: Author

The results show that the distribution of data in all cases, normal because according to the results, the significance level of 0.05 significance level all variables Sig more. The Cronbach's alpha coefficient values according to number 0.7 standard are approved.

4. DATA ANALYSIS

For data analysis, linear regression method was used. According to the fifth hypothesis, deliver 5 linear equations is necessary.

Table 2. Linear regression analysis and hypothesis test

Regression equation	dependent variable	Variables	Non-standardized correlation		Standardized correlation	T value	sig
			Beta value	Error	Beta value		
First	Employee Empowerment	constant	1.s524	0.324		4.758	0.000
		Superior satisfaction	0.274	0.236	0.269	1.125	0.098
Second	Employee Empowerment	constant	2.347	0.239		9.852	0.000
		Salary satisfaction	0.269	0.258	0.274	1.041	0.124
Third	Employee Empowerment	constant	1.916	0.706		2.713	0.008
		Promotion satisfaction	0.434	0.201	0.215	2.155	0.034
		Testing linearity hypothesis				Sig=034	F=644.4
Fourth	Employee Empowerment	constant	1.665	0.508		3.274	0.001
		Employee satisfaction	0.405	0.145	0.276	2.797	0.005
		Testing linearity hypothesis				Sig=006	F=823.7
Fifth	Employee Empowerment	constant	1.828	0.415		4.4	0.000
		Satisfaction of working conditions	0.488	0.118	0.387	4.117	0.000
		Testing linearity hypothesis				Sig=000	F=950.16

Source: Author

In the first and second equations, regression, beta coefficients calculated for superior satisfaction and the satisfaction of rights was observed. 0.098 And 0.124, respectively sig value that is greater than 0.05.

 Thus, the first and second hypothesis is not confirmed. In the third, fourth and fifth equations, and sig t values in any equation, indicating the independent variable and dependent variable significantly affected or not.

The sig in all cases, less than 0.05 show that beta coefficient calculated is significant. So hypothesis approved and strongly influenced by the amount of beta, is described. It also calculates the amount of F ANOVA and sig value is smaller than 0.05 and default imply endorsement linearity relationship between the variables in the regression equation.

5. RESULTS

The results show that there is no significant relationship between empowerment and satisfaction of superiors. In fact, the staff of all sizes improves their skills and knowledge, communication with superiors and had their heads and employees, empowering step to improve the satisfaction of his superiors, did not say. The results showed that empowerment is not a significant relationship with the consent of salaries and bonuses. It seems with the skills and knowledge of employees, their expectations of the organization goes up and they expect to receive salaries and bonuses. So, with the consent of the rights and empowerment is not rewarded. In the third hypothesis, the results showed that empowerment, to improve satisfaction leads upgrading.

It seems to improve the level of skills and knowledge, increasing the chance of promotion and staff to find a higher ranks and positions. Therefore, it empowers the poor level of satisfaction with the effective promotion. This relationship is weak because of the possibility of upgrading the hospital, weak and slightly improved every year the number of employees finds therefore, empowering the weak impact on improving the satisfaction of the upgrade. Satisfaction colleagues also significantly empowerment, has been affected.

It seems that the more capable employees build better relationships with their colleagues established and better able to interact with your colleagues and even for team work. As a result, enable and enhance employee skills, satisfaction of partners has led to the increase. It also seems to be one of the skills in the field of empowerment of organizations are concerned, communication skills as a result, employees spend training can better communicate with their colleagues. In addition, the results showed that one of the most important results of empowerment, satisfaction of the conditions of work. In fact, improving skills, work organization more attractive and the perception of working conditions, particularly the working environment can be improved. Employee empowerment, better understanding of the environment and more positive feedback received from the organization. As a result of working conditions, it will be more satisfied. It seems there is a significant relationship between job satisfaction and sense of achievement. If employees feel successful and competent in their jobs, it will be more satisfied with their working conditions. It is also one of the main factors of satisfaction with working conditions; the feel valued which directly affect people's capabilities. The ability to allow people to work more and do it more versatile, can play a role in them is satisfied.

5.1. SUGGESTION

• **The promotion of programs, empowerment** programs is a serious necessity

• **One of the factors affecting individuals' perception of working conditions, empowerment. So it is not** necessary to enhance staff satisfaction, it is sure to increase their salaries and bonuses. Alternative payment methods such as empowerment can improve employee satisfaction and feel.

• **It is also recommended in order to maintain and increase staff loyalty, empower employees to be** encouraged and dynamism and progress, the agenda is easy resources department.

• **Schemes to im**prove the capabilities and clinical staff and so, the field for the optimal selection of individuals to provide higher positions.

• **Training and empowerment, communication and teamwork will pay more attention to issues to** empowerment in areas such as communications improved

• **Periodically, especially in units that conflict among employees is high, training and empowerment to be** held

• **Continually encourage employees to improve their skills and knowledge as one of the solutions to** improve relations between employees is strongly recommended

REFERENCES

Amin, B., Ali, A., Salehpour, M. (2007). the relationship between job satisfaction and organizational commitment to employee education; Journal of Shahed University, the fourteenth year, New Era No 26; pp 38-31

Bigliardi, B. Dorimo, A. Galati, F. (2012). The impact of organizational culture on the job satisfaction of knowledge workers. VINE: The journal of information and knowledge management systems. Vol. 42 No. 1, pp. 36-51

Carrier, J; Bourque, C. (2009). The effects of organizational communication on job satisfaction and organizational commitment in a land ambulance service and the mediating role of communication satisfaction; Career Development International; Vol. 14 No. 1, pp. 29-49

Foote, D., Seipel, S. (2008). Employee commitment and organizational policies; Management Decision; Vol. 43 No. 2, pp. 203-219

Gunlu, E., Aksarayli, M., Percin, N. (2010). Job satisfaction and organizational commitment of hotel managers in Turkey; International Journal of Contemporary Hospitality Management; Vol. 22 No. 5, pp. 693-717

Homborsted, S., Perry, C. (2011). Employee empowerment, job satisfaction and

Hosseini, E., Hosseini, R. (2012). Employee empowerment is a step towards the promotion and development of entrepreneurship in organizations. First International Conference on entrepreneurship and business management knowledge. November 2012

Jain, A.,Giga, S., Cooper, C. (2009). Employee wellbeing, control and organizational commitment; Leadership & Organization Development Journal; Vol. 30 No. 3, pp. 256-273

Jonason , P. Wee, S. Li, N. (2015) . Competition, autonomy, and prestige: Mechanisms through which the Dark Triad predict job satisfaction. Personality and Individual Differences 72. PP 112–116

Josuh, M., Simun, M.,Chong, S. (2011) ; Expectation gaps, job satisfaction, and organizational **commitment of fresh graduates ; Education þ Training; Vol. 53 No. 6, pp. 515**-530

Kmieciak, R. Michna, A. Mecynksa, A. (2012). Innovativeness, empowerment and IT capability: evidence from SMEs. Industrial Management & Data Systems.Vol. 112 No. 5, pp. 707-728

Lim, L. Ling, F. (2012). Human resource practices of contractors that lead to job satisfaction of professional staff. Engineering, Construction and Architectural Management. Vol. 19 No. 1, pp. 101-118

Limbu, Y. Jayachandran, C. Babin, B. (2014). Does information and communication technology improve job satisfaction? The moderating role of sales technology orientation. Industrial Marketing Management 43. PP 1236–1245

Maamari, B. Chaanine, J. (2013). Job satisfaction of the modern information-system-using nurse in Lebanon. Journal of Technology Management in China. Vol. 8 No. 2, pp. 120-136

Mirkamali, M., Narenji, S. (2008). The relationship between quality of work life and job satisfaction among faculty members of Tehran University and Sharif; Journal of Research and Planning in Higher Education, Issue 48, pp. 71-101

Mollahosseini, Ali. Arslan, Ehsan. (2009). The Relationship between empowerment and organizational effectiveness in Rafsanjan city departments and government agencies. Development and Investment Journal. Issue 4. Pages 117-140

Organizational commitment; An in-depth empirical investigation; Chinese Management Studies ; Vol. 5 No. 3, ; pp. 325-344

Pelit, E. Ozturk, Y. Arslanturk, Y. (2011). The effects of employee empowerment on employee job satisfaction. International Journal of Contemporary Hospitality Management. Vol. 23 No. 6, pp. 784-802

Saleem, H. (2015). The impact of leadership styles on job satisfaction and mediating role of perceived organizational politics. Social and Behavioral Sciences 172 (2015) 563 – 569

Schuler, R., Jackson, S. **(2001). HR Issues and activities in mergers and acquisitions," European** Management Journal. 19(3), 239-253.

Smith, P.C., Kendall, L. M., Hulin, C.L. (1969), The Measurement of Satisfaction in Work and Retirement: A Strategy for the Study of Attitudes, Rand McNally, Chicago, IL

Spreitzer, G**., M. (1992). Social structural characteristics of psychological empowerment". Academy** of management Journal 39(2), 483-504.

Spreitzer, G., M. (1995). Psychological empowerment in the workplace: dimensions, measurement, **and validation". The Academy of management Journal. 38 (5),1442**-146

ORIGINAL RESEARCH PAPER

INVESTIGATING THE EFFECT OF KNOWLEDGE-BASED LEADERSHIP ON INNOVATION PERFORMANCE WITH MEDIATING ROLE OF KNOWLEDGE MANAGEMENT (CASE STUDY: MTN IRANCELL COMPANY)

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Abstract

Today, knowledge becomes as a decisive factor in the success and competitiveness of organizations and knowledge management as one of the last organizational issues has been raised in management science. Business organizations that field based solely on organizational obvious advantages, such as money, machinery and equipment and so should not be able to achieve a competitive advantage in the knowledge-based economy. The study aimed to investigating the effect of knowledge-based leader on innovation performance with mediating role of knowledge management in MTN Iran cell Company performed. Software to analyze the data in this study is smart pls. The results showed knowledge-based leadership has a positive and significant impact on all components of knowledge management. As well as knowledge transfer and application of knowledge has a significant positive impact on innovation performance.

JEL classification: D83

Keywords: *Knowledge management, Innovation performance, MTN*

1. INTRODUCTION

Knowledge-based business environment, organizations need a method and system that intangible assets such as knowledge and competencies of people, innovation, customer communication, organizational culture, systems and processes, organizational structure, and so the population. Understand and exploit these intangible resources vital for organizations to maintain their competitive advantage. In the knowledge-based economy the most successful organizations of their intangible assets better and faster use. Studies have shown that unlike the decreasing returns of traditional resources (eg, money, land, machinery etc.), organizational intangible assets are really a resource to improve business performance. It is noteworthy that the long-term market value of other intangible factors in the process of value creation is diagnosed. The size of the "hidden value" is increasingly changing (Rezaeaian et al., 2009). Innovation has a historical background is very wide, so that no historian has been able to estimate the human innovation. Occasionally say: The inventions of man, the things which were made of stone and have been used in hunting animals that also is nothing more than a guess wisely. However, in many contexts, the first human invention of the wheel is remembered, but it should be noted that the wheel has never been the first human innovation and only because of the importance of being radical or in other words the wheel in the direction of human growth which is known as the first

human invention (Tallebi, 2006). In discussing the importance of innovation can be said that all the improvements and enhancements human reason and discover new ways and new innovation in order to get things done. Scientific advances can be easily found by studying the history of the great inventors like Bell, Morse, Kellto have with their innovations to change the course of human life. Innovation means creating something new is extracted. Halt innovation came in the form of a scientific concept. Halt term innovation in a broad sense as a process for using knowledge or about to develop or introduce something new and useful explains so in a general definition of innovation can be practical as any new idea about an organization or a defined industry or a nation or in the world (Hussaini, 1999). Operation and innovation as the successful implementation of new ideas defined. In the eyes of some researchers, innovation refers to changes and the creation and commercialization of new knowledge. In addition, innovation means introducing new ways of doing work during which individuals and organizations to change their environment. Product and service innovations range from level to level and even society organizations has expanded (Amabile, 1998).

2. THEORETICAL LITERATURE

Definitions of Knowledge Management

Knowledge management is a concept that has defined much. Some of the knowledge management process related stress and its impact on their definitions are included. Nickel King is one of the knowledge management processes of creating; organizing, promoting and ensuring understanding sees the information needed to perform a task (King, 1999). Stamp knowledge management application rates and put more attention to knowledge management, is considered an active role. His knowledge management to provide the knowledge needed in places and the time required for a person in need to define it. He also believes that the best thing is not having any knowledge about a particular topic, but knowing where and how is the access to knowledge (Stamp, 1999). Knowledge management is a process through which organizations, generates wealth from its intellectual property (Bukowitz,Williams, 1999). Knowledge management as a process, evaluation, representation, distribution and application of knowledge introduced (Bahatt, 2001). Knowledge management and structured to create a planning perspective, to share, store and use knowledge as an organizational asset for promoting empowerment, speed and effectiveness of the organization in providing products or services to clients (Plessis, 2008). But consider the study's definition, the definition of Nonaka & Takeuchi (1995), which is the most widely used definitions. They believe in organizations, two types of knowledge: tacit. First, Polanyi (1996), the explicit knowledge and implicit distinction and later Nonaka & Takeuchi acknowledged point that often in organizations and companies shall be deposited into oblivion, issues such as insight, intuition, thought, felt unconscious, values, ideas, metaphors and comparisons (Nonaka, 1994).

Benefits of Knowledge Management

1) Save money and perform better, more effective processes are done and the need to re-destroy the way of doing the job. (Liu et al., 2013)

2) New opportunities, new markets and new opportunities are identified (Satyendra, Andrew, 2013)

3) Change and Innovation, an organization can identify changes and be shown the right response, on time change (Atapattu et al., 2014)

4) Better use of human resources, the operation provides efficient than their human resources. (Liu et al., 2013)

5) Speed of process, knowledge management enables organizations to reduce cycle time, shorten processes; the resulting delays remove recreated solutions. In addition, detailed knowledge of processes enables employees to optimize their processes. (Inkinen et al., 2015)

6) Continued, particularly in industries and organizations that have a high staff exchange knowledge management, construction and work effectiveness. Knowledge from experienced staff transferred to new staff, and thus to preserve the continuity of customer knowledge bases, for example, represent the new computing enables the customer to quickly examine and work from where delegates had left the previous calculation, begin (Satyendra, Andrew, 2013)

The role of knowledge management in organizations

Today, the emphasis on the role of knowledge management literature and economics in abundance as a vital resource maintain our competitiveness and profitability (Nonaka, 1994). Knowledge management helps organizations to have effective knowledge process. Choose market organizations should benefit from existing knowledge and new knowledge creation and knowledge management in this matter has great help to them. But companies should consider and establishing a system organized according to the different requirements of your organization requires special preparation and if you do not provide it, make it successful is not possible (Salvati, Haghnazar, 2009). Knowledge management in the new era does not confine only to students and documented code, many world organizations and companies rely on tacit knowledge and its obvious, promote competitive position and increase their effectiveness and efficiency. In order to achieve these objectives, knowledge management seeks to capture knowledge, wisdom and experience of the staff and also implements value-added, recovery and maintenance of the assets of the organization. Undoubtedly today, knowledge is the most important competitive tool in the present and future markets. Although many organizations have already invested in the development of knowledge at different levels have been successful, but many organizations have also failed. Lack of proper mechanism to evaluate and implement knowledge management, this type of investment managers in mind only has made an additional cost (Rezaeian et al., 2009). Today, the creation and application of knowledge for competitiveness and survival of organizations and industries is essential. Other sources of knowledge cannot simply be stored or be acquired; it cannot simply systematically manage and used. So far, in most organizations, including the various sectors of the oil industry, IT had the highest share in knowledge management, so that behind all activities of knowledge management, information technology has been impacted. But it should be noted that knowledge management is not only the component of information processing technology and changes in decision-making processes, organizational structure and how to do is manage the affairs of other components. Organized by fundamentally different knowledge can be organized according to traditional competitive advantages (Badriazarin et al., 2013).

Definitions and importance of innovation

Innovation has a historical background is very wide, so that no historian has been able to estimate the human innovation. Occasionally say: The inventions of man, the things which were made of stone and have been used in hunting animals it is also nothing more than a guess wisely. Although in many texts, the wheel is remembered as the first human invention, but it should be noted that the wheel has never been the first human innovation and only because of the importance or in other words the wheel in the direction of radical human growth which is known as the first human invention (Tallebi, 2006). In discussing the importance of innovation can be said that all progress human incentive for innovation and explore new ways to get things done. Scientific advances can be easily found by studying the history of the great inventors like Bell, Morse, Kelto have... with their innovations to change the course of human life. Innovation means creating something new is extracted. Holt innovation came in the form of a scientific concept. Holt term innovation in a broad sense as a process for using knowledge or about to develop or introduce something new and useful explains so in a general definition of innovation can be practical as any new idea about an organization or an industry or a nation or a world defined (Hussaini, 1999). Operation and innovation as the successful implementation of new ideas defined. In the eyes of some researchers, innovation refers to changes and the creation and commercialization of new knowledge. In addition, innovation means introducing new ways of doing work during which individuals and organizations to change their environment (Porter, Ketels, 2003). Product and service innovations range from level to level and even society organizations have expanded. So creative person may not be innovative. It can have new ideas but lack the ability to offer or sell them. So often creative innovator, but

all creative people are not necessarily innovative. In a larger sense of creativity to produce new and useful ideas and innovation is the successful implementation of these ideas (Amabile, 1998).

Innovations include:

- The ability to manage creative knowledge in a way that meets market demand and other social needs.

- Purposeful and organized search for changes (systematic innovation).

- The process of gathering any new and useful ideas to solve problems and the formation of ideas, accept and implement new ideas will be included in the processes and products and services.

- The creation and implementation of new ideas (Abdi, 2008).

Creativity and innovation are the most important factor associated with the development of communities and factors associated with these two components will help to foster creativity and innovation and prosperity. This research aims to identify factors related to the achievement or creativity and innovation among young people

3. RESEARCH METHODOLOGY

This research is descriptive research applied research and in terms of collecting data from a variety of descriptive research, survey research. The population was Iran cell research center in Tehran.

The study population consisted of all employees, experts and managers of MTN Irancell Company in Tehran. Also according to the formula sample of 500 community Corker and volume statistics, the number is estimated.

Research Conceptual Model
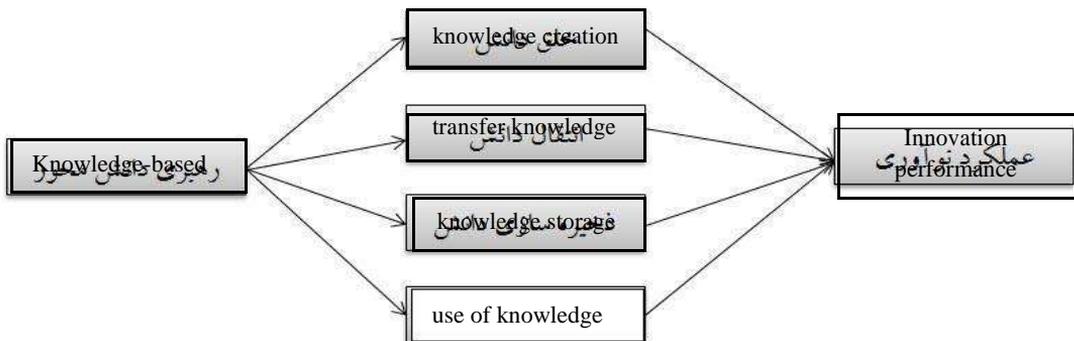
Research Hypothesis

Hypothesis 1: Knowledge-based leadership has positive and significant impact on knowledge creation.

Hypothesis 2: Knowledge-based leadership has positive and significant impact on knowledge transfer.

Hypothesis 3: Knowledge-based leadership has positive and significant impact on knowledge storage.

Hypothesis 4: Knowledge-based leadership has positive and significant impact on the use of knowledge.

Hypothesis 5: Knowledge creation has positive and significant impact on innovation performance.

Hypothesis 6: Transfer of knowledge has positive and significant impact on innovation performance.

Hypothesis 7: Knowledge storage has positive and significant impact on innovation performance.

Hypothesis 8: Use of knowledge has positive and significant impact on innovation performance.

4. DATA ANALYSIS AND RESULTS

In this section we discuss the evaluation of the measurement model and structural model study and to examine hypotheses and the data in this study was conducted using the software is smart pls.

Evaluation Measures

Evaluation of the measurement model includes two main parts, the reliability of variables that can be done through Cronbach's alpha. According to the results table top 0.7 of all Cronbach's alpha variables are all variables considered thus have good reliability. If the average variance extracted (AVE) for each construct is more than 5.0, convergent validity is confirmed model and thus each structure represents more than half of your dispersions. Based on the results obtained in Table 1 all values are greater than 0.5, the convergent validity of the measurement model also seems to confirm.
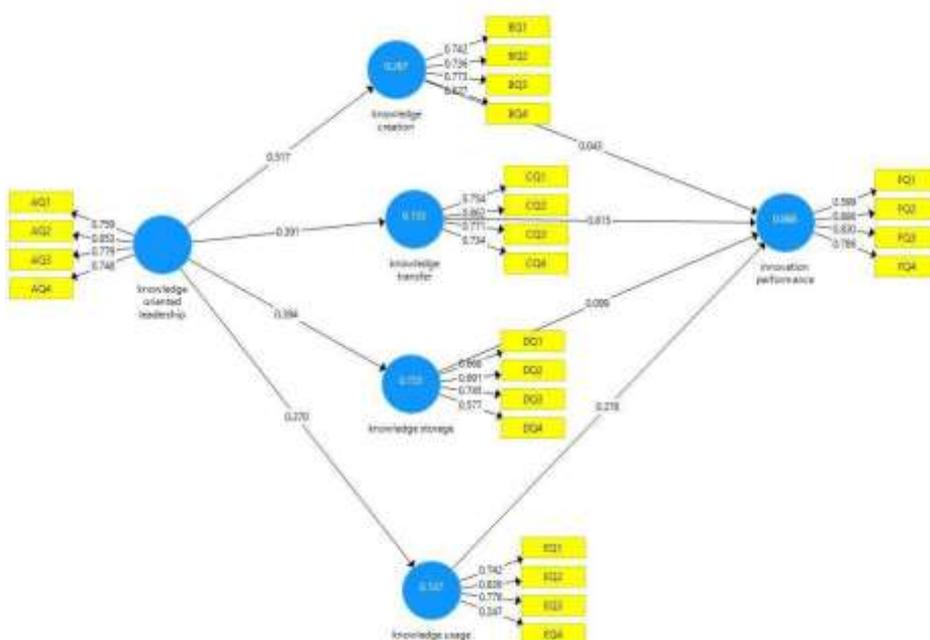
Figure 1. Shows the model in standard mode

Table 1 shows variable in the study, the statements of each of the variables, the load factor of each of the items (validity) and reliability using Cronbach's alpha and mean-variance. It should be noted that the fourth question of knowledge due to lower variable load factor of 0.5 is eliminated.

Table 1. Variables, statements, load factor (validity), the reliability of the study and the average variance

Variable	Questions	Load factor	Cronbach's alpha	Average variance
Knowledge-based leadership	AQ1	0.759	0.794	0.866
	AQ2	0.853		
	AQ3	0.779		
	AQ4	0.748		
Knowledge creation	BQ1	0.742	0.743	0.812
	BQ2	0.736		
	BQ3	0.773		

Variable	Questions	Load factor	Cronbach's alpha	Average variance
	BQ4	0.627		
Transfer of knowledge	CQ1	0.754	0.787	0.862
	CQ2	0.862		
	CQ3	0.771		
	CQ4	0.734		
Storage of knowledge	DQ1	0.668	0.706	0.761
	DQ2	0.691		
	DQ3	0.745		
	DQ4	50.77		
Use of knowledge	EQ1	0.742	0.781	0.743
	EQ2	0.836		
	EQ3	0.778		
Innovation performance	FQ1	0.599	0.780	0.861
	FQ2	0.886		
	FQ3	0.830		
	GQ2	0.786		

Source: Author

Evaluation of structural research model

BT is using software algorithms to test the hypothesis dealt with SMART PLS. In Table 2, the results of the structural model are shown. Results Table III shows that the hypothesis of one, two, three, four, six and eight were approved and disapproved the assumption of five and seven.

Figure 2. The model in a significant

Table 2 shows the values t, the coefficient B, and thereby prove or disprove the hypothesis.

Table 2. The values t, the coefficient B, coefficient of determination and the results prove or disprove hypotheses.

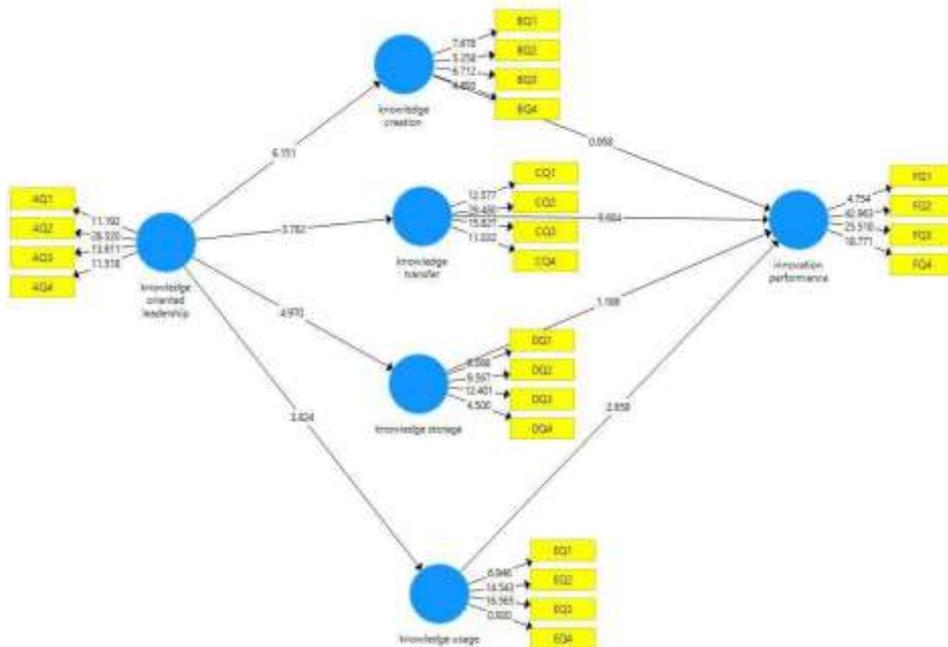| Hypothesis	T-statistic	Path coefficient B	Result
Hypothesis 1: Knowledge-based leadership has positive and significant impact on knowledge creation.	6.15	0.517	Confirmed
Hypothesis 2: Knowledge-based leadership has positive and significant impact on knowledge transfer.	3.78	0.391	Confirmed
Hypothesis 3: Knowledge-based leadership has positive and significant impact on knowledge storage.	4.97	0.394	Confirmed
Hypothesis 4: Knowledge-based leadership has positive and significant impact on the use of knowledge.	3.82	0.730	Confirmed
Hypothesis 5: Knowledge creation has positive and significant impact on innovation performance.	0.958	0.043	Rejected
Hypothesis 6: Transfer of knowledge has positive and significant impact on innovation performance.	9.68	0.615	Confirmed
Hypothesis 7: Knowledge storage has positive and significant impact on innovation performance.	1.18	0.099	Rejected
Hypothesis 8: Use of knowledge has positive and significant impact on innovation performance.	2.65	0.276	Confirmed

Source: Author

5. CONCLUSIONS

As mentioned in the analysis according to Table 2, the structural model and study the effects of knowledge creation on knowledge-based leadership with path factor 0.517 and statistics 6.15 t was approved. Hypothesis knowledge-based leadership has a significant positive impact on knowledge transfer with path factor 0.391 and statistics 3.78 t was approved. Hypothesis knowledge-based leadership has a significant positive impact on storage of knowledge with path factor 0.394 and statistics 4.97 t was approved. Hypothesis knowledge-based leadership has a significant positive impact on use of knowledge with path factor 0.730 and statistics 3.82 t was approved. Hypothesis Knowledge creation has a significant positive impact on innovation performance with path factor 0.043 and statistics 0.958 t was approved. Hypothesis transfer of knowledge has a significant positive impact on innovation performance with path factor 0.615 and statistics 9.68 t was approved. Hypothesis knowledge storage has a significant positive impact on innovation performance with path factor 0.099 and statistics 1.18 t was approved. And hypothesis use of knowledge has a significant positive impact on innovation performance with path factor 0.276 and statistics 2.56 t was approved.

5.1. PRACTICAL SUGGESTIONS

According to the results of this research offered the following suggestions:

- Knowledge-based leadership in order to influence the behavior of senior **executive's** knowledge management initiatives proposed and leadership primarily in the behavior and statements of their commitment to showcase and demonstrate. In fact, managers and leaders must work to ensure their organizations are models of good practice for staff. The level of their commitment, under the

established norms and the norms of the organization to the lower levels of the organization is transmitted, thus, if managers are demanding increased use of knowledge management at MTN Iran cell Company first you need to model appropriate behavior for their employees.

- Adequate space to implement new theories and ideas must exist in Iran cell

- MTN company of knowledge acquired its people to organizational objectives

- Will promote teamwork in Iran cell

- The continued regular meetings and exchange of information between authorities and staff

- MTN inter-organizational networks to share information and exchange to be used properly.

- MTN structure should not be prevented from separating and distancing of people from each other.

- One of the keys to success in any arena managers, communication and sincere cooperation with its employees.

They should create an atmosphere of trust and confidence in the organization, in such a way that their confidence in him and his staff as their patron. Despite these conditions, highly motivated employees work to improve their organization's performance.

- The mechanisms and procedures for the use and application of knowledge within the organization are created to enhance the performance of innovation

- Creativity and new thinking in the bank is valuable.

- MTN employees to transfer their professional knowledge to less experienced employees and newcomers should be encouraged.

To be effective it must also promote important aspects of financial and non-financial aspects.

- Regular and transparent information to support decision-making be organized.

- At Christmas spirit, collaboration and improvement is emphasized

5.2. RECOMMENDATIONS FOR FUTURE RESEARCH

This research has as its management and territory in the country's unique and pioneering features and can by paying more fertile ground for future research to provide researchers interested in the field of development. So is this the researcher wants, recommendations and proposals for future research that will be presented as follows:

- It suggested the impact of knowledge management initiatives in future research on organizational variables Iran cell such as productivity, efficiency, effectiveness and discuss.

- Recommended for multi-criteria decision techniques for the evaluation of knowledge management initiatives in Corporate Administration be used.

- It is suggested that future research to examine the impact of dynamic system simulation methods

REFERENCES

Abdi, B (2008). Innovation and levels, methods and processes, Military Management Journal, Issue 32, Winter, pp. 90-59.

Amabile, T.M. (1998). How to kill creativity. Harvard Business Review 76 (5): 77-87.

Atapattu, A. Jayakody, J. (2014). The interaction effect of organizational practices and employee values on knowledge management (KM) success", Journal of Knowledge Management, Vol. 18. No 2, pp.307 - 328

Badriazarin, Y., Seyyed A., Mir, H., Imanpour, A. (2013). "Regression analysis of the relationship between knowledge and practice of human resources management components", Sport Management, 15, 190-175.

Bhatt, G.D. (2001). **"Knowledge management in organizations: e**xamining the interaction between **technologies, techniques and people". Journal of knowledge** management, Vol.5, No.1, pp. 68-75

Bukowitz, W.R., Williams, R.L. (1999). The Knowledge Management Fieldbook. Harlow: Pearson Education

Hussaini, Khodad. (1999). Innovation in Organizations: concept, types and processes. Journal of Economics and Management (42).   P. 48

Inkinen, H. Kianto, A. Vanhala, M. (2015). Kowledge management practices and innovation performance in Finland", Baltic Journal of Management, Vol. 10. No 4, pp.432 – 455

King, N. (1999). **"Knowledge management: applying manufacturing theory in knowledge based industries". Management** accounting. Vol.77, No.3.

Liu, S. Leat, M. Moizer, J. Megicks, P. Kasturiratne, D. (2013). A decision-focused knowledge management framework to support collaborative decision making for lean supply chain management. International Journal of Production Research. Vol 5. No 7. Pp. 2123-2137

Nonaka, I.,Takeuchi, H. (1995). **"The knowledge creating company, New York": Oxford Univer**sity Press, p.181.

Nonaka,I. (1994). A Dynamic theory of organizational knowledge creation. Organizational science.: pp. 14-37.

Plessis,M.d.,(2008)."What bars organiations from managing knowledge successfully", International Journal of Information Management, 28(1), pp. 285- 292.

Porter, M.E., Ketels, C.H.M. (2003). "UK Competitiveness: Moving to the next stage", DTI Economics Paper No.3, London, DTI.

Rezaeian, A.A., Ali,M.T R. (2009). Examining patterns of knowledge management strategy and the strategy of knowledge in organizations, police Human Development Magazine, Issue 27, 28-17

Salavati, A., Hagh N., F. (2009). Analysis of factors affecting the establishment of a knowledge management system in the administrative units of National Iranian Oil Company, beyond the management, Volume 3, Number 10, 45-32.

Satyendra, C., Andrew, D. (2013). Role of knowledge infrastructure capabilities in knowledge management. Journal of Knowledge Management. Vol 17. No 3. pp 435-453

Stamps, D. (1999). **"Is the knowledge management a fad"**. Training. Vol.36, No.3, p. 37.

Talebi, Kambiz (2006). Incremental innovation versus radical innovation, management culture magazine, Issue XIII, pp, 130-113 summer

ORIGINAL RESEARCH PAPER

MEASUREMENT OF THE EFFECT OF SPIRITUAL INTELLIGENCE ON THE EXCITEMENT OF EMPLOYEES OF HOSPITALS IN AMOL CITY (MAZANDARAN UNIVERSITY OF MEDICAL SCIENCES)

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Abstract

Studies have shown that encouraging spirituality in the workplace can lead to many benefits, including employee eagerness. Therefore, the purpose of this study was to investigate the effect of spiritual intelligence on the enthusiasm of employees in the hospitals of Amol city, therefore, the statistical population of the present study included the staff of hospitals in Amol city (Imam Reza Hospitals, Imam Ali Hospital, 17 Shahrivar and Imam Khomeini) which total number of employees in these hospitals is 1,663. According to the Morgan table, 311 of these individuals were selected as the sample size needed by simple sampling method. In this study, library studies (Review of books, articles and scientific journals) and also researcher made questionnaire with five options of Likert scale have been used as the main tool for data collection. In this research, Pearson correlation test was used for analysis. Also, the research model was analyzed using the regression model method. The results of this study showed that there is a positive and meaningful relationship between all aspects of spiritual intelligence (existential thinking, states of consciousness, transcendental consciousness and personal meaning), and the enthusiasm for employees and in the regression model. The desire to work according to the dimensions of spiritual intelligence, all dimensions of spiritual intelligence (existential thinking, states of consciousness, transcendental consciousness and personal meaning) have a positive effect on the eagerness of the staff, especially the "personal meaning" with a regression coefficient (0.730) has the greatest impact is on the enthusiasm of the employees of Amol city hospitals.

JEL classification: M12

Keywords: *spiritual intelligence, employee eagerness, employees of Amol city hospitals*

1. INTRODUCTION

In today's organizations, the discussion of spirituality in the workplace and the work environment has found many supporters. Even the theoretical commentator in the context of organizational spirituality, has raised the term of spiritual movement and believes that organizations that have a rational system are now creating places for the spiritual dimension of the organization.

Since the end of the last century, in the nineties of the twentieth century, a kind of reunification between the exterior and the inner life has been developing. One of the major areas where this integration has been posed, is the business environment is organizations (Neal and Biberman, 2014). Doayi (2007) believes that nowadays many of the things that were previously categorized in the private realm, are imposing themselves on the realm of the public. Entering concepts like ethics, truth, belief in God or supreme Leader, integrity, conscience, conscience, passage, trust, forgiveness, kindness, emotion, consideration, meaning in Work, solidarity with colleagues, encouragement of partners, peace and coordination, friendship and etc. to the researches and management and business activities all indicate the emergence of the paradigm of spirituality. The paradigm of spirituality, which is taken from quantum physics, cybernetics, chaos theory and cognitive sciences, in fact it is a reaction to the modern and modern

mechanistic paradigm (Aktan, 2011). Even Wagner-Marsh and Conley (2008) have predicted with certainty that this new paradigm will be the fourth wave in the following of third wave from Alvin Toffler.

There is no doubt that fundamental changes are taking place in the workplace, and spirituality is one of the fundamental issues. There are many beneficial reasons for examining the relationship between spirituality and management. One of them is the effect that spirituality has on managerial behavior, and the other is the perspective of working with meaning.

Considering that spirituality and spiritual intelligence play a major role in creating values and views, the review of this concept will be very essential and vital in business literature, because people enter the workplace with something more than their own mind and body, they bring their own unique spirit to the work environment, thus making a major contribution to the effectiveness and entrepreneurship of the organization. Therefore, organizations are changing alongside the changing personality of individuals. Neal and Biberman (2014) state that life without meaning becomes meaningless, but the soulless work, ruin and kill the life. Therefore, people are keen to experience spirituality not only in personal matters, but also in work and other levels of life.

Studies show that encouraging spirituality in the workplace can lead to many benefits. One of the areas of management that can have a great deal of spirituality, is the management of organizational change that its purpose is to help change the behavior of individuals in an organization and thus achieve functional goals in an effective and fast way. The traditional methods of changing individuals and organizational culture are focused on aligning organizational structures and systems with desirable behaviors. This method requires extraordinary endeavor. We can call this method change from outside to inside, because in this way, the change begins first with elements outside people. In return spiritual knowledge suggests that changes can be managed from the inside out. In fact, people who experience spiritual life can develop themselves and organize themselves in a manner consistent with organizational goals (Lakshman, 2009).

From the comments it can be concluded that spirituality is a sustainable source for organizations which can help them in times of turbulence and chaos and resolve the contradiction of the organization's order and irregularity and without any exclusion, apply them appropriately, because organizations need constant traffic between the two modes of change and stability for continuous activity in different areas.

In fact, the spirituality paradigm is rebuilding the knowledge of management. On the other hand, the concept of passion for work is as a positive organizational behavior which is in the face of burnout. Schaufeli, et al. (2006) believe that job craving refers to penetrating, sustainable, and subjective affective work which is characterized by a feeling of strength, commitment and attraction. Using the passion to work can prevent the loss of organizational strengths and capital and also raise the level of job satisfaction. If the choice in the organization take place based on the amount of passion for work, their cooperation will increase and they can participate with peace of mind in different and important organizational affairs, the process of producing goods or providing services in different organizations also will increase and the facilities of organizations will be used more favorably and in general, will cause increasing the material and spiritual gain for such organizations (Rahimi et al., 2012).

So, from the sum of these theories, can conclude that there is a positive relationship between spiritual intelligence and employee eagerness that by determining the main factors influencing spiritual intelligence on the passion for work can be try in the direction of their development and growth in the organization and bring valuable results for the organization on the one hand and for the employees on the other.

2. THEORETICAL EXPRESSION OF RESEARCH

• **Spiritual Intelligence**

Gardner knows intelligence as a set of abilities that are used to solve a problem and create new products. In general, intelligence generally causes the individual to adapt to the environment and provides ways to

deal with problems. Also, the ability to recognize the problem, provide a solution to the problem and discover efficient problem-solving methods are among the features of intelligent people.

Thinkers have provided various categories of intelligence based on Gardner's Definition of Intelligence. In one of these categories, human intelligence is divided into three categories: Intelligence quantity, IQ, Emotional quantity or EQ, and Spiritual quantity or SQ. In fact, the concept of spiritual intelligence was first introduced in 1996 by Stevens and then expanded by Ammon in 1999. Emmons expresses spiritual intelligence as an adaptive application of spiritual intelligence to solve daily problems and the process of achieving the goal.

Volman states that spiritual intelligence is the capacity of man to ask questions about the meaning of life, and at the same time the experience of the interconnectedness between each of us and the world which we live in. According to Liao (2012), man is through spiritual intelligence pays attention to problems, meaning, value and solving them and uses it to put his actions and lives in a context that is richer and wider in meaning. We can help with that one method or one way of life is more meaningful than the other methods and ways. It should be noted that spiritual intelligence is the essential foundation for the effective operation of rational intelligence and emotional intelligence. Spiritual intelligence is our fundamental and fundamental intelligence.

As previously stated, thinkers have already provided several definitions for spiritual intelligence. In this research, the definition provided by King (2008) will be used because of the greater affinity with the subject as well as the validation of its measurement method in numerous internal and external research. According to Morris (2011), spiritual intelligence is a set of adaptive mental capacities based on immaterial and transcendental aspects of reality, especially those who are conscious of the nature of the individual's existence, personal meaning, excellence and elevated states. In practice, these processes are adaptive given their ability to facilitate unique problem solving, abstract reasoning and dealing. He has also studied the dimensions for spiritual intelligence and has defined the following for each of them.

• **Critical Existential Thinking: The capacity for critical reflection of the essence of being, reality, world,** space, time, and other existential and meta-physical subjects, as well as the capacity to contemplate non-existent subjects in relation to one's being (for example, from an ontological perspective).

• **Creating personal meaning: the ability to extract the meaning and purpose of a person from all material** and psychological experiences, including the capacity to create and choose one goal of life.

• **Transcendental consciousness: the capacity to recognize the transcendental dimensions/patterns of self** (for example, transcendental or transcendental oneself) of others and the material world during natural modes of consciousness, along with the capacity to recognize their relationships with oneself and nature.

• **Expansion of consciousness: the ability to enter the state of acute consciousness (for example, absolute** and infinite alertness, unity and unity) and other modes of attraction by the individual (Maurice, 2011).

• **Eagerness to work**

Chen et al. (2009) believe that career enthusiasm refers to the penetrating, sustained, and positive mental state associated with work, which is characterized by a feeling of strength, commitment and attraction. Strength is determined by the high energy level and having an elastic state of mind when working, the desire to work hard and stability in dealing with problems. Commitment to full engagement in work and experience a strong feeling refers to meaningfulness, passion, inspiration, pride and challenge. Absorption is characterized by a complete concentration and fascination with work that is based on it, time goes fast and the person has problems with separating himself from work.

The passion for work, which is referred to as a positive organizational behavior, is a psychological state and the opposite of burnout. Chen et al. (2009) believe that career enthusiasm refers to penetrating, sustained, and positive mental affinities associated with work that are characterized by a sense of strength, commitment and attraction. Strength is determined by the high energy level and having an elastic state of mind when working, the desire to work hard and stability in dealing with problems. Commitment refers to

full engagement in work and experiencing a strong sense of meaning, passion, inspiration, pride and challenge. Absorption is characterized by a complete concentration and fascination with work that is based on it, time goes fast and the person has problems with separating himself from work.

3. RESEARCH HYPOTHESES

The hypotheses of this research are divided into two main hypotheses and sub-hypotheses of the research.

The main hypothesis of the research

Spiritual intelligence has a significant effect on the enthusiasm of employees of hospitals in Amol city.

Sub-hypotheses of the research

Sub-hypotheses of the research are:

Existential thinking has a significant effect on the enthusiasm of the employees of the hospitals of Amol city.

Awareness states has a significant effect on the enthusiasm of the employees of the hospitals of Amol city.

Transcendental consciousness has a significant effect on the enthusiasm of the employees of the hospitals of Amol city.

Personal meaning has a significant effect on the enthusiasm of the employees of the hospitals of Amol city.

Type and method of research

Current study in terms of research purpose is applied and in terms of type of research method is quantitative. Also, the research method for collecting required data is descriptive and correlation type. In this research, spiritual intelligence (including dimensions of existential thinking, states of consciousness, transcendental consciousness, personal meaning) as independent variables and passion for work (including strength, endowment, and absorption dimensions) are dependent variable of the research. The statistical population of study included the staff of hospitals in Amol city (Imam Reza Hospitals, Imam Ali Hospital, 17 Shahrivar and Imam Khomeini) which total number of employees in these hospitals is 1,663. According to the Morgan table, 311 of these individuals were selected as the sample size needed by simple sampling method. In the present study, eligible individuals were selected through simple random

sampling among the selected statistical population. In the present study, library studies (review of books, **articles and scientific journals) and a researcher made questionnaire with Likert's five options scale (1 =** very low, 2 = low, 3 = average, 4 = high and 5 = too much) are used as the main data collection tool. Considering that the hypothesis test mainly requires correlation analysis and quantitative variables, Pearson correlation test was used to test the research hypotheses. Also, the research model is analyzed based on the regression model method.

4. RESEARCH FINDINGS

Test of the first hypothesis:

Existential thinking has a significant effect on the enthusiasm of the employees of the hospitals of Amol city.

According to table (1), since the Pearson correlation coefficient between the two variables of existential thinking and passion for work is (0.455) and the level of significance is (0.000) and less than 0.05, the first hypothesis is confirmed, in other words, with the increase of existential thinking, the enthusiasm of the employees increases.

Test of the second hypothesis:

Awareness states has a significant effect on the enthusiasm of the employees of the hospitals of Amol city.

According to table (1), since the Pearson correlation coefficient between the two variables of awareness states and passion for work is (0.354) and the level of significance is (0.002) and less than 0.05, the second hypothesis is confirmed, in other words, with the increase of awareness states, the enthusiasm of the employees increases.

Test of the third hypothesis:

Transcendental consciousness has a significant effect on the enthusiasm of the employees of the hospitals of Amol city.

According to table (1), since the Pearson correlation coefficient between the two variables of transcendental consciousness and passion for work is (0.441) and the level of significance is (0.001) and less than 0.05, the third hypothesis is confirmed, in other words, with the increase of transcendental consciousness, the enthusiasm of the employees increases.

Test of the fourth hypothesis:

Personal meaning has a significant effect on the enthusiasm of the employees of the hospitals of Amol city.

According to table (1), since the Pearson correlation coefficient between the two variables of personal meaning and passion for work is (0.569) and the level of significance is (0.000) and less than 0.05, the fourth hypothesis is confirmed, in other words, with the increase of personal meaning, the enthusiasm of the employees increases.

Table 1. Test of sub-hypotheses of the research

Significance level	Correlation Coefficient	dependent variable	independent variable	Hypothesis
0.000	0.455	Passion for work	Existential Thinking	First
0.002	0.354	Passion for work	Awareness states	Second
0.001	0.441	Passion for work	Transcendental consciousness	Third
0.000	0.569	Passion for work	Personal meaning	Fourth

Source: Author

Test of the main hypothesis of the research

Spiritual intelligence has a significant effect on the enthusiasm of employees of hospitals in Amol city.

According to Table 2, according to the regression model, all dimensions of spiritual intelligence have a significant and positive effect on the eagerness to work simultaneously.

Table 2. Test of the main hypothesis of the research

Result	Coefficient of path B	Statistics t	Dependent variable	Independent variable
Confirmed	0.517	6.15		Existential Thinking
Confirmed	0.391	3.78	Passion for work	Awareness states
Confirmed	0.394	4.97		Transcendental consciousness
Confirmed	0.730	3.82		Personal meaning

Source: Author

5. THE RESULT OF THE DISCUSSION

So far, many studies have been done in the field of employee enthusiasm, but very few of these studies have considered the concept of spiritual intelligence as an individual level variable that can be improved through organizational arrangements. Also, while there are various ways to improve the state of enthusiasm for working in human resources management literature, but because the main focus of this field is on the performance of private business organizations, they cannot be used with full confidence in military organizations that its most important reason is the working conditions and different missions between these two categories of organizations. Promoting the passion for employees through spiritual intelligence is just one of the achievements that can be achieved through the spiritual upgrade of the organization. As it is evident in the spiritual management paradigm, the focus on spirituality brings with it other significant results, such as creativity development, productivity, job satisfaction, etc., Therefore, identifying ways to improve spiritual intelligence can be important in many ways for organizations such as the desire to work. Having a passion for work has practical implications in the life and career of an individual. The passion for work affects the person, adds to his awareness, strengthens his creativity and facilitates his social relations. It also creates the field of fertility of reason and thought. People with high passion have high self-esteem, strong friendship and meaningful religious beliefs. Situational situations and individual characteristics that are related to one's own person have a great impact on the desire to work. Understanding what triggers a person entails creating a passion for work helps a lot in organizing and managing these behaviors.

Using the passion to work can prevent the loss of organizational forces and assets, as well as increase the level of employee satisfaction. If the choice in the organization take place based on the amount of passion for work, their cooperation will increase and they can participate with peace of mind in different and important organizational affairs, the process of producing goods or providing services in different organizations also will increase and the facilities of organizations will be used more favorably and in general, will cause increasing the material and spiritual gain for such organizations (Rahimipoor et al., 2014).

Findings of this research showed that all aspects of spiritual intelligence (existential thinking, states of consciousness, transcendental consciousness and personal meaning) have a positive and significant effect on employee eagerness that the results of this research are consistent with the results of researchers such as Kheirollahi (2008), Abdollahi (2005), Najjar Asl (2005), Rahimipoor et al. (2014). Spiritual Intelligence with the extension of altruism culture within the organization causes that people have a deep interest in themselves and in their past lives and have good relationships with others and it causes that communication networks take form between people, leaders pay attention to the needs and interests of their employees and pay more attention to their growth and development for the assignment of authority and responsibility and ultimately, create a passion for their employees. Also, spiritual intelligence in the organization leads to the formation of spiritual beliefs and belief in employees, which, as an internal stimulus in the staff, promotes their own development and fulfills their duties in the best way and ultimately increases the accountability and enthusiasm of employees. Therefore, managers can create a friendly and collaborative atmosphere instead of competition, reduce stress and create some kind of investment in the organization, and increase the sense of solidarity of the staff, so that the efficiency and effectiveness of the organization will increase.

REFERENCES:

Abdolahi F, Mohammadpour A. (2004). investigation of the quality of preceding elderly life at home and elderlies home in Savi town. second national congress of family.

Aktan, B. and Bulut, C. (2011)," Financial Performance Impacts of Corporate Entrepreneurship in Emerging Markets: A Case of Turkey", European Journal of Economics, Finance and Administrative Sciences, Vol. 12, pp. 69-79.

Chen, Chung-Jen, and Jing-Wen, H., (2009). "Strategic human resource practices and innovation performance the mediating role of knowledge management capacity", Journal of Business Research, Vol. 62, pp. 108, 112.

Doayi, H., (2007), "Human Resources Management (Applied Approach)", Publishing the Book of Hedayat Noor, Sixth Edition, First Edition.

Fraya W.-M., Conley,J. (2008) "The fourth wave: the spiritually-based firm", Journal of Organizational Change Management, Vol. 12 Iss: 4, pp.292 – 302

Khearelahi M. (2008). skills of life with Quran. Young thought center; 11: 23-34.

Lakshman, C. (2009). "Organizational knowledge leadership", Leadership and Organization Development Journal, Vol.30, No.4, pp.360.

Liao, Hsien. Shu, Chien Hu.Ta (2012). "Knowledge transfer and competitive advantage on environmental uncertainty: An empirical study of the Taiwan semiconductor industry", Technovation, Vol.27, pp 403,405.

Morris, M. H. and Kuratko, D. F. and Covin, J. G. (2011). Corporate Entrepreneurship and Innovation, USA: South- Western, 3ed.

Najarasl S. (2005). investigating the relationship between religious attitude with ego concept and generall well-being among Behbehan Azad university students.M A general psychology. Ahvaz Azad university.

Neal, J., & Biberman, J. (2014). Research that matters: Helping organizations integrate spiritual values and practices. Journal of Organizational Change Management, 17(1), 7−1

Rahimi, G., (2012), "Performance Evaluation and Continuous Improvement of Organizations", Tadbir Magazine, No. 173.

Rahimipour, M., Karami, A. (2014). The role of mediating spiritual intelligence with psychological well-being and life satisfaction in the elderly in Mehriz (Yazd), Journal of Rehabilitation Medicine. The third period Number III Fall.

INFORMATION TECHNOLOGY ROLE IN INTELLIGENT STAFF EMPOWERMENT BASED ON SKILL RECOMMENDER MODEL

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Abstract

In today's world information and communication technology is just undeniably affected organizations and has categories such as knowledge management and decision support systems used in the field of management. An important part of managing any organization, human resource management plays in enabling organizations of manpower which uses innovative technologies and intelligent can gets better results and ultimately lead staff satisfaction. In this study, a neural network model intelligent staff empowerment based on skill recommender model through proposals for increased training and expertise will be applied, then, using sample data that is based on the employees of private firms have been collected, data mining operation based on neural network simulated in which the leading multi-tier architecture is used and outputs offers to employees to skill empowerment. It offers skills; as a result of an important process in human resource management in the field of intelligent capabilities are used.

1. INTRODUCTION:

Today, with the rapid growth of information technology in different parts of the organization, particularly in the areas of human resource management, the need for accurate information at the right time and at minimal cost, an important role in improving organizational performance plays an organization's success. Human resources management should implement information technology, tools and technologies through the development of skills is able to take advantage of that IT can create, in enhancing the organization's human resource function. More than anything currently in the organization of human resource management practices will be overwhelmed by information technology. To investigate the role of information technology in human resource management practices as well as to design and create a dynamic system, laying the groundwork for identifying, selecting, hiring, training and effective deployment of human resources in our organization. One of the important tasks in the management of human resources, training of human resources is to increase the effectiveness of staff. Organizational Empowerment different indicators such as improved performance, independence and freedom of action, increased responsibility, job satisfaction, enhance decision-making, increasing employment diversification, responsibility and self-control and the professional development that in this article, indices professional development, increase job variety and job satisfaction is emphasized.

2. RESEARCH BACKGROUND

Research background associated with this research includes the following:

1. The ISO10015 standard as one of the most important and most comprehensive standards in the field of training and human resource optimization is at a global level. The role of international standards in mentoring organization to identify training needs analysis, training design and planning, providing resources for education, evaluate training outcomes, and monitor and improve the educational process in order to achieve organizational goals, is essential and decisive. The standard of education and emphasis on continuous improvement help organizations create effective and efficient educational (Fereshteh,Asghar, 2014). By examining this sector needs to improve organizational performance standard, a standard reference for analyzing and improving the organization's competence needs found that in terms of requirements analysis, in addition to training needs in the area of competence needs and distribution of specialty training experts also stressed figure. One of the needs of staff competence, issues of education, especially technical education which will lead to the training of staff in specialized areas.

2. In the article application of information technology, empowering employees in 5 Regional Library of the Islamic Azad University in the journal Science published in 2009, management on how to empower staff was conducted using information technology tools. The aim of this awareness from the perspective of five regional library staff of Islamic Azad University about the role of information technologies in their

job performance and show the importance of role and impact of technology on business promotion is empowering them (Mohsen, Sartipi Yarahmadi (2009). Therefore, by addressing all the forces working administrators, experts and staff held a total of 65 comments were used in the study. The research method is descriptive survey and questionnaire. In this study, the use of facilities and application of information technologies is examined and then ensuring its application, investigated its effects on the employees' empowerment. Organizational empowerment different indicators such as improved performance,

independence and freedom of action, increased responsibility, job satisfaction, enhance decision -making, increasing employment diversification, finally, responsibility and self-control and professional development. The hypothesis that components in the form of basic questions that were raised. The hypothesis of the use of information technologies to improve the performance of library staff in District 5 free university knew. Results showed that five regional library personnel will benefit from at least 1-5 and (64.6%) of them has education in librarianship. In (69.2%) cases, every library has a computer for every existing employee and intranet software spreadsheet, nearly 25% of research interest. But of applications and computer networks over (50%) used.

3. Identify the features related to staff training process, scientific research in paper titled application training is expressed in Ferdowsi University of Mashhad, the authors of the paper include Hamida Lotfi, Mohammad Reza Ahanchian and Morteza Karami. This article in the fall of 95 in the Journal of teaching and evaluation has been published (Hamideh,Mohammad Reza,2016).

THIS paper aims to identify factors that the following two categories: "general features" and "learning process" affect the application of corporate education. The findings of this study were obtained using a qualitative approach and with case study method was used. Ferdowsi University of Mashhad research field was in 1393. To collect data, 34 people, including 13 managers, 12 faculty members and nine employees were considered as examples. The instrument used was semi-structured interviews. The findings showed that factors affecting the application of corporate education, including 8 factors related to the characteristics of the individual learner, continuity of knowledge, practical background, leverage the performance, job knowledge system, drivers behavior, perceived capacity and the need and 7 factors related to the process of training needs assessment, materials and resources for teaching, learning, output to education, and educational policy approach, the classes, the continuity of learning experiences. Given these factors can organizations realize the goal of "training exercise" or "transferring knowledge to the field" which is a key indicator to measure the effectiveness of managers and permanent concern is to help.

3. LITERATURE

The concept of empowerment

Empowerment has general and specific, and countless interpretations, and the variety of definitions and approaches, integration of this concept is too many, so that the definition of empowerment elements such as:

Intrinsic motivation, perception and commitment, job structure, transfer and sharing of resources and information authority is used. In fact, the process of empowerment is permanent and dynamic environment are analyzed at different levels.

Empowerment is the set of systems, methods and processes through the development of competence in order to improve and increase productivity, development and growth and prosperous organization and workforce are employed due to organizational goals (Doustar, 2014).

Factors contributing to the empowerment of staff

• **Creativity: creativity and intuition empowered employees should be strengthened so that they can us**e creative ways to solve problems and get things done.

• **Skills development: for full empowerment, employees have the skills and knowledge needed to meet the** responsibilities of their business.

• **Accountability: empowered employees should be held accountab**le in front of others and defend their actions and decisions.

Intelligent Skills Development

Nowadays, a lot of research in the field of intelligent training and skills development intelligent people to personalize learning based on scientific features and their expertise has been done.

Intelligent is a personal skill development training for various segments of people, especially employees of different organizations by an intelligent system based on various parameters such as personality traits, academic and institutional done them (Hamdi, 2006).

Recommender system

Recommender systems are located in a subset of decision support systems and the duties of a decision support system to provide more limited in scope. Recommender system or systems bidder, by analyzing the behavior and characteristics of users registered to offer them the best items (data, information, cycles). Recommender systems and guidance systems affecting the user of possible options to reach a volume of useful options are his favorite and so that the process is personalized for the user. Recommender systems have been proposed definitions, including the definition of that holistic and summary Liang (Turban, Liang, 2006). The subset of systems, decision support systems knows and they define information systems and the ability to analyze past behavior and provide recommendations for current issues are met.

Classification

In fact, the evaluation of classification features a set of data and then assigns them to a set of pre-defined groups (Huizhi, Richi, 2009). This is the most common data mining capabilities. In fact, data mining system that is based on their classification, two inputs sets: training set that default where the data are in different categories, the structure will be logged along with its category and systems based on them to teach, or parameters provides categories for themselves. Other categories of inputs are after the training phase and to determine the category into the system. Data mining techniques are commonly used to classify techniques, neural network and decision making.

ANN (Artificial Neural Network)

Crude methods simulate human endeavor electronic neural network of the brain. Our brains are about 100 million tiny units called neurons (neuron) is made. Every other neuron is connected to thousands of light through electrochemical signals associated with them. Artificial neural network of a large number of artificial neurons made. An artificial neuron, biological neuron is the simplest expression of the E-model (Venugopal, 2009). Artificial neural network model for processing information, characterized by mimicking the biological neural networks have been made like human brain. A key element of this new structural model for its data processing system and a large number of elements (neurons) with strong internal communications that work harmoniously together to solve specific problems have been formed. Artificial neural networks by processing the experimental data or the knowledge behind the network structure data to pass to the act of learning to say.

Neural Network Learning

In a neural network, the method applied to network data and presence or absence of output data network training method is defined as consisting of two types: Supervised Learning and Unsupervised Learning. In a couple of forces supervised learning method applied and out of the network. Each of these categories of input and output can be considered as a vector. Then adjust the weights by applying the trained network. During network training, network weights gradually converge to the values that they applied for an input vector, vector desired output is produced. In unsupervised learning neural network parameters are set only by the response and correction system and such training supervised desired response vector network does not apply. In this case, the relationship between inputs network finds and grouped in the output (Graupe, 2009).

Multilayer Feed-Forward Network

In this type of neural network topology, the output layer neurons in the next layer feed, to reach the last layer neural network output in the process in Figure 1 is shown. In other words, the leading multi-channel output parameter value based on the input parameters and a series of initial weight is determined. Input values are combined and in hidden layers are used to calculate the amount of hidden layers are combined output values (Castro, 2006). The network is teaching methods of the observer.
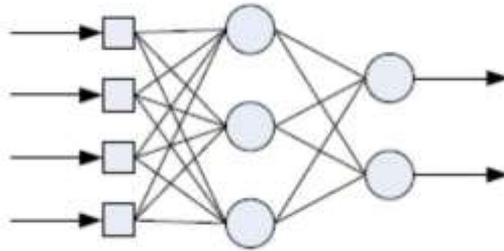
Figure 1 Leading multi-layer network topology structure

4. RESEARCH METHODOLOGY

In this study design, data analysis engine to employees and private companies that have been obtained from different databases is considered as a recommender engine training course for staff training and specialized training is introduced. Recommender motor skills important part of the recommender system based on the model proposed in this research skills, recommender system is designed. The design of the engine, leading to the beginning of the multi-layer neural network with supervised learning method and then the self-organizing network with unsupervised learning method was used. The data collected by the screening methods are pre-processed to remove impurities and incomplete data and then we try to design the recommendation engine based on neural network with supervised learning method, good skill package to employees, specialists and managers offered.

The proposed model skills recommender system
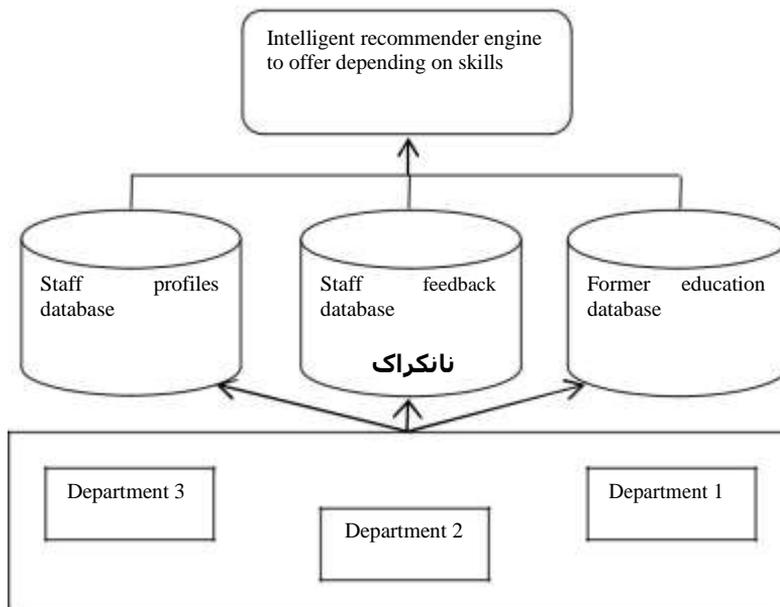
Figure 2. The proposed model recommender skills required to offer staff

Collect data and define the variables

The population in this study includes employees of several organizations and private enterprise in Isfahan inventories in accordance with the parameters considered by experts in the field of human resource management have been collected. To assess the reliability of the questionnaire was designed, the way the two halves of the questionnaire were used to Gatman Split Half Coefficient method is known. As a result,

reliability of the questionnaire alpha coefficient was 0.781 and the questionnaire was designed to show that the reliability is good. According to Table 1 are variables defined in the questionnaire.

Table 1. The study sample variables

Interest in Management	Enterprise-grade	Age	Area of expertise
Interest in technical matters	Technical skills	language skill	Responsibility
Interest in sales	History	The previous training	Gender
Interest in telework	Interest to research	Enterprise-grade	Education

Source: Author

Recommender engine output journey based on the proposed model is one of 12 proposals to be beneath the craft, according to staff and the goal is the same variable or output. Suggested list of packages with features and detailed instructions related to them are shown in Table 2.

Table 2. The study sample output variables

Course: skill packs skills 3 Field managers Responsibility: Chief Course: Specialized Language level: Excellent Experience: Excellent Course: ISO10015	Depending on number skills 2 Field managers Responsibility: Chief Course: General Language level: Excellent Experience: Good Course: ISO9001	Depending on number skills 1 Field managers Responsibility: Chief Course: International Language level: Excellent Experience: Excellent Course title: DBA
Depending on number skills 6 Areas of work: office personnel Responsibility: middle managers Course: Specialized Language level: Excellent Experience: Good Course: ICT	Depending on number skills 5 Areas of work: office personnel Responsibility: middle managers Course: General Language level: Medium Experience: Medium Course: enterprise software	Depending on number skills 4 Areas of work: office personnel Responsibility: middle managers Course: Specialized Language level: Excellent Experience: Good Course: MIS
Depending on number skills 9 Domain: technical personnel Responsibility: Manager Course: Specialized Language level: Medium Experience: Medium	Depending on number skills 8 Domain: technical personnel Responsibility: Manager Course: General Language level: Poor Experience: Medium Course: Fundamentals of Supervision	Depending on number skills 7 Domain: technical personnel Responsibility: Manager Course: International Language level: Excellent Experience: Excellent Course: Installation

Course: Knowledge Management Depending on number skills 12 Business areas: sales staff	Depending on number skills 11 Business areas: sales staff Liability: Employee Course: General	Depending on number skills 10 Business areas: sales staff Liability: Employee Course: General

Liability: Employee Course: Specialized Language level: Excellent Experience: Good Course Title: CRM	Language level: Poor Experience: Poor	Language level: Medium Experience: Medium Course: Marketing

Source: Author

5. THE RECOMMENDER ENGINE DESIGN SKILLS

In this part of the recommendation engine design skills will be described the recommendation engine that actually correspond to the neural network modeling skills through the application Matlab.

Modeling Using leading multi-tier architecture (Method 1)

The input and output layers and a middle layer network with supervised learning algorithm designed and about 75 percent as a record number of 400 training and test data along with education and the remaining 25 percent is used as a test set. The number of neurons in the input layer simply equal to 16 input variables in a dataset that make up the network. According to the study, which is expected customer numbers right tourism package and the packets from 1 to 12 are intended to be used in the output layer neurons 12. The number of neurons tries to determine the optimal number of neurons in the middle layer is from 3 to 15 neurons. Optimize network performance network selection criteria or mean square error (MSE) is learning data. Finally, by comparing the values in accordance with the table of network performance, network transfer function S-shaped and 8 neurons in the middle layer was chosen. In addition to having the appropriate number of intermediate layer neurons, the neural network must be trained by the optimal number of cycles of learning. The optimal number of training or learning cycle (epoch) for a total of 30 courses is designed network.

**Table 3. Table amounts of network performance
(parameter Root Mean Square Error)**

The number of neurons	Chi-squared error (MSE)
3	0.3177
4	0.2475
5	0.1338
6	0.1906
7	0.5485
8	0.1037
9	0.1271
10	0.2375
11	0.2140
12	0.1405
13	0.1572
14	0.1906
15	0.2876

Source: Author

Normally, to check the performance classification method of classification matrix (Confusion Matrix) is used. The rows of the matrix represent actual floors and columns of the introduction floors decision on test data. If the value is equal to the diagonal elements in this matrix, 100% indicates that classification algorithm based on test data, in accordance with the actual data and just sorted and the values of the diagonal elements be introduced smaller one more error in the classification.

Classification matrix modeling with multi-tier architecture is leading in Table 4

Table 4. The introduction of performance classification matrix

Class	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
P1	12	0	0	0	1	0	0	0	0	0	0	0
P2	0	57	3	1	6	0	0	0	0	0	0	0
P3	0	0	37	0	0	0	0	0	0	0	0	0
P4	0	0	0	38	2	0	1	0	0	0	0	0
P5	0	0	0	7	30	0	0	0	0	0	0	0
P6	0	0	0	0	0	5	0	0	0	0	0	0
P7	0	0	0	0	0	0	28	1	0	0	0	0
P8	0	0	0	0	0	0	1	27	0	0	0	0
P9	0	0	0	0	0	0	0	0	0	0	0	0
P10	0	0	0	0	0	0	10	0	0	6	0	0
P11	0	0	0	0	0	0	0	0	0	0	17	2
P12	0	0	1	0	0	0	0	0	0	0	0	14

Source: Author

6. PERFORMANCE EVALUATION MODELING

A) careful evaluation of proposals submitted:

The performance evaluation, the proposed number of correct and incorrect test results obtained from the leading multi-network data (supervised learning) is calculated in this way, the accuracy of neural networks as recommender engine with results obtained skills in terms of human resources management experts compared. 25 percent of all data and test data set includes 100 records. The results are compared in Table 5.

Table 5. Results comparing the special offer neural network models with two different architectures

Percent of accuracy	Number of samples	The proposed package status	Prediction method
86%	86 14	Right False	Leading multi-layer network
65%	65 32	Right False	Human resource manager

Source: Author

(B) Assess the cross (Cross Validation)

The best performance for two recommender engine modeling skills, using cross validation is achieved. The method used to assess Cross-Leave-one-out Cross-Validation is a method. The entire data set is divided into 10 sections with 400 cases and at each stage of the data is laid out for validation and the rest of the data used for training. It is located in the K-Fold method in which K is the number of data is considered. The assessment results can be seen in Table 6.

Table 6. The results of the two methods for evaluating cross

Leading multi-layer accuracy (%)	Partitioning assessment data
53.3	Section 0
83.3	Section 1
56.6	Section 2
76.6	Section 3
83.3	Section 4
63.3	Section 5
86.6	Section 6
53.3	Section 7
86.6	Section 8
63.3	Section 9
70.62	Average accuracy
14.03	Standard deviation

Source: Author

7. CONCLUSIONS

In this study it was shown that data on individual characteristics and teaching staff of an organization how can a recommender system for effective training in various specialized areas used and by offering appropriate training courses for any group of staff development process to improve skills in the field of empowerment of human resources. In fact, recommender system provided in this study can also be used as a forecasting system and the processes of recruitment or talent management in organizations to considerably improve the performance of these processes.

REFERENCES

Doustar, M. (2014). Human Resource Empowerment in Lean Manufacturing, International Journal of Innovation and Research in Educational Sciences, Volume, Issue1

Fereshteh, M., Asghar, B. (2014). Application of the ISO 10015 Standard in Knowledge Management and Employee Training. MAGNT Research Report Vol.2 (4): PP. 4188-4194

Hamideh, L., Mohammad Reza, A. (2016). Implementation of the Ferdowsi University of Mashhad education, training and evaluation Journal, Volume 9, Issue 35, Page 37-63

Hamdi, M. S. (2006). **"MASACAD: A Multiagent Approach to Information Customization for the purpose of academic advising for students", IEEE intell**igent systems, pp. $60 - 67$

Mohsen, H., Sartipi Yarahmadi, R. (2009). Application of information technology to empower employees in 5 Regional Library, Islamic Azad University, Science Studies (Sciences Library and Information Science and Information Technology), Volume 2, Issue 5, page 59 71

STUDY OF THE RELATIONSHIP BETWEEN ACCOUNTING QUALITY AND THE DEGREE OF CONCENTRATION OF DEBT OF COMPANIES ACCEPTED IN THE TEHRAN STOCK EXCHANGE

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Abstract

The main purpose of this study is to study the relationship between accounting quality and the degree of concentration of debt of companies accepted in the Tehran Stock Exchange. The research methodology is applied in terms of purpose and in terms of its implementation is causal-descriptive and in terms of data collection, it is a type of library. The research period is 5 consecutive years since 2011 to 2015. By applying the conditions and considerations in the systematic deletion sampling, 160 companies were selected from the statistical community to perform the tests. The dependent variable of the research, the degree of concentration of debt in the company, and the quality of accounting are independent variables, measured by the three criteria of weakness in internal control, re-presentation of information and audit quality. According to the findings, with the increasing weakness of internal controls, the degree of corporate debt concentration has decreased. At the same time, the relationship between refinement of information and the degree of debt concentration in the sample companies is reversed. However, there is no significant correlation between the quality of audit and the degree of debt concentration in the statistical sample companies.

JEL classification: M41

Keywords: *Degree of debt concentration, Weakness in internal controls, Renewal of information presentation, Audit quality, Tehran Securities Market*

1. INTRODUCTION

Financial reports are one of the sources of information available to the capital markets, which is expected to play an effective role in the development of investment and increase its efficiency. In this regard, professors, researchers and accountants have sought to increase the quality of accounting as a means to respond to the needs of their community. Transparency of financial information affects the quality of investment decisions. Further potential benefits of disclosure and transparency may include lower cost of capital (Betson, 1999) and Diamondm Worcesha (2001), reduction of agency costs (Levvich et al., 1981), stock price recovery (Gib, Zarvin, 2002), and (Vafeas, 2000) and increase the value of the company (Kothari, 2010). The disclosure of sufficient information by the economic person helps investors and creditors in search of investment opportunities, and thus capital is distributed to the most efficient companies, and financing is provided through the right investment.

Different business activities come from complexity, operational cycle, risk, returns, capital, financial resources, different goals and missions, and it is evident that the information and reporting environment is significantly influenced by the type of business activity and the features that govern it is. The size of the company has a positive impact on accounting quality and it considers the reasons for it, such as establishing an effective internal control system, connecting with large audit firms, and observing the cost of credit and reputation as its main factors (Cohen, 2004). Also, the combination of current and non-current assets affects the information content of financial statements items. Francis et al. (1999) argue that some of the features of a company determine the content of its accruals. The length of the operating cycle

increases the time interval between the conversion of accruals to cash flows, which reduces the accuracy of prediction of accruals and reduces the quality of accounting. Dhacho Di Chou (2002) found a negative relationship between the quality of financial reports and the length of the operational cycle. They believe that a longer operating cycle reflects more uncertainty, an error in the estimation, and therefore a lower financial reporting quality.

Jensen and McLing (1976) argue that the presence of agency costs leads to the demand for supervision, and information that provides financial statements to a company may be used to offset agency costs. Letvovich et al. (1981) argue that high leverage companies have higher representation costs and therefore more demand for oversight, and therefore the accounting quality seems to be related to the firm's financing structure.

Obviously, with the transformation and complexity of the business environment, new information needs are emerging, and according to the different characteristics of the various activities, they collect and display their results in the set of financial reports, their properties and the relationship between the elements of the reports affects finances and disrupts them.

According to Beathy et al. (2014), accounting quality has been considered from three aspects of internal control weaknesses, renewing information provision and audit quality.

Jensen's (1986) studies showed that, when the target for the sale of shares was the financing of investment expenses, the average decline in stock prices was less than the target of debt financing. Their studies also showed that one of the reasons for falling stock prices after capital increase is the concern of shareholders to reduce the profit of each EPS share, since the cash gain of each DPS share is influenced by the dividend policy of the company and is therefore under the control of the company. Regarding the nature, the information provided by the announcement of new stock exchanges has been drafted and presented by four theorized models. In these models, it is assumed that managers' information about the future of the company is more and more than the information of external investors. On the other hand, managers act to protect the interests of current shareholders (Abbasi, 2001). The four models are as follows:

1) Retire Existing Debt Model (Capital Restructuring Model)

When the funds generated by the sale of new shares are used to repay existing debt, the announcement of the new stock exchange offers information on the restructuring of the company's capital to investors. Taking into account the tax and the cost of finance, deciding on the optimal capital structure requires balancing between tax savings due to increased debt and financial costs. According to this model, companies that expect more and more stable profits tend to pay more. Because they can use cost savings tax savings. Conversely, companies that have high business risk and, as a result, variable profits, are willing to borrow less. As additional borrowing increases the expected fiscal expenditures more than expected borrowing benefits. Therefore, the supply of new shares to reduce the financial leverage suggests that managers expect a company's future earnings to be less or riskier than its predecessor (Sajjadi, 2009).

2) The Existing Assets Value Signaling Hypothesis

Myers and Magell (1984) asserted that managers have better information than investors about the intrinsic value of the company's assets. If the value of the company's shares is high, if the company requires external financing, the managers will issue shares. But if managers feel that the market lowers the company's stock, they decide to issue bonds. Therefore, the announcement of the stock issue has a negative effect on the stock price. However, the announcement of bond issue has a positive impact on stock prices.

3) Free Cash Flow Signaling Hypothesis

The hypothesis of free cash flow signals (surplus) expresses the role of growth opportunities in the stock price response to new financing. When a company announces its intention to raise capital initially, the market assesses its ability to generate new investment returns. In general, the goal of new financing is either to finance a shortage of income or to finance investment in profitable projects. Therefore, the stock

price response to new financing depends on the market assessment of the probability of each of these two situations. It is expected that the market for growth-enhancing companies will consider the scenario of lowering incomes and growing companies for the financing of investment projects (Sajjadi, 2009).

4) To Fund Short-falls in Operating Cash Flows

According to this model, the investment and financing policies of the company are constant and managers have more information about current cash flows in comparison with investors. Given the uniformity of resources and cash flows, investors interpret the supply of shares by companies, which, in terms of corporate earnings managers, are declining.

Bayan (2017) explored the relationship between financial flexibility, leverage, and size of the company. He concludes that small companies have a lower leverage ratio, which is due to the fact that small companies provide their own resources through increasing domestic capital. Margaritis and Psillaki (2016), in their research, investigated the relationship between efficiency and efficiency leverage. They first used the technique of their companies to determine and then, using the quark regression analysis, they determined the relationship between efficiency and leverage. The result showed that there is a positive and significant relationship between efficiency and leverage, and this relationship becomes more severe for leveraged companies. Tao (2016), in his research, titled "Less Quality Accounting and Investment," argued that the standard of asymmetric recognition of profits and losses could be highly conducive to opportunistic behavior of managers, leading to concerns about earnings performance and stimulation Managers are moving forward on projects with a net present value that will result in lower investment. Clarke (2015) examines the impact of financial flexibility on capital structure decision-making. The results of this research show that when the ultimate value of flexibility is investigated in relation to capital structure decision-making, other variables that affect the structure of capital greatly lose their significance, in other words, the flexibility of the most important factor of influence Transition to the structure of capital. Biddle et al. (2015), along with their three previous studies on the relationship between accounting quality and investment efficiency, in a sample of 34,791 companies for the financial period of 2005 to 1993, explained that higher quality financial reporting, The efficiency of investing in capital items by reducing the information asymmetry and, consequently, factors such as improper selection or moral hazard, leads to a reduction in the investment of more and less than that. Mahmoud Abadi and Mehdi (2016) investigated the relationship between accounting quality and investment efficiency.

The results of the research show that there is a significant relationship between accounting conservatism and future investment at the level of companies and at the level of 7 groups of industries. Also, there is a significant negative relationship between the size of the company and the future investment in the overall level of the companies and in the chemical, food and pharmaceutical industries, between the ratio of market value to book value and future investment at the level of the whole companies in the wood industry and Textile, chemical, metallic, tile and ceramic, there is a significant positive relationship between financial leverage and future investment in the total level of companies and in food and pharmaceutical industries, there is a significant negative relationship.

Kordestani and Rahimi (2015) studied the determinants of choosing the level of accounting quality and its economic effects in the capital market. The results of this research indicate that there is a significant positive relationship between institutional ownership and the level of accounting quality. There was not a significant relationship between sales growth, investment in fixed assets and financial leverage, and the level of accounting quality. Also, there is no significant relationship between the level of accounting quality with the cost of ordinary equity capital and information asymmetry.

2. MATERIALS AND METHOD

The research methodology is applied in terms of purpose and in terms of implementation it is causal-descriptive and in terms of data collection, it is a type of library and the data are historical, and therefore it can be considered as an event. The research period is 5 consecutive years since 2011 to 2015. By applying

the conditions and considerations in the systematic deletion sampling, 160 companies were selected from the statistical community to perform the tests. The research period is 5 consecutive years, so the final volume of the sample is 800 years old (160 * 5).

The dependent variable of the research is the degree of debt concentration in the company, and according to Kola et al. (2013), it is calculated as follows.

$$SS_{it} = \left(\frac{LAP_{it}}{TD_{it}}\right)^2 + \left(\frac{PR_{it}}{TD_{it}}\right)^2 + \left(\frac{CFL_{it}}{TD_{it}}\right)^2 + \left(\frac{LFL_{it}}{TD_{it}}\right)^2 + \left(\frac{Bon_{it}}{TD_{it}}\right)^2 + \left(\frac{LAC_{it}}{TD_{it}}\right)^2 + \left(\frac{LC_{it}}{TD_{it}}\right)^2$$

LAP: long-term payables
PR: Previews
CFL: Current Financial Facility
LFL: Long-Term Financial Lending Facility
Bon: Participation bonds
LAC: Debt to affiliated companies
LC: L / Cs
TD: total debt

After calculating SS, the following equation is used to estimate the degree of debt concentration.

$$HHI_{it} = ss_{it} \frac{SS_{it} - \frac{1}{7}}{1 - \frac{1}{7}}$$

Independent Variables

In the present study, accounting quality is considered as an independent variable, measured by the three following criteria.

ICW: Reflects weaknesses in internal controls (as independent variables). Is a virtual variable that, if the auditor's report states that the internal controls are weak, it is 1, otherwise it will be zero. **Res**: A virtual variable that if the company's financial statements are presented at the specified period, its value is 1, otherwise it is zero (as an independent variable).

AQ: reflects the quality of the audit and is a virtual variable that if the financial statements of the company during the period considered are audited by the audit firm; its value is 1 and otherwise it is zero (as an independent variable).

The regression models for assay testing are derived from Lee et al. (2014). These tests are performed using the EViews statistical software and at 95% confidence level.

The First Hypothesis Test Model

$HHI_{it} = \beta_0 + \beta_1 ICW_{it} + \beta_2 SIZE_{it} + \beta_3 MTB_{it} + \beta_4 PROFITIBILITY_{it}$

$+ \beta_5 DIVIDEND_{it} + \beta_6 TANGIBILITY_{it} + \beta_7 CF VOL_{it} + \beta_8 LEVERAGE_{it}$

$+ \beta_9 FIRMAGE + \beta_{10} LOSS_{itit} + \beta_{11} EXTREME SALE_{it} + \beta_{12} G\text{-}INDEX_{it} + \beta_{it}$

HHI: The degree of debt concentration in the company is calculated through Kola et al. (2013). **ICW**: Reflects weaknesses in internal controls (as independent variables). Is a virtual variable that, if the auditor's report states that the internal controls are weak, it is 1, otherwise it will be zero. **SIZE**: Company size (as control variable). Through the natural logarithm, the value of the company's stock market is calculated.

MTB: The ratio of market value to the company's book value (as a control variable).

PROFITIBILITY: The ratio of return on assets of the company (as a control variable).

DIVIDEND: A virtual variable that has paid cash dividends if it participates in the period in question; its value is 1, otherwise it is zero (as the control variable).

TANGIBILITY: The ratio of fixed assets to total assets (as a control variable).

CF VOL: Three-year standard deviation of cash flow (as a control variable).

LEVERAGE: Corporate leverage (as a control variable).

FIRMAGE: Natural logarithm of company life (as a control variable).

LOSS: A virtual variable that, if the company has reported losses in the period considered, has a value of 1, otherwise it is zero (as a control variable).

EXTREME SALE: Sales growth rate (as a control variable).

G-INDEX: Percentage of institutional ownership (as a control variable).

Test Model Of The Second Hypothesis

$HHI_{it}= \beta_0+ \beta_1 Res_{it}+ \beta_2 SIZE_{it}+ \beta_3 MTB_{it}+ \beta_4 PROFITIBILITY_{it}$

$+ \beta_5 DIVIDEND_{it}+ \beta_6 TANGIBILITY_{it} + \beta_7 CF VOL_{it} + \beta_8 LEVERAGE_{it}$

$+ \beta_9 FIRMAGE+ \beta_{10} LOSS_{itit} + \beta_{11} EXTREME SALE_{it}+ \beta_{12} G-INDEX_{it}+ \beta_t$

Res: A virtual variable that if the company's financial statements are presented at the specified period, its value is 1, otherwise it is zero (as an independent variable).

Test Model Of The Third Hypothesis

$HHI_{it}= \beta_0+ \beta_1 AQ_{it}+ \beta_2 SIZE_{it}+ \beta_3 MTB_{it}+ \beta_4 PROFITIBILITY_{it}$

$+ \beta_5 DIVIDEND_{it}+ \beta_6 TANGIBILITY_{it} + \beta_7 CF VOL_{it} + \beta_8 LEVERAGE_{it}$

$+ \beta_9 FIRMAGE+ \beta_{10} LOSS_{itit} + \beta_{11} EXTREME SALE_{it}+ \beta_{12} G-INDEX_{it}+ \beta_t$

AQ: reflects the quality of the audit and is a virtual variable that if the financial statements of the company during the period considered are audited by the audit firm; its value is 1 and otherwise it is zero (as an independent variable).

3. FINDINGS

The descriptive statistics of the variables used in the hypothesis testing model are presented in Tables 1 and 2.

Table 1. Descriptive Statistics Of Dependent And Independent Variables Of The Research

Variable	HHI	ICW	RES	AQ
Average	0.125976	0.106250	0.197500	0.273750
Middle	0.100964	0.000000	0.000000	0.000000
Maximum	0.906876	1.000000	1.000000	1.000000
At Least	-0.166667	0.000000	0.000000	0.000000
Standard Deviation	0.171218	0.308350	0.398362	0.446161
Skewed	0.775912	2.555513	1.519670	1.014842
Elongation	3.549707	7.530646	3.309397	2.029904
Number Of Observations	800	800	800	800

Source: Author

Table 2. Descriptive Statistics Of The Control Variables Of The Research

Variable	SIZE	MTB	PROF	DIV	TANG	CF	LEV	AGE	LOSS	SALE	GIND
Average	13.41225	2.846005	0.121878	0.841250	0.220145	0.116734	0.595193	3.456533	0.097500	0.149604	0.214746
Middle	13.31004	1.951579	0.098248	0.000000	0.180152	0.104403	0.617906	3.637586	0.000000	0.125044	0.176700
Maximum	18.43252	5.711300	0.726006	1.000000	0.825389	0.651653	0.996719	4.143135	1.000000	20.48155	0.593400
At Least	8.641444	0.064962	-0.239771	0.000000	0.000000	-0.348146	0.012733	1.098612	0.000000	-0.936638	0.000000
Standard Deviation	1.565371	5.204347	0.130541	0.367991	0.167592	0.127902	0.204302	0.550311	0.296823	0.995337	0.138248
Skewed	0.469117	14.939948	0.952917	1.842227	1.210616	0.421718	-0.461803	-1.267312	2.713751	12.780791	0.732120
Elongation	3.636919	296.30999	4.899855	4.393801	4.259851	4.372696	2.754648	4.255099	8.364443	238.6775	2.862200
Number Of Observations	800	800	800	800	800	800	800	800	800	800	800

Source: Author

Independent variables of the present study are two states (zero and one), and the average for the weakness of the internal controls is equal to 0.106, indicating that more than 10% of the sample companies during the research period, have been weak in internal controls. In the same vein, the findings indicate that 19.7 percent of the companies listed have updated their information and more than 27 percent of companies have been audited by the audit firm.

The average for the MTB variable is 2.846, indicating that the market value of the sample companies is about three times the book value. This is mainly due to the use of historic data based on cost. According to the findings, more than 12 percent of the assets of the company during the research period have been generated by sample companies and more than 84 percent of the observations have distributed cash benefits. The results show that more than 22 percent of the assets of the sample companies are fixed assets. Also, the ratio of cash flow to total assets is 0.116, and sample companies during the research period, have earned about 60% of their assets through debt. At the same time, about 10 percent of sample companies have suffered losses during the research period. Also, the proportion of sales to total assets was about 15% and more than 21% of the shares of these partners belonged to institutional owners.

In this paper, three hypotheses were proposed. The results of the hypothesis test are summarized in the following table.

Table 3. Summarize The Results Of Testing The Hypotheses

Hypotheses	Independent Variable	Independent Variable Coefficient	Sig.	Result
First hypothesis: There is a significant relationship between the weakness of internal controls and the degree of debt concentration	ICW	-0/620	0/000	Accepte

Hypotheses	Independent Variable	Independent Variable Coefficient	Sig.	Result
in firms.				
Second hypothesis: There is a significant relationship between refinement of information and the degree of debt concentration in firms.	RES	-0/104	0/020	Accepted
Third Hypothesis: There is a significant correlation between audit quality and the degree of corporate debt concentration.	AQ	-0/007	0/920	Rejected

Source: Author

According to the findings, with the increasing weakness of internal controls, the degree of corporate debt concentration has decreased. At the same time, the relationship between refinement of information and the degree of debt concentration in the sample companies is reversed. However, there is no significant correlation between the quality of audit and the degree of debt concentration in the statistical sample companies.

3.1. The Analysis of the Results Related to First Hypothesis

The results of the first hypothesis test showed that there is a reverse and significant relationship between the weakness of internal controls and the degree of debt concentration in firms. In other words, with increasing weakness in internal control, the amount of debt concentration has fallen. Controls (control activities), ie policies and procedures, and these are in addition to those included in the control environment. These policies help to address the risks and to meet the long-term goals of the business unit by taking measures, every business unit has many potential ways to control it. In this regard, Saberamaniyam and Agneva (2005) obtained preliminary evidence regarding the correlation between the weaknesses of the internal control system and the cost of the company's capital. They examine the cost of capital of firms reporting weaknesses in internal controls, with the cost of capital companies reporting and disclosing them, and concluded that there was an increase in the cost of capital between firms disclosing weaknesses The system and companies that do not have any disclosure in this regard, and studies have shown evidence that the weaknesses of the internal control system increase the uncertainty of information in the market. Based on the theoretical foundations, it can be seen that weaknesses in internal control are associated with a negative reaction from the suppliers of capital companies. Therefore, two general arguments can be found regarding the findings of the first hypothesis of the study. First of all, companies that have had problems with internal control have not been able to fund a large part of the company, so their debt structure is scattered and used to finance various resources. Second, the creditors of the sample companies are able to understand the weakness of the internal controls, or they may have taken into account the report of the company's auditor.

3.2. The Analysis of the Results Related to The Second Hypothesis

The results of the second hypothesis test showed that there is a reverse and significant relationship between refinement of information and the degree of debt concentration in companies. In other words, with increasing renewing of information provision, the amount of debt concentration has fallen. Niccolo (2007) challenges the presentation of financial statements to the quality of financial reporting of previous periods. This will make capital suppliers make new decisions about their investment future in the company. Typically, they will transfer their portfolio to less risky investments, which affects the company's capital costs. Empirical evidence suggests that transparency in financial reporting is an important factor in the theory of representation based on the company's relationship with outside groups,

and the reopening of information to the profit of the units as a data hacking authority hurts. Hence, the renewal of the provision of information is, in some way, an attempt by the company's managers to compensate for the consequences of distortion in past information. Accordingly, two general arguments can be found on the findings of the second hypothesis of the research. First, the managers of the refineries in Iran were aware of the consequences of the renewal of the information provided and sought to mitigate these consequences. Second, creditors have been reluctant to lend huge rewards to refiners, and may have refrained from providing information as a negative factor in determining the credit rating of these companies.

3.3. The Analysis of the Results Related to The Third Hypothesis

The results of the third hypothesis test showed that there was no statistically significant correlation between audit quality and the degree of debt concentration in firms. Hawk et al. (2008) argued that the role of auditing in crediting corporate information over bankruptcy of large corporations was of great importance. As a result, differences in the quality of the audit reveal differences in the credentials provided by the auditors and the quality of their clients' financial information. In this regard, Reynolds and Francis (2009) have stated that high-quality auditors are able to discover significant deviations because they have more and better knowledge than other auditors and try to prevent any opportunistic management. Maintain their reputation. Based on the theoretical foundations, one can argue that, firstly, it is likely that the managers of the sample companies did not have a clear understanding of the operation of the information environment of the company in obtaining facilities and did not try to increase the quality of the audit process to the creditors, assurance Remember to get the facility. Second, the creditors did not pay attention to the type and quality of the audit, and the figures entered into the financial statements may have been more important for them.

4. CONCLUSIONS

The results of the first hypothesis test showed that there is a reverse and significant relationship between the weakness of internal controls and the degree of debt concentration in firms. This finding is consistent with the results of Saberamaniyam and Agneva (2005). They obtained preliminary evidence of the correlation between the weaknesses of the internal control system and the cost of capital. Also, the results of the first hypothesis of the research are consistent with the findings of Lee et al. (2014).

The results of the second hypothesis test showed that there is a reverse and significant relationship between refinement of information and the degree of debt concentration in companies. This finding is **consistent with the results of Niccolò (2007). The researcher found that** revising the financial statements challenged the quality of financial reporting of previous periods. This will make capital suppliers make new decisions about their investment future in the company. Also, the results of the second hypothesis of the research are consistent with the findings of Lee et al. (2014).

The results of the third hypothesis test showed that there was no statistically significant correlation between audit quality and the degree of debt concentration in firms. The results are incompatible with the findings of Ray Nolds and Francis (2009). Also, the results of the third hypothesis of the research are in contradiction with the findings of Lee et al. (2014).Based on the findings of the first hypothesis that there is a reverse and weak relationship between the weakness of internal controls with the degree of debt concentration in the corporations, it is recommended that managers of corporations make efforts to strengthen the structure of internal control of the company and to note that The financing of the company can be greatly affected by it.Based on the findings of the second hypothesis that there is a reverse and significant relationship between refinement of information with the degree of debt concentration in corporations, it is advised to creditors and other users of financial information that, while paying attention to the event of re-presenting information and assessing the information environment Firms try to consider this event as a factor that could affect the financial reporting behavior of corporate executives in their decisions.

REFERENCES

Abbasi, I. (2001). "Investigating the Impact of Increased Capital on the Profitability of Companies", Journal of Economics and Management. Issue 49 and 48, Spring and Summer 2001, pp. 38-36.

Beathy, A., Weber, J., Scott, J. (2014). "The Role of Accounting Quality in reducing investment information and inefficiency in the presence of private" University Working paper, The ohio State Monitoring.

Cohen, A. D., (2004). **"Financial Reporting Quality Choice:Determinants and Consequences",A** Dissertation , Northwestern University

Jensen, M.C., Meckling, W.H., (1986). Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure, *Journal of Financial Economics* 3, 305–360.

Kordestani, G., Rahimi, M. (2013). "The Factors Determining the Choice of the Level of Financial Reporting Quality and Its Economic Impact in the Capital Market," Quarterly Journal of Financial Accounting Research, First Year, No. 1, Autumn 90, pp. 67-91.

Kothari, S.P., Ramanna, K., Skinner, D. (2010). **'Implications for GAAP from an Analysis of Positive Research in Accounting', Journal of Accounting and Economics (forthcoming).**

Mahmoud, A. H., Zeinab, M. (2016). "Investigating the Relationship Between Accounting Conservatism and Investment Efficiency of Companies Acquired in Tehran Stock Exchange", Journal of Accounting Progresses of Shiraz University, Third Volume, Number II, Autumn and Winter 2011, Serial / 3 61, Pages 113-140.

Sajjadi, S. H., Mansour, Z. N., Alireza, J. (2009). "Non-financial Characteristics Affecting the Quality of Financial Reporting in Companies Listed in Tehran Stock Exchange", Accounting and Auditory Reviews, Volume 16, Issue 57, Autumn 2009, Pages 51 to 68.

Tao, M. (2016). "Accounting Conservatism and Underinvestment.working paper, Washington University in St. Louis-OlinBusiness School.http://papers.ssrn.com/sol3/papers.cfm? abstract_id.

Vafeas, N., (2000). **"Board Structure and the Informativeness of Earnings", Journal of Accounting** and Public Policy 19pp 139 – 160

EVALUATION OF THE RELATIONSHIP OF LEADERSHIP STYLES AND THE EXTENT OF STRESS IN PARSIAN BANK EMPLOYEES

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Abstract

This study aimed to identify the relationship between leadership styles and the extent of Stress in Parsian bank employees. Methods used in the research from the purpose view is applied method and the method of obtaining data is descriptive and survey. The population of this research are the employees of Parsian Bank in Tehran. The model of the research includes a sample of 150 employees of Parsian banks and using simple random sampling method was evaluated. Independent variables of the study were (Guidance leadership style, Support leadership style, leadership success Seeking style, leadership Participation style) and the dependent variable is the stress. Information needed for this study were collectedusing standardized questionnaires. The results show that the dimensions of leadership styles (directive leadership, supportive leadership, whether successful leadership and participative leadership) has significant relationship with the stress of senior staff in Parsian Bank.

JEL classification: L26

Keywords: *Directive leadership style, Supportive leadership style, Successful leadership style, Participative leadership style, Stress, Parsian Bank.*

1. INTRODUCTION

According to studies, a high percentage of employees are seen in organizations that show signs of stress in them. (Rafiee, 1994). On the other hand, often the employees who are under stress, complain of their leadership style. Now the question is that whether the relationship exist between leadership styles of managers and employees' stress?

Based on an inappropriate method or technique of motivational leadership style or inconsistent, organizational objectives will be compromised and employees may also feel resentment and dismay, oppression and insecurity and dissatisfaction. Model and management model in each community affected by leadership practices of that society.

The victory of any society depends on both the national level and at the global level and effectiveness of managers and decision makers at all levels. (Zomorodian, 1994). British economist Alfred Marshall says if all assets and means of production in the world to suddenly be destroyed, but remains art and science of management, production and development will continue (Bayan, 1989).

One of the most complex management tasks, is responsibility and leadership. Leadership is an integral part of management and director plays an essential role in the operation. If there is only one factor that determines the difference between successful and unsuccessful organizations without a doubt it is effective leadership. (Irannezhad Parizi and Sasan Gohar, 1380). The role of the manager as leader has been so important in all areas that to find people who have leadership ability necessary to be a constant effort to act. In fact, if this is not done the work is not performed.

Leadership must be in the form of duty and willingness of the group to evaluate according to their strength in dealing with them, choose one of the styles of leadership. (Rezaeian, 2009).

1.1. RESEARCH BACKGROUND

- Ali Mashhadizadeh investigated the relationship between leadership styles and stress among male and female principals at elementary schools, junior and senior government schools of Shadegan in 2003-2004. The whole society was selected as sample a total of 48 male and female managers, including 20 principals of elementary, 12 middle managers and 16 middle managers, after extraction and sort the data to test the hypothesis of correlation test was used to compare the mean. In conclusion, stress management relationship-oriented, was not more than task-oriented managers.

- Mansooreh. Vafaie investigated the effect of managerial skills (technical, human perception) managers to reduce burnout in Iran Chemical Industries Investment Company, focused on graduate school in 2002. Inverse relationship between the amount of burnout and human skills of the managers existed. The high degree of burnout has more in workers with higher degrees of bachelors were observed and there was no difference in higher degree of burnout due to work experience.

- Dr. Seyed Mehdi Alvani and Seyed Hossein Abtahi investigated on stress management in the industrial sector of the country, in 1992. This study was conducted with hypothesis of stress or stress sensitivity of the labor. The aim of this study was to evaluate the stressors and stress that managers that have been affected and the solutions for dealing with them is provided, but according to this it is important that the role of culture, beliefs and values in the face and dealing with stress is very important and due to the fact that human beings are not all equal, so ways to deal with stress is different and diverse, to reduce stress and deal with it to human beings to understand and tailored to the personality, spirit and scenarios they especially take advantage of the right solution. And the results of this study indicated that 57 percent of the work environment, social environment, economic environment, 23 percent to 17 percent effective in causing the stress.

- Ditore and Greco, in 2015. Studied the" impact of occupational health and treatment organizations in order to prevent job stress in Brindisi Italy. This study analyzed job stress levels in different situations. In the method of data collection instruments validated multidimensional development of a national network of physicians, nurses of Italy. The results of this study show that stress management programs aimed at developing occupational health with default parameters and capture job it is to some extent reduce job stress.

1.2. HYPOTHESES

Between directive leadership style and stress among the senior staff there is a significant relationship.

Between supportive leadership style and stress of the senior staff there is a significant relationship.

Between leadership style and stress or success in senior staff there is a significant relationship.

Between participatory leadership style and stress among senior staff there is a significant relationship.
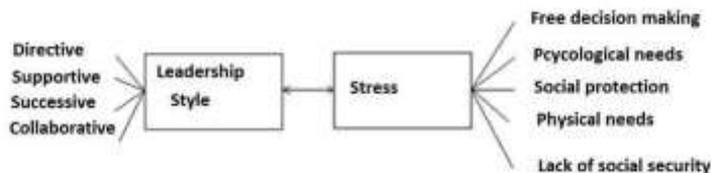

Figure.1. Conceptual model of research (Ghoonieh etal.)

2. RESEARCH METHOD

In this study, library data collection and field were used. Thus to collect information to develop a theoretical framework and literature of library research and field study was to test the hypothesis. The instrument used for data collection in this study, was questionnaire. It is one of the most effective methods for collecting experimental data with great examples. Also, when the investigator is familiar with variables, the questionnaire is an appropriate tool. Therefore, it seems that the questionnaire is the most efficient tool to gather data for this study. The population of this study consisted of senior staff in Tehran Parsian Bank branches that are 150.

2.1. QUESTIONNAIRE

The structured questionnaire was used to measure the variables. This questionnaire is set up based on the data collected, researchers will be able to test the conceptual model. The questionnaire begins with an introduction on the basis of its senior staff will be asked to fill out a questionnaire. After the introduction of demographic and descriptive data required for this study, a questionnaire that included questions on age, gender, education is found. 38 other question is also generally five concept study to the conceptual model is referred to measures that include directive leadership style, Supportive leadership style, leadership style or success, are participatory leadership style and stress.

Table 1 Shows the distribution of questions to questionnaire concepts of separation

Row	The concept	Number of questions	Number of questions
1	Stress	20	20-1
2	Directive leadership	4	25-21
3	Supportive leadership	6	30-26
4	Whether successful leadership	4	34-31
5	Participative leadership	4	38-35
Total			38

Source: Author

2.2. VALIDITY OF THE QUESTIONNAIRE

The concept of validity refers to the precision measuring of instrument and to answer the question to what extent the Measure tool to measure characteristics. In order that the measuring instrument to measure what it was built for. The validity of the order that measures may be inadequate and unfair worthless makes any scientific research (Khaki, 2005: 288). In this study, two types of validity is used to consider the questionnaire. The face validity and construct validity of the questionnaire appearance and other one. The appearance of validity by reference to the leaders and teachers of the study of relevant contextual questions regarding the concepts presented in the consultation took place and after confirming ask them to be included in the questionnaire. Factor analysis to assess the reliability or the reliability or validity of the measures (validity Structures Questionnaire) were used.

In this study, the analysis of certified first agents should be used because the scale of the variables in the latent are small. Standardized coefficients of the measurement model having the following characteristics may be the impression that the latent variables and their corresponding indices, there are significant correlations. Standardized coefficients, the indicated path or standardized factor loadings between agents and their markers. For the validity of the index, there should be a significant correlation. Standard model shows the estimates that the adaptation of the covariance matrix models and realistic estimate model parameters obtained data. In this model, the relationship between the index and the indicator is shown.

Chi-Square=61.27, df=37, P-value=0.00000, RMSEA=0.09
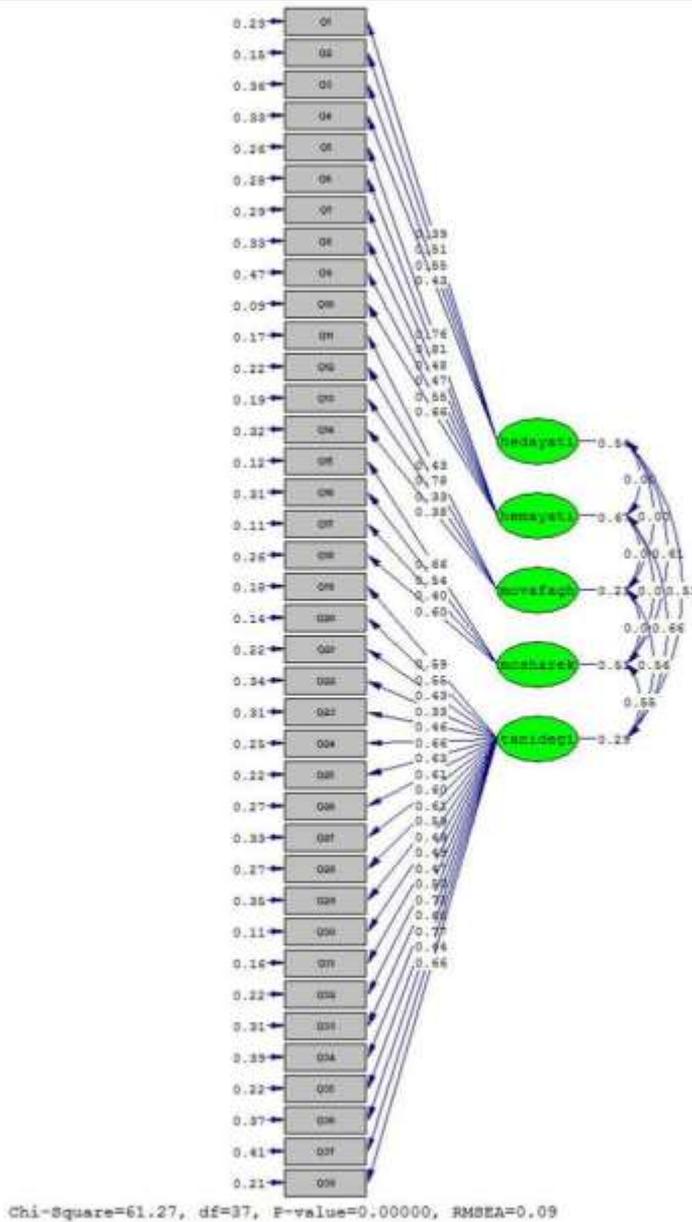
Figure 2 Standard model coefficients of measured Questions

Coefficients between questions and variables are standardized coefficient, which indicates the severity of the measurement of each indicator on the variables investigated. As it is seen in the diagram, the measures have good standard coefficients. In this case the validity is confirmed. The left numbers are the errors of measurements, if they be small then they are better. Since all the questions have good meaningful levels, there is no need to omit any questions. The meaningful variables of the model are as follows:

Chi-Square=61.27, df=37, P-value=0.00000, RMSEA=0.09
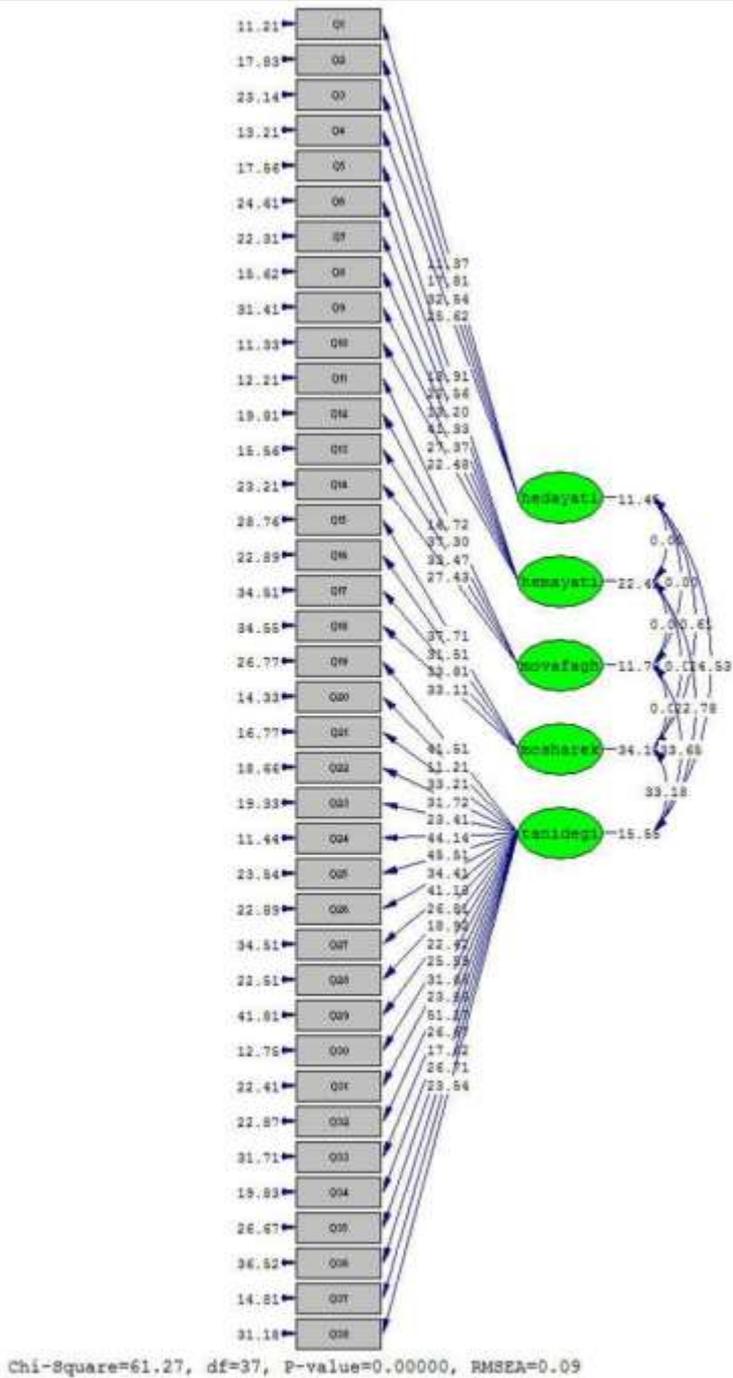
Figure 3. Significant level of model coefficients measured Questions

Coefficients Significant Show Significant Relations between Variables Respectively. If this Coefficients are Between -1.96 to +1.96 are, Shows Lack of Ability Index At measurement variable respectively. As it is seen from the above diagram, all Coefficients are located at significant level acceptable, because all the numbers are greater than 1.96, so the validity is confirmed.

2.3. RELIABILITY

Reliability or credibility is whether any specific method, when applied on a single theme several times, each time gets the same result. The reliability of the questionnaire in each of the general concepts and scales presented in the table below. As can be seen in the table all concepts evaluated in this study produced alpha coefficient of 0.7, and therefore are reliable. Further details on the results of this study, Cronbach's alpha variables and concepts are presented in Appendix.

Table 2 Lists the reliability test

Cronbach's alpha coefficient standard	Cronbach'salpha coefficient	Number of questions	The number of respondents	Component Name
0.924	0.917	38	150	The entire questionnaire
0.903	.902	18	150	Style of leadership
0.882	0.881	20	150	Stress
.757	0.728	4	150	Directed the leadershipof
0.745	0.738	6	150	Support of theleadership of
0.877	.869	4	150	Whether the leadershipsuccess
0.795	.771	4	150	The contributions of

Source: Author

3. FINDINGS OF THE STUDY

3.1. CHECK THE GENDER OF THE RESPONDENT
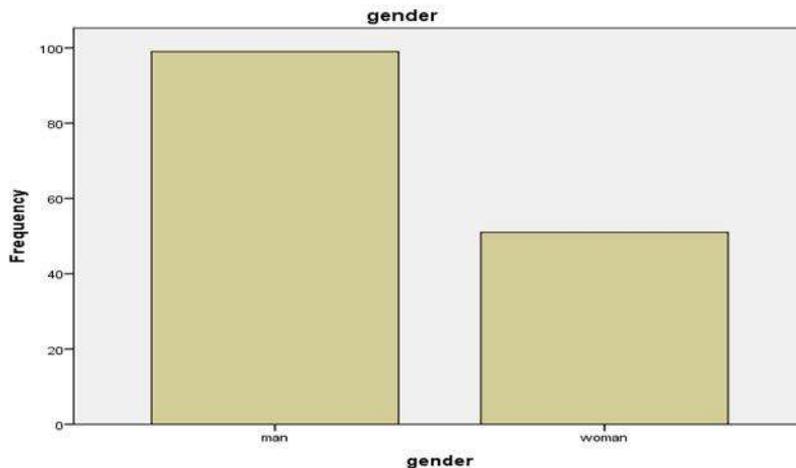
Figure 4 Frequency distribution of respondents by gender

As shown in the chart above men are with a greater frequency.

3.2. Check the age of the respondent
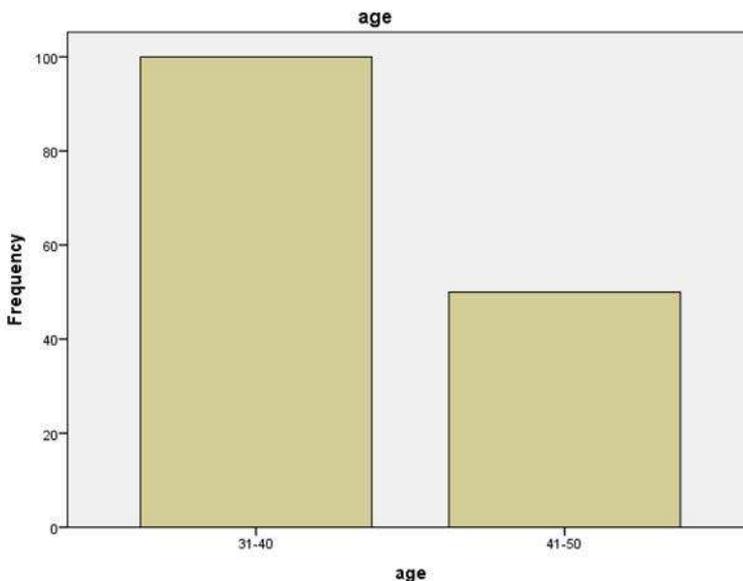
Figure 5. Frequency distribution of respondents by age Chart

As shown in the diagram above this age of 31 to 40 years have a greater frequency.

3.3. EVALUATE THE EDUCATIONAL STATUS OF THE RESPONDENT
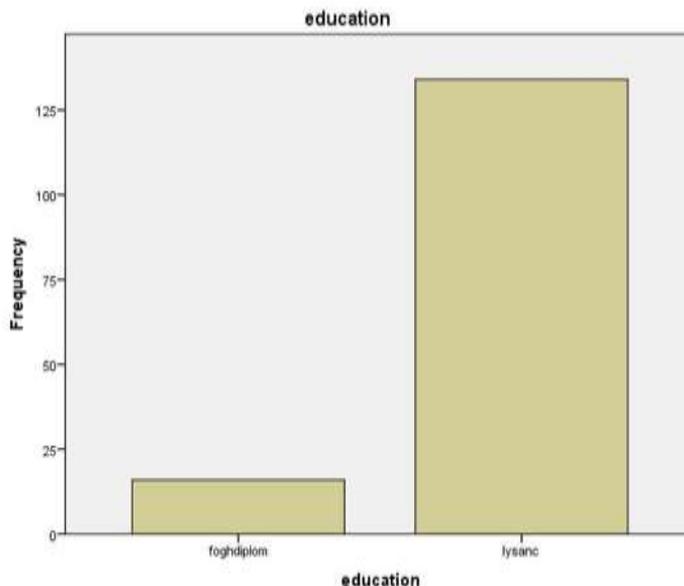
Figure 6 shows the distribution of respondents by education status

As shown in the diagram above higher degree of **bachelor's** number of people in the population under study, are more.

3.4. GOODNESS OF FITNESS INDEX

Lisrel a goodness of fit index (The sum of squares explained by the model to estimate the total sum of squares in the matrix) is calculated. The correlation coefficient is similar to the index in terms of

desirability. Both of these criteria between zero and one, are variable, although it is theoretically possible negative (It should not happen, because it indicates lack of fit to the data is deterministic model). Whatever Goodness of fit index and Modified fitness *index* are Closer to number one, Goodness of fit with observed data will be further.

Table 3 Indices model

Utility	The amount of	The amount acceptable	Full name	Indicators
Approval of model	0.000	p <0.1	Significance level	P-VALUE
Approval of model	0.96	NNFI> 0.9	Non -normal fit index	NNFI
Approval of model	0.98	CFI> 0.9	Comparative fit index	CFI
Approval of model	0.98	IFI> 0.9	Incremental fit index	IFI

Test models

3.5. THE FIRST ASSUMPTION IS:

H1: between leadership style and stress reduction in senior staff leadership there is a significant relationship.

H0: between directive leadership style and stress reduction there is no significant relationship.

Table 4 Shows the correlation table of first hypothesis

Correlations

			Stress	Guidance
Spearman's rho	Stress	Correlation Coefficient	1.000	0.651[**]
		Sig. (2-tailed)	.	.000
		N	150	150
	Guidance	Correlation Coefficient	0.651[**]	1.000
		Sig. (2-tailed)	.000	.
		N	150	150

**. Correlation is significant at the 0.01 level (2-tailed).
Source: Author

Given the significant level of less than 0.05 correlation coefficient of 0.651 a result of the rate of the decrease in the MA leadership and guidance There is a significant positive correlation between stress in senior staff. The hypothesis is confirmed.

3.6. SECOND HYPOTHESIS:

H2: between protection and stress reduction in senior staff leadership there is a significant relationship.

H0: Between supportive leadership and stress reduction in senior staff there is no significant relationship.

Spirman correlation between the supportive leadership and stress reduction in senior staff:

Table 5 Table II correlation assumptions

Correlations

			Stress	Support
Spearman's rho	Stress	Correlation Coefficient	1.000	0.270[**]
		Sig. (2-tailed)	.	.001
		N	150	150

	Support	Correlation Coefficient	**0.270**[**]	**1.000**
		Sig. (2-tailed)	**.001**	**.**
		N	150	150

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Author

Given the significant level of less than 0.05 correlation coefficient of 0.270 a result of the supportive leadership and stress reduction in senior staff there is a significant positive correlation. The second hypothesis is confirmed.

3.7. THIRD HYPOTHESIS:

H3: between leadership style and success in stress reduction in senior staff whether there is a significant relationship.

H0: between leadership style and success in stress reduction in senior staff whether there is no significant relationship.

The correlation between the success and stress reduction in senior staff leadership style:

Table 6. Correlation table third hypothesis
Correlations

			Stress	Success or
Spearman's rho	Stress	Correlation Coefficient	1.000	0.474[**]
		Sig. (2-tailed)	.	.000
		N	150	150
	Success or	Correlation Coefficient	0.474[**]	1.000
		Sig. (2-tailed)	.000	.
		N	150	150

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Author

Given the significant level of less than 0.05 and a coefficient correlation 0.474 a resulted that between the leadership style success either, and stress reduction in senior staff there is positive and significant relationship. The hypothesis is confirmed.

3.8. THE FOURTH HYPOTHESIS

H4: between the participative leadership styles and stress reduction there is a significant relationship among senior staff.

H0: between the participative leadership style and stress reduction in senior staff there is no significant relationship.

The correlation of the relationship between participative leadership style and stress reduction in senior staff:

Table 7. Correlation table fourth hypothesis
Correlations

			Stress	Contributed
Spearman's rho	Stress	Correlation Coefficient	1.000	.054
		Sig. (2-tailed)	.	.513
		N	150	150
	Contributed	Correlation Coefficient	.054	1.000
		Sig. (2-tailed)	.513	.

Correlations

				Stress	Contributed
		N		150	150

Source: Author

Given the significant level of greater than 0.05 correlation coefficient of 0.054 a result of the participatory leadership style there is no significant relationship stress reduction in senior staff. The hypothesis is rejected.

3.9. RESULTS TEST THE MAIN HYPOTHESIS

Table 8. Output of research

Hypothesis	VariableFirst	The second variable	Sig. The level of significance	Spearman	Result	Ranking
1	Stress	Guidance	0.000	0.651	Confirmed	1
2	Stress	Support	0.001	0.270	Confirmed	3
3	Stress	Wah yoursuccess	0.000	0.474	Confirmed	2
4	Stress	Contributed	0.513	0.054	Hypothesis	----

Source: Author

3.10. THE RESULTS

Today, many bank managers and employees have realized the essential role in gaining competitive advantage and follow the organization's strategic objectives. Stress of Employees in the service sector due to the intangible nature of services, is important. In general, we can say that employees are satisfied and no stress of the job, is the main indicator is the superiority of one organization to the other organizations. The Staff without stress, provide the field for the development of the organization. Therefore, employees Satisfied willing and committed to the organization of the main requirements and are, therefore, very essential for any organization. Parsian Bank in the financial services industry and credit activities, and according to this principle the organization of the service organizations of and directly interact with customers; the service quality of staff and managers of banks are from the factors affecting customer satisfaction of any person or organization. Especially financial institutions such as banks, employees and managers stress the importance of their work and its impact on the organization is obvious. Therefore, according to the study was performed in Parsian Bank. The results of this study using confirmatory factor analysis and correlation of the results show that Styles OF leadership manager and Stress OF Staff are existed. But the styles presented in this study, there was no significant relationship between participative leadership and stress. Compared with the rank of variables in the bank Parsian leadership of the leader Conductive is most effective in reducing job stress and the support of the leadership and participative leadership has been the least effective because of the relationship, its impact was not identified.

According to the results obtained with different styles of leadership it is effective in reducing employee stress. The highest rank among leadership styles is directive leadership style. In this style, the managers say to lower levels staff what expectations they have and guidance on how to perform the duties offer work to be done in planning the and employees are precisely that managers what to expect from them. The leadership style success or managers tell to employees of goals and efforts, they are determined and confidence in achieving goals and doing good work, and bank employees expect the highest level of work.

The supportive leadership style, bank managers are very friendly and are available with subordinates and social status, welfare and needs of **subordinate's** notice.

4. SUGGESTIONS

According to the research hypotheses, the following recommendations are provided.

Since the findings of the study, the relationship between leadership style and Stress of staff exist, it is proposed utilization of the service by training and other means of awareness and attention of managers to take advantage of increased risk of proper leadership.

It is recommended to try accuracy and more supervision rules in the appointment of directors and there should be better planning and more people trained in management courses and dates.

- In setting goals and values of the organization using employee feedback and participation in decisions related to their field of work should be done.

- the survey of expectations and perceptions of employees from management style to prevent occupational stress is needed.

- Training and of the creation of support of the staff ranks as the most important of the factors associated with the client to provide services.

5. LIMITATIONS OF THE STUDY

Generally, in carrying out research and development projects, theses and dissertations academic strengths of research work, limitations exist. Although this research is in the development of literature related to leadership style and tension in the country was taking role, but with some limitations encountered in this area was presented as follows:

- Despite the efforts of researcher and in order to attract the satisfaction of the respondents and creating stigma based on the results of the research that is so important, but some of them **didn't** answer the questions.

- One of the limitations of this study is related to the selection of the sample. The sample is limited to senior staff of Parsian Bank in the city of Tehran. So the extension to all banking customers, the caution to be observed.

- Since banks were selected as the population is a private bank and it is likely that the private nature of the results were more important. Therefore, in generalizing the results to the banking industry of Iran should be handled with care, because it seems to be a culture on the bank of issue in the case is different, and possibly, generalization of the results to the government banks is limited.

- The only factor limiting the study to evaluate the type of leadership style and stress were studied, and other variables such as loyalty, organizational culture and organizational climate and ... was not examined.

REFERENCES

Bayan. H., A.D., (1991), Regulations Management, Second Edition, Public Administration Training Center, Tehran.

Choobineh A, Ghaem H, Ahmadinejad P (2011): A study among hospital nurses. East Mediterr Health J.2011; 17 (4): 335-4

Irannezhad Parizi M., and Parviz. S. G., (2001), Organization and Management, From Theory to Practice, Second Edition, Institute of Banking Islamic Republic of Iran, Tehran.

Rafiee, M., (1994). The effect of stress on employee performance Machine-Building Plant in Arak, (Thesis, Tarbiat Modarres University).

Rezaeian A., (2008) Organizational behavior management, third edition, Tehran University.

Zomorodian, A. (1994), Change management, printing, Industrial Management Institute, Tehran.

INVESTIGATING CREDIT RISK MANAGEMENT IN BANKS

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University Ilam Branch
Azad University Kermanshah Branch

Abstract

Correct relationship between financial and producing systems in each country is the most important factors of economic development and growth. Banks as the main parts of financial system can play main roles in financial securement of producing commercial, consuming or even governmental parts. In Iran because of country commercial structure, financial securements of economic real parts are banks` duties. So, the research aim is investigating credit risk management methods in banks and existed financial institutes in Iran from 2007 to 2015. Research statistic population are all banks and financial institutes in Iran that 17 banks have been chosen by data sampling. In the research regression of multi variables have been used to show relationships between variables. Asset return is dependent variable and asset efficiency ratio, asset efficiency ratio of loan to loan, demands costs ratio of loan to loan, and deferred demands ratio of loan to loan have been considered as independent variables for credit risk management which shows their effects on banks` profitability that have been investigated by SPSS software. Research conclusions indicate that assets` returns have negative meaningful effect with efficiency ratio, asset efficiency ratio of loan to loan, demands costs ratio of loan to loan, and deferred demands ratio of loan to loan. Moreover, these conclusions can be used as effective indicators in credit risk management.

JEL classification: G32

Keywords: *Efficiency ratio, Asset efficiency ratio of loan to loan, Demands costs ratio of loan to loan, Deferred demands ratio of loan to loan, Assets 'returns*

1. INTRODUCTION

Banks are the main mobilization and attribution of saving financial sources, (Foso and et.al 2010). So these roles cause banks to be important phenomenon in economic development and growth. To perform these roles banks should own potential of facilities for sources mobilization and their attributions to efficient investments. Risk is an inherent member of banks and is the main important systematic challenge of country banks because of financial sources limitation, conveniences of banks, and repayment evaluation of banks before convenience dispassion, (Jalilian and et.al, 2009).

Risk is extension of situation to access success and beneficiary, in otherwise risk can be considered as estimation contingency of anticipation and providence, (Askari, 2008).

One of the most important risk is credit risk, totally rational relationship between return risk can be main factor of sources attribution and corporations` profitability warranty, (Fallah and Mahdavi, 2009).

Loan is considered as the main part of commercial banks` assets. Banks` specialties are deposit absorption from investors and grant loan to demandants. Absorbed deposits force bank to pay profit and its real should be obliged in usance, while these loans cause banks to be default by borrowers, so investigating of demandants credibility for making decision about awarding loan can be important.

Credit risk redicates from this reality that counterparty can`t or doesn`t want to do its assurances. Traditionally, the effect of this risk is measured by Rial cost from counterparty default. Damages of credit risk can be created before real happening of default from counterparty. So, credit risk can be defined as likely damage which has been caused by credit event. Credit event happens when counterparty ability

changes its obligations. Based on the above definition, liability market changes because of credit category change (or market awareness change from counterparty ability in ratio to its obligation) can`t be considered as credit risk.

2. BACKGROUND

Azarpendar (2012), investigated relationship between credit liquidity risks in banking industry from 2003 to 2012. Research findings indicated that there was a negative relationship between credit risk and liquidity risk and this relationship was intensified from credit risk toward liquidity risk. In otherwise, effect of credit risk variable was accepted as dominant variable in this relationship and would change it to up to date noticeable phenomenon.

Khosh Sima and Tavesh (2011), in their research investigated the effect of credit risk and liquidity operational efficiency of Iran banking system. To evaluate categorizing efficiency of banks, choice optimized mother of mathematics had been used. In the research 15 banks as research sample had been chosen from 2004 to 2009. Research findings indicated difference in parametric and non-parametric methods of banks categorization evaluation and showed the superior of parametric method than non-parametric method. Moreover, the research conclusions indicated that there was a meaningful relationship between credit risk and liquidity operation of Iran banking system.

Saeid Safari and et.al (2010), in a research investigated credit risk management in banking system and comparative view of data coverage analysis and neural channel. They found that data coverage model and neural channel had more efficiency.

Moziblalon (2015), investigated credit risk management methods in of Bangladesh banks, investigation of public bank of Volition education. This article helped efficiency in credit risk of Bangladesh banks and was used as a definite source for study of credit risk management to increase profit ability, long term resistance of commercial banks. Credit risk management included recognition, measuring, mitigation, supervision and controlling of credit risk.

Koregi (2011), in a research of Nigeria banks investigated meaningful relationship between banks operation and credit risk management.

Kothinji (2010), investigated loan, advance and non-play loans and asset quality variables of a bank in **Kenya from 2004 to 2008. This research indicated that main parts of commercial banks profit weren't** affected by loan and credit.

3. THEORETICAL BASES

3.1. RISK MANAGEMENT

Every transaction or service which is done by banks has risk. The risks which affected banks are arisen from shortness in program flow or unsuccessful politics or system inadequacy. These factors may cause customers loss or commercial situations or pay compensation. If banks make mistakes in financial securement or service value pricing, they may be encountered by risk. So, banks need total awareness of society from financial sources costs and their services, (Hitchin and Malt, 2001).

3.2. CREDIT RISK

This risk is the most important factor of production in banks and financial institutes, credit risk can be defined as sudden events which usually happen as a change in assets values. This risk happens when loans receivers don`t incline or want to repay their liabilities to banks, so it is called default which is a synonym for credit risk.

3.3. CALCULATION MODELS OF CREDIT RISK AND MODEL ANALYSIS

Credit risk models are important because they have necessary vision and knowledge to estimate and exhibit damage expectancy of loans. Credit risk models with risk measuring can create rational relationship between risk return and suitable situation for price in the two following levels:

A) Investigating loan and customer individually (estimation credibility)

B) Investigating portfolio risk of loan credits and the most important models of this kind are:

    a) Credit risk,

    b) Credit portfolio,

    c) Risk measuring,

    d) Risk measuring model

Many models have been introduced for risk modeling during recent years, in this part of the research main models of portfolio credit risk have been interpreted risk measurement method by J.P Morgan had been based on categorized transmission change analysis. Then, Tom Wilson developed credit categorized change method and suggested view model of credit portfolio which was changed by default expectancy in a credit cycle, and was an accessory of economic vast variables and after that risk measurement model of a widespread view was used. This model might relate default expectancy of each debtor to assets market value. Finally, credit Suisse financial products introduced credit risk model in October of 1997. This model was used mathematically and has been exceptional among portfolio models and has been one of the main reason of the model success whose concentration has been on default event.

3.4. MEASURING CREDIT MODELS OF CREDIT RISK MANAGEMENT

Measuring credit has been an identity instrument for banks credibility and credit customers are categorized impartially based on quality and quantity information and statistic measuring credit models can be divided into two main parts as follow:

A) Parametric measuring credit models as:

    a) Linear probability model

    b) Prohibit &logit models

    c) Discrimination analysis models

B) Non- parametric measuring credit models as:

    a) Classification trees algorithms (recursive partitioning)

    b) Nearest **neighbors'** models

    c) Analytical hierarchy process

    d) Expert systems

    e) Artificial neural networks

Evaluation and measurement of banks loans portfolios can be **called as "credit portfolio management"** based on varied effects and relationship among different portfolio loans.

Successful banks in all over the world can develop measuring credit systems and credit portfolio management. Moreover, these systems can help banks` mangers to make decision better based on quality and quantity evaluation, individual loans and bank credit portfolio.

3.5. THE MOST IMPORTANT BANKING RISK

The most important banking risks which banks and financial institutions encounter are divided into 3 part as:

Credit risk: risk related to damages of non- repayment delay repayment of real or collar of loan from customer part

Market risk: risk related to likely damages on banks` assets based on changes and fluctuations of market factors such as foreign exchange price, interest price, share price and etc.

Operational risk: risk related to direct or indirect damages which their origins aren`t insufficient or incorrect processes of organization, individual, system and events out of the organization.

While recognition and management of banking and financial risk kinds are duties of an international center which has duty of politics and announcement of instruction in relation to risk discussion in organizations. So, existences of Bank and Bassel(1) or International Settlements and Bassel Committee are necessary to have main duty of supervision on Bassel(1) assets situations in different countries. This Committee has duty of standards determinations related to banking risk, too.

Based on Bassel Committee (1) requirements, asset adequacy is a criterion for measurement of bank asset degree which is expressed as percentage of endangered credits. The least asset efficiency ratio based on Bassel (1) requirements has been considered as 8 percent.

Bassel Committee (1) in its new instruction in 1999 published Basssel (2). In this new Bassel new changes in calculation method and least ration of asset efficiency ratio have been existed.

Asset efficiency (adequacy) definition based on Bassel (1) and (2) is as follow:

Bassel (1): asset adequacy is a necessary asset least degree to cover credit risk.

Bassel (2): asset adequacy is a necessary asset least degree to cover credit and operational risks.

3.6. HYPOTHESES

First Hypothesis: deferred loans of banks can effect on assets` returns.

Second Hypothesis: loan damages in banks can effect on assets` returns.

Third Hypothesis: asset efficiency of banks can effect on assets` returns.

3.7. RESEARCH AIM

The research main aim is investigating efficient management of credit risk in all banks` factors. Moreover, the research wants to express risk management of banks` rmanagement. It is showing of management effect of banks` credits risks on profitability.

4. RESEARCH METHODOLOGY

Research data gathering has been done by two methods, descriptive method that gas gathered its information from library, articles and similar researches. The other method is data gathering by annual reports of banks and their sites. The research uses regression model of multi variables to show relationship between variables.

ROA = A + B * 1 NPLR + B * 2 LLPR + B * 3 car

4.1. ASSETS` RETURNS (ROA)

The received ratio of operational net profit of a corporation is from its business transaction in a definite duration of time which is total asset of a corporation. This indicator is a good indicator of o profitability bank.

4.2. NPLR

It is ratio of deferred demands of loan to loan which is recognized as a good indicator for credit risk management evaluation.

4.3. LLPR

It is ratio of demands` costs to categorized loan which is recognized as the best indicator for evaluation of credit risk management efficiency.

4.4. CAR (RATIO OF ASSET EFFICIENCY0

This indicator of supervised statuses is for optimized **degrees'** amount of banks assets and can own special level of fund deposit endangered risk.

Research statistic population indicates 17 banks and accepted financial institutes of Iran Islamic Central Bank from 2007 to 2015. After data gathering to analyze related data both statistical and financial analyses should be acted as follow:

Statistical instruments for research data analysis are instruments that have been considered as different relationship derivation between different variables as analysis of multi regression and assumption test.

Financial analysis: to do financial analysis of financial and other analyses ratios.

To analyze research data SPSS software is used.

4.5. ANALYSIS OF REGRESSION MODEL

ROA =a + b 1 * NPLR + b 2 *LLPR + b 3 *CAR (1) ROA = A + B **1** NPLR + B **2** LLPR + B **3** car

1- Test conclusions of Variance (Anova) Analysis

At first linear relationship between variables is investigated by variance analysis test:

H0: There is no linear relationship between variables.

H1: There is a linear relationship between variables.

Table 1. Anova Analysis

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	47.227	3	15.742	.911	.046[b]
	Residual	570.181	13	17.278		
	Total	**617.407**	**17**			

Source: Author

Based on mean square which is less than 0/01, so linear relationship between variables in regression is accepted by 0/095 level and indicates that regression model is a suitable model.

2- Conclusions of Regression Coefficients

Table 2. Regression Coefficients

Model	Correlation coefficients	R Square	Std. Error of the Estimate	Durbin-Watson
1	.277[a]	.076	.156706	2.054

Source: Author

As table (2) shows, Durbin- Watson amount has been from 1/5 to 2/5, so it can be concluded that observations are independent. Multi correlation coefficient should be from 0 to +1 and in the research is 0/277 and determination coefficient (Square R) indicates that 76 percent of research dependent changes which means asset return dependent on independent variables.

3- Conclusions of Regression Quotation Coefficients

Below table shows conclusions of standard and non- standard coefficients in regression quotation. Based on the table meaningfulness or non- meaningfulness of coefficient in term of t-statistic can be investigated.

H0: Regression quotation coefficient is not meaningful (lack of independent meaningful variables effects on dependent variable)

H1: Regression quotation coefficient is meaningful (independent meaningful variables effects on dependent variable)

Table 3. Regression quotation of asset return dependent variable

Model	Non-standardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
Fixed effect	10.010	1.415		7.075	.000
Asset efficiency	.018	.452	.007	.039	**.0**69
Deffered demands ratio of loan to loan	-.996	1.199	-.140	-.831	.412
Demands costs ratio of loan to loan	.106	.081	.237	1.307	**.0**20

Source: Author

Based on received coefficients of Beta, amount of this coefficient of all independent variables are meaningful (meaningful level is less than 0/05) which means that deferred demands` costs ratio of loan to assets return is validated. In fact, this coefficient indicates important and independent variables roles in anticipation of dependent variable. Moreover, B coefficient amount and t-statistic amount show role of independent variables on operation, and its regression quotation is as follow:

$ROA = A + B * 1 -.996 + B * 2 .106 + B * 3 .018$

Based on t-statistic amount which indicates the presence of each independent variable in the model and meaningful level amount which is less than 0/05 for all independent variables, it can be concluded that the effect of all independent variables on dependent variable is meaningful which means that every change in the variables would cause change in credit risk.

4.6. HYPOTHESES TEST

First Hypothesis: Banks` deferred loan effect on assets` returns, to investigate the hypothesis Pearson correlation coefficient should be used.

H0: Banks` deferred loan don`t effect on assets` returns.

H1: Banks` deferred loan effect on assets` returns.

Table 4. Pearson correlation test conclusion of the first hypothesis

		Assets` returns	deferred loans
Assets'' returns	Pearson Correlation	1	-.383[**]
	Sig. (1-tailed)		.010
	N	**1**7	**1**7
Differed loans	Pearson Correlation	-.383[**]	1
	Sig. (1-tailed)	.010	
	N	**1**7	**1**7

Source: Author

Above table conclusions indicate that meaningful level is 0/000 and is less than 0/05, so banks` deferred loans have negative effect in 99 percent of assurance level on assets` returns. Although correlation coefficient is negative and increase of one element will be followed by decrease of other element and intensified effect is 0/034. So, H0 is rejected and H1 is validated.

Second Hypothesis: Banks` loans damages effect on assets` returns, to investigate the hypothesis Pearson correlation coefficient should be used.

H0: Banks` loans damages don`t effect on assets` returns.

H1: Banks` loans damages effect on assets` retu

Table 5. Pearson correlation test conclusion of the second hypothesis

		Assets` returns	Loans` damages
Assets` returns	Pearson Correlation	1	-.**4**16
	Sig.		.246
	N	1 7	17
Loans` damages	Pearson Correlation	-.**4**16	1
	Sig.	.246	
	N	1 7	17

Source: Author

Above table conclusions indicate that meaningful level is 0/000 and is less than0/05, so banks` loans damages have negative effect in 99 percent of assurance level on assets` returns. Although correlation coefficient is negative and increase of one element will be followed by decrease of other element and intensified effect is 0/034. So, H0 is rejected and H1 is validated.

Third Hypothesis: Banks` assets efficiencies effect on assets` returns, to investigate the hypothesis Pearson correlation coefficient should be used.

H0: Banks` assets efficiencies don`t effect on assets` returns.

H1: Banks` assets efficiencies effect on assets` returns.

Table 6. Pearson correlation test conclusion of the third hypothesis

		Assets` returns	Assets efficiencies
Assets` returns	Pearson Correlation	1	-.067
	Sig.		.346
	N	1 7	17
Assets efficiencies	Pearson Correlation	-.067	1
	Sig.	.346	
	N	1 7	17

Source: Author

Above table conclusions indicate that meaningful level is 0/000 and is less than0/05, so banks` assets efficiencies have negative effect in 99 percent of assurance level on assets` returns. Although correlation coefficient is negative and increase of one element will be followed by decrease of other element and intensified effect is 0/034. So, H0 is rejected and H1 is validated.

5. CONCLUSIONS

The research investigates credit risk management methods in banks and financial institutes in Iran from 2007 to 2015. Research conclusions indicate that assets returns variable is dependent variable for measuring of effect degree that these variables have on credit risk. The dependent variable has a negative meaningful effect on assets` efficiencies, deferred loans ratios and loans damages ratios variables. When dependent variable increases, independent variable will decrease. This conclusion shows that this indicator can be determined as the best factor for credit risk management and risk management methods.

REFERENCES

Al-Khouri, R. (2011). *Assessing the Risk and Performance of the GCC Banking Sector*. International Journal of Finance and Economics, ISSN 1450-2887, Issue65, 72-8.

Asli, Sh., (2010), "*Credit risk management and view **of loans` payments sample in other countries***"**, Expert of risk control and research in Sepah Bank

Azarpendar, F., (2011), "*Investigation of credit risk and liquidity risk in banks***",** M.A. Thesis, Azad university of Tehran

Baesens, B., Viaene, S., Van den Poel, D., Vanthienen, J., and Dedene, G. (2002). Bayesian neural network learning for repeat purchasemodelling in direct marketing.European Journal of OperationalResearch, 138(1), 191–211.

BGL Banking Report (2010). *Getting Banks to Lend Again the Banker's* Magazine of July 2012, publication of The Financial Times Ltd., London.

Chen, K. and Pan, C. (2012). *An Empirical Study of Credit Risk Efficiency of Banking Industry in Taiwan*, Web Journal of Chinese Management Review, 15(1), 1-16.

Kargi, H.S. (2011). *Credit Risk and the Performance of Nigerian Banks*, Ahmadu Bello University, Zaria

Khoshsima, R., Shahikitash, M.N., (2011), "*The effect of credit, operational and liquidity risks in Iran banking system efficiency***"**, Magazine of Research and Science of Programming and Budgetary, 17th year, No, 2

Kithinji, A.M. (2010). *Credit Risk Management and Profitability of Commercial Banks in Kenya*, School of Business, University of Nairobi, Nairobi **.**

Koohzadi, N., (2003), "*Risk management in electronic bank***",** Collection of lectures and articles of 14th Islamic banking meeting, Iran banking Superlative Institute, First year, p. 144

Raad Mozib L., (2015). Credit Risk Management (CRM) Practices in Commercial Banks of Bangladesh: *"A Study on Basic Bank Ltd."*.*International Journal of Economics, Finance and Management Sciences.* Vol. 3, No. 2, 2015, pp. 78-90.

Raei, R., Saeidi, A., (2014), "*Bases of risk management engineering***", Management country, Tehran** University and Samt Publications

Safari, S., Ebrahimi Shaghghi, M., Taherifard, M., (2011), *"Credit risk management in banking system, data coverage analysis comparison and neural channel",* Research and Science Shahed Magazine, 18th year, No, 2

ORIGINAL RESEARCH PAPER

STUDY OF AUDITING QUALITY EFFECT ON THE RELATIONSHIP BETWEEN FREE CASH FLOW AND REPORTING QUALITY IN THE ACCEPTED CORPORATIONS OF TEHRAN STOCK EXCHANGE

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Abstract

Auditors can discover performed profit management by managers and they can integrate mangers to perform high reporting quality and profit management. This research aim is studying auditing quality effect on the relationship between free cash flow and reporting quality in the accepted corporations of Tehran stock exchange. The research methodology is descriptive-measuring and relationships between the research variables are correlative and the research aim is applicable and post-eventual. The research statistic population include 148 accepted corporations of Tehran stock exchange from 2010 to 2014. To process and test research hypotheses regression methodology, paneling data and constant effect model have been used. So, four hypotheses have been codified. In the research hypotheses, free cash flow, auditor charge duration, auditor size and auditor specialty in industry are independent variables and financial reporting quality is dependent variable. The research conclusions indicate that there is a negative meaningful relationship between free cash flow and financial reporting quality, auditing charge duration and auditor specialty in industry have negative effect on reporting quality and auditor size has positive meaningful effect on relationship between free cash flow and reporting quality. Totally, the research findings represent that auditing quality has positive meaningful effect on the relationship between free cash flow and reporting quality. It is suggested to board structure to approve instructions because managers can invest cash flows in profitable projects that aren`t related to their personal interests. So, managers will not change commitment items to access opportunistic behaviors because decrease of commitment items will be continued by increase of financial reporting quality.

1. INTRODUCTION

Auditors` aim is keeping investors` beneficiaries in contrast to distortions and mistakes in the financial statements. Auditors want to keep their professions` credits and their professional fames, they avoid judicial parts against themselves and they try to increase their auditing quality. So, mangers` motivations to perform their personal beneficiaries in profit quality can create obstacles for auditors to access their aims, (Namazi and et. al, 2010).

One independent proficient auditing institute can recognize incorrect exhibition of investigating financial statement items and it can effect on correct exhibition to its owner. So, financial information can be reported reliantly. To access this aim, characteristics of auditing institutes are important because these characteristics can be relative to auditing quality positively or negatively. Titman & Truman (1989), believed that more qualified auditor can improve correctness of exhibited information. Auditor will let investors to access more accurate estimation, (Nonahal Nar and et.al, 2009).

Growth and change of economic relationships can cause competition in business, industry and investment. So, corporations need suitable and on time investments to keep and vast their activities. Financial

reporting of corporations should develop information for potential and actual investors, creditors and other users in the rational investments, credit delivery and similar profitable decisions. Financial reporting should develop necessary information to evaluate financial situation and agency economic base, performance evaluation and profitability ability, financial securement evaluation of financial situation and cash flow use, evaluation of management responsibility and performance of rational duties and financial reporting can develop complement information to understand financial information better and anticipated future situation. So, the reporting can be important in the mentioned research aims and the increase of reporting quality can cause more for efficient investments, keeping and development of corporations. Recent studies express that financial reporting increase can be continued by important economic outcomes such as investment efficiency increase, (Khodaei and et.al, 2009).

Free cash flow is a standard to measure corporations` performances and it shows the amount of cash flow that a corporation owns after performance pf necessary expenses to keep or develop assets. New production development, commercial educational performances, payment of cash flow profits to investors and liability payment will not be possible without owing cash flow because a corporation can report positive pure profit in profit and loss statement if it dons`t pay its liabilities. So, some investors use cash flow statement information to evaluate. The mentioned criterion is one of the continuous criterions which is use to compare and analyze financial health of corporation, (Moradzadeh Fard and et.al, 2009). Sometimes managers will be in the conditions that their decisions can`t be efficient for the investors and their decisions may damage to financial reporting. In otherwise, corporations which have more profit management behaviors will exhibit financial reporting with low quality.

However; auditors can discover performed profit management by managers and they can integrate mangers to perform high reporting quality and profit management, (Namazi and et. al, 2010).

Based on the above mentioned factors, this research aim is studying auditing quality effect on the relationship between free cash flow and reporting quality in the accepted corporations of Tehran stock exchange. This research tries to answer to this question of whether auditing with high quality in the accepted corporations of Tehran stock exchange can weaken relationship between free cash flow and reporting quality or not?

2. RESEARCH BACKGROUND

Hoshyar (2014), in his research investigated relationship between characteristics of auditing committee members with financial reporting. The research findings represented that there was no meaningful relationship between numbers of auditing committee members and ratio of auditing committee irresponsible members with quality of financial reporting, while financial specialty and education degree of auditing committee members had positive meaningful relationship with quality of financial reporting.

Asadi (2014), investigated relationship among auditing committee division, financial reporting quality and profit anticipation accuracy of the accepted corporations in Tehran stock exchange. The research received conclusions by regression analysis of corporation data represented by 0/095 with modulated, paneling and constant effect models that financial reporting quality and management anticipation accuracy before and after auditing committee run were different from each other that had been developed after auditing committee run. Moreover, the research conclusions indicated that there was a direct relationship between financial reporting quality and management profit anticipation accuracy.

Ahmadi (2012), investigated auditing quality role on relationship between representative problems and financial information quality. The research findings represented that with increase of financial leverage as representative supervising element and management ownership amount as representative motivating element, auditing quality would decrease meaningfully, so increase of auditing quality would be continued by decrease of voluntary commitment items and meaningfully decrease of financial reporting.

Rychardson (2006), believed that investments would be more that optimization in the corporations which had high free cash flow. Moreover, in the investigation of corporation guideline system structure and

investments more that optimization he found that some corporation guideline system plans would decrease free cash flow of investments more that optimization.

Rajgopal &Venkatachalam (2011), in their research tested financial reporting and substandard return fluctuation (vibration) during 40 years. They found that lowering of financial reporting quality would be related to increase of substandard return fluctuation (vibration).

Biddle & Hillary (2006), investigated relationship between investment and financial reporting quality. They found that reporting quality would be in the corporations in the commercial areas, which tended toward more investment (less investment), had negative (positive) relationship with investment. In the otherwise, higher reporting quality would stop more (less) investment.

Abedin & et.al (2012), in their research investigated relationship between auditor specialties of on time auditing financial statements. Their findings indicated that corporations whose auditor had industry specialty would not own on time auditing quality in contrast to other corporations whose auditors weren`t specialists. So, auditor specialty couldn`t effective fore on time auditing reporting. Moreover, they found that auditor size could increase auditing reporting speed.

2.1. RESEARCH HYPOTHESES

1- There is a positive meaningful relationship between free cash flow and reporting quality.

2- Auditor charge duration has a positive meaningful effect on the relationship between free cash flow and reporting quality.

3- Auditor size has a positive meaningful effect on the relationship between free cash flow and reporting quality.

4- Auditor specialty in industry has a positive meaningful effect on the relationship between free cash flow and reporting quality.

2.2. RESEARCH VARIABLES

A) Independent Variables

1- Auditing Quality

In the research three indicators as; auditing institute size, auditor specialty and auditor charge duration have been used to evaluate auditing quality, (Hajia and et.al, 2015).

Auditor Charge Duration:

Fllateh (2006: 18), believed that auditor charge duration had been one of the measuring standard of auditing quality that would be used for continuous years of auditing institutes where investigated and audited one ownership, (Hajia and et.al, 2015).

Auditor charge in this research has been introduced as an independent variable. If auditor charge duration is 5 years or more than 5 years, number one or in otherwise number zero will be accepted.

Auditor Size:

In this research auditors, (auditing institutes) will be divided into 2 groups. So, auditing organization will be among big auditor because of its frequent employees and its long life duration and other auditing institutes will be among small auditor (small auditing institutes). In this research, auditing organization will be recognized as a big institute, BIG=1, so other society member auditing institutes of Iran formal accountants will be recognized as non-big institutes, BIG=0, (Hasas Yeganeh, 2009).

Auditor Specialty in Industry:

In this research, market share has been used as a measuring indicator of auditor specialty in industry, so this topic indicates the priority of industry in relative to other auditors. If auditor market share is more, industry of auditor experience and specialty will be more in relative to other competitors. Owning high

market share (market dominant share) represents that auditors divide himself among other competitors successfully, (Aghaei, and et.al, 2011).

In this research, market share has been known as an indicator for auditor industry specialty, (Willkinz, **2002). Market share can be calculated as, "Collection square of customers` assets bookkeeping of auditing**

institutes in which industry is division of collection square of customers` assets bookkeeping of auditing **institutes", (Hajia an**d et.al, 2015).

2- Free Cash Flow

Rezvani Raz & Haghighat (2004: 50), believed that received cash flow would be attained from operations after tax deduction without liability and cost calculation of a corporation. So, free cash flow is cash flow will be given to a corporation after coverage of investment needs and asset in flow without liability assumption. In the corporations without liability or financial leverage, free cash flow is cash flow of share owners` rights, (Jahanshad and et.al, 2012).

Cash flow of share owners` rights with the assumption of no liability for a corporation= free cash flow

B) Dependent Variables

1- Financial Reporting Quality

Voluntary commitment item standard is used for reporting quality measuring, and Kothari & et.al (2005) standard will be used as:

$$TA_{t,i} = \Delta CA_{t,i} - \Delta CL_{t,i} - \Delta CASH_{t,i} + \Delta STD_{t,i} - DEP_{t,i}$$

TA: total commitment items of i corporation in t year

$\Delta CA_{t,i}$: Change in flow assets of i corporation between t and t-1years

$\Delta CL_{t,i}$: Change in flow liabilities of i corporation between t and t-1years

$\Delta CASH_{t,i}$: Change in cash flow of i corporation between t and t-1years

$\Delta STD_{t,i}$: change in flow share long term liabilities of i corporation between t and t-1years

$DEP_{t,i}$: Depreciation cost of i corporation in t year

C) Controlling Variables

1- Corporation Size

De Anjeloo (2010), believed that bigger auditing institutes would serve auditing services with higher quality because they interested better fame in work market. These institutes have more owners, so they will not worry of missing then. Corporation size will be calculated by logarithm of all assets, (Hajia and et.al, 2015).

Corporation size $size_{i,t}$ is total asset natural logarithm of i corporation in t year.

$$size_{i,t} = Ln(A_{i,t})$$

$size_{i,t}$: i corporation size in t year

$Ln(A_{i,t})$: Natural logarithm of i corporation total assets in t year

2- Financial Leverage

Liability ratio= total liabilities / total assets

Ghalibaf Asl (2005), this ratio represents cash percent which has been financially secured by liability, (Zahari & et.al, 2011).

In this research to calculate corporation leverage level, total liabilities will be divided to total assets of i corporation in t year.

$$Lev_{i,t} = \frac{L_{i,t}}{A_{i,t}}$$

$Lev_{i,t}$: leverage level of i corporation in t year

$L_{i,t}$: Total liabilities of i corporation in t year

$A_{i,t}$: Total assets of i corporation in t year

2.3. Analysis and Description of Research Variables

Statistical analysis of research variables has been used as a part of methodology for aims of experimental observation description about research topic and descriptive conclusion expression to evaluate research hypotheses. Characteristics of descriptive elements will describe research phenomenon characteristics more accurate that statistic deduction will be performed based on indicators of the variables. Research variables have been described and analyzed by use of statistic indicators of dispersal and central orientation. Totally, this deduction has gathered and processed the methods which gather information. It should mention that after extra data deduction and clarification, numbers of corporation years will be encountered by decrease.

2.4. VARIABLES` DESCRIPTIVE INDICATORS

Descriptive statistic table represents amounts of average, standard deviation, minimum and maximum of each independent, dependent and controlling variables. In the below table, the most main central indicator is average which shows balance point and center of distribution exertion and it is a good indicator to show data center.

Table1. Descriptive indicators of the research variables

Minimum	Maximum	Standard deviation	Mode	Average	Number of corporation year	Symbol	Research variables
536/1	423/7	256/0	593/4	537/4	740	FCF	Free cash flow
000/0	000/1	532/0	674/0	691/0	740	AIS	Auditor specialty in industry
000/0	000/1	146/0	385/0	462/0	740	TA	Duration of auditor charge
000/0	000/1	178/0	000/0	381/0	740	SA	Auditor size
982/1-	541/2	256/0	032/0	037/0	740	TA	Financial reporting quality
413/9	87/15	824/1	11/12	30/12	740	SIZE	Corporation size
214/0	67/15	65/1	784/1	141/2	740	LEV	Financial leverage

Source: Author

As observed in the above table, amount free cash flow average is 4/537 and its mode is 4/59. Totally, dispersion standards are standards which compare and investigate observation dispersion about average. One of the most important dispersion standards is standard deviation and its amount for free cash flow in the above table is 0/256.

Based on the above table, amounts of average and mode for auditor charge duration variable are 0/462 and 0/385 and minimum and maximum amounts are 1/00 and 0/000.

Average is the most main central indicator which shows data average. If data categorized based on discipline line, average amount will be situated in the balance point or dispersion exertion point. Mode indicates that 50 percent of data are less than collection of middle number and 50 percent of data are more than collection of middle number. Mode is used as an inclination size toward dispersion center whose forms are asymmetric. While amounts of these central parameters (average, mode) are near to each other, data will be symmetrical dispersed. Standard deviation is one of the dispersion parameters which represents amount of data dispersion.

3. DISCUSSION

In this research, model estimation methodology has been based on the paneling data. This method is a mixture of time series (2010-2014) and sectional data of 148 accepted corporations in Tehran Stock Exchange have been calculated for each model variables based on million Rials. Eviews software has been used. Finally, estimated models of the research hypotheses have been exhibited by regression models of multi variables.

First Hypothesis Test

First hypothesis test will be used as:

H0: free cash flow has no positive meaningful relationship with reporting quality.

H1: free cash flow has a positive meaningful relationship with reporting quality.

Regression model for the first hypothesis is as follow:

TA = β0 + β1 FCF + β8 SIZE + β9 LEV

Table 2. First hypothesis test conclusions

			TA = β0 + β1 FCF + β8 SIZE + β9 LEV		
Prob.	**t statistic**	**Standard deviation**	**Coefficient**	**Variable symbol**	**Variable name**
0000/0	879/0-	342/0	301/0-	C	Constant amount
0000/0	178/3-	074/0	235/0-	β_1(FCF1)	Free cash flow
3167/0	165/3-	027/0	087/0-	β_8 (SIZE)	Corporation size
0004/0	241/2-	160/0	360/0-	β_9 (LEV)	Financial leverage
321/38 (000/0)			F Statistic Meaningful level (Prob)		
977/1			Watson-Durbin Statistic		
325/0			Determination coefficient (R^2)		
281/0			Adjusted determination coefficient (Adj R^2)		

Source: Author

Based on the conclusions of the research first hypothesis model test, statistic meaningful level F (0/000) is less than error level and all regression model is meaningful. Watson- Durbin statistic (1/977) is from 1/5 to

2/5, so there is no correlation between model error members. Based on the lowering of t statistic (P-Value) **from accepted error level for β1, this hypothesis conclusion indicates that there is a negative meaningful** relationship between free cash flow with financial reporting quality. So, H0 can be rejected in 5 percent error level which means there is a negative meaningful relationship between free cash flow with financial **reporting quality. Moreover, t statistic of the accepted error level for β8 represents that controlling variable** of corporation size has no meaningful relationship with financial reporting quality. T statistic amount of **the accepted error level for β9 represents that controlling variable of financial leverage has a negative** meaningful relationship with financial reporting quality. Finally, determination coefficient and adjusted determination coefficient represent that entered variables in regression can describe 28 percent of the dependent variable changes.

Received conclusions indicate that there is a meaningful relationship between free cash flow and financial reporting quality in 5 percent error level and there is no meaningful relationship between controlling variable of corporation size with financial reporting quality, however; there is a negative meaningful relationship between financial leverage variable and financial reporting quality. Estimated model of the hypothesis will be as follow:

TA = (-0/301) + (-0/235) FCF + (-0/087) SIZE + (-0/360) LEV

Second Hypothesis Test

Second hypothesis test will be used as:

H0: auditor charge duration has no positive meaningful effect on relationship between free cash flow and reporting quality

H1: auditor charge duration has positive meaningful effect on relationship between free cash flow and reporting quality

Regression model for the second hypothesis is as follow:

TA = β0 + β1 FCF + β2 TA + β5 FCF*TA+ β8 SIZE + β9 LEV

Table 3. Second hypothesis test conclusions

			TA = β0 + β1 FCF + β2 TA + β5 FCF*TA+ β8 SIZE + β9 LEV		
Prob.	**t statistic**	**Standard deviation**	**Coefficient**	**Variable symbol**	**Variable name**
0000/0	879/0-	342/0	301/0-	C	Constant amount
0000/0	178/3-	074/0	235/0-	**β**1(CFC)	Free cash flow
0024/0	699/4-	098/0	462/0-	**β**2 (TA)	Auditor charge duration
0362/0	362/2-	008/0	021/0-	**β**5(TA*CFC)	Cash flow* charge duration
3167/0	165/3-	027/0	087/0-	**β**8 (SIZE)	Corporation size
0004/0	241/2-	160/0	360/0-	**β**9 (LEV)	Financial leverage
321/38 (000/0)			F statistic Meaningful level (Prob)		
977/1			Watson-Durbin statistic		
325/0 281/0			Determination coefficient (R^2) Adjusted determination coefficient (Adj R^2)		

Source: Author

Based on the conclusions of the research second hypothesis model test, statistic meaningful level F (0/000) is less than error level and all regression model is meaningful. Watson- Durbin statistic (1/977) is from 1/5 to 2/5, so there is no correlation between model error members. Based on the lowering of t statistic (P-

Value) from accepted error level for β1, this hypothesis conclusion indicates that there is a negative meaningful relationship between free cash flow with financial reporting quality. β 2 represents that auditor char**ge duration has a negative meaningful effect on financial reporting quality. Finally, β5 indicates that** auditor charge duration has negative meaningful effect on financial reporting quality. So, H0 can be rejected in 5 percent error level. Moreover, t sta**tistic of the accepted error level for β8 represents that** controlling variable of corporation size has no meaningful relationship with financial reporting quality. T **statistic amount of the accepted error level for β9 represents that controlling variable o**f financial leverage has a negative meaningful relationship with financial reporting quality. Finally, determination coefficient and adjusted determination coefficient represent that entered variables in regression can describe 28 percent of the dependent variable changes.

Received conclusions indicate auditor charge duration can have negative meaningful effect on relationship between free cash flow and financial reporting quality in 5 percent error level and there is no meaningful relationship between controlling variable of corporation size with financial reporting quality, however; there is a negative meaningful relationship between financial leverage variable and financial reporting quality. Estimated model of the hypothesis will be as follow:

TA= (-0/301) + (-0/235) FCF+ (-0/462) TA+(-0/021) TA*FCF+(-0/087) SIZE+(-0/360) LEV

Third Hypothesis Test

Third hypothesis test will be used as:

H0: auditor size has no positive meaningful effect on relationship between free cash flow and reporting quality

H1: auditor size has positive meaningful effect on relationship between free cash flow and reporting quality

Regression model for the third hypothesis is as follow:

TA = β0 + β1 FCF + β3 SA + β6 FCF*SA + β8 SIZE + β9 LEV

Table 4. Third hypothesis test conclusions

TA = β0 + β1 FCF + β3 SA + β6 FCF*SA + β8 SIZE + β9 LEV
Prob.	t statistic	Standard deviation	Coefficient	Variable symbol	Variable name
0000/0	879/0-	342/0	301/0-	C	Constant amount
0000/0	178/3-	074/0	235/0-	)₁**β**FCF)	Free cash flow
2350/0	468/2	156/0	385/0	)₃**β** SA)	Auditor size
0018/0	696/3	063/0	234/0	)₆ **β**SA*FCF)	Auditor size*free cash flow
3167/0	165/3-	027/0	087/0-	)₈**β** SIZE)	Corporation size
0004/0	241/2-	160/0	360/0-	)₉**β** LEV)	Financial leverage
\multicolumn{2}{c}{321/38 (000/0)}	\multicolumn{4}{l}{F statistic Meaningful level (Prob)}
\multicolumn{2}{c}{977/1}	\multicolumn{4}{l}{Watson-Durbin Statistic}
\multicolumn{2}{c}{325/0}	\multicolumn{4}{l}{Determination coefficient (R²)}
\multicolumn{2}{c}{281/0}	\multicolumn{4}{l}{Adjusted determination coefficient (Adj R²)}

Source: Author

Based on the conclusions of the research second hypothesis model test, statistic meaningful level F (0/000) is less than error level and all regression model is meaningful. Watson- Durbin statistic (1/977) is from 1/5 to 2/5, so there is no correlation between model error members. Based on the lowering of t statistic (P-

Value) from accepted error level for β1, this hypothesis conclusion indicates that there is a negative meaningful relationship between free cash flow with **financial reporting quality. β3** represents that auditor size has no meaningful effect on financia**l reporting quality. Finally, β6** indicates that auditor size has a

positive meaningful effect on relationship between free cash flow and financial reporting quality. So, H0 can be rejected in 5 **percent error level. Moreover, t statistic of the accepted error level for β8 represents**

that controlling variable of corporation size has no meaningful relationship with financial reporting **quality. T statistic amount of the accepted error level for β9 re**presents that controlling variable of financial

leverage has a negative meaningful relationship with financial reporting quality. Finally, determination coefficient and adjusted determination coefficient represent that entered variables in regression can describe 28 percent of the dependent variable changes.

Received conclusions indicate auditor size has a positive meaningful effect on relationship between free cash flow and financial reporting quality in 5 percent error level and there is no meaningful relationship between controlling variable of corporation size with financial reporting quality, however; there is a negative meaningful relationship between financial leverage variable and financial reporting quality. Estimated model of the hypothesis will be as follow:

TA= (-0/301) + (-0/235) FCF+ (0/385) SA+(-0/021) SA*FCF+(-0/087) SIZE+(-0/360) LEV

Fourth Hypothesis Test

Fourth hypothesis test will be used as:

H0: auditor specialty in industry has no positive meaningful effect on relationship between free cash flow and reporting quality

H1: auditor specialty in industry positive meaningful effect on relationship between free cash flow and reporting quality

Regression model for the fourth hypothesis is as follow:

TA = β0 + β1 FCF + β4 AIS + β7 FCF*AIS+ β8 SIZE + β9 LEV

Table 5. Third hypothesis test conclusions

TA = β0 + β1 FCF + β4 AIS + β7 FCF*AIS+ β8 SIZE + β9 LEV					
Prob.	t statistic	Standard deviation	Coefficient	Variable symbol	Variable name
0000/0	879/0-	342/0	301/0-	C	Constant amount
0000/0	178/3-	074/0	235/0-	)₁**β** FCF)	Free cash flow
0000/0	163/4	034/0	143/0	)₄**β** AIS)	Auditor specialty in industry
0000/0	815/1-	047/0	086/0-	)₇**β** AIS*FCF)	Auditor specialty in industry *free cash flow
3167/0	165/3-	027/0	087/0-	)₈**β** SIZE)	Corporation size
0004/0	241/2-	160/0	360/0-	)₉**β** LEV)	Financial leverage
321/38 (000/0)			F statistic Meaningful level (Prob)		
977/1			Watson-Durbin Statistic		
325/0 281/0			Determination coefficient (R^2) Adjusted determination coefficient (Adj R^2)		

Source: Author

Based on the conclusions of the research second hypothesis model test, statistic meaningful level F (0/000) is less than error level and all regression model is meaningful. Watson- Durbin statistic (1/977) is from 1/5

to 2/5, so there is no correlation between model error members. Based on the lowering of t statistic (P-Value) from accepted error level for β1, this hypothesis conclusion indicates that there is a negative meaningful relationship between free cash flow with financial reporting quality. β4 represents that auditor specialty in industry has a meaningful effect on financial reporting quality. Finally, β8 indicates that auditor specialty in industry has a negative meaningful effect on relationship between free cash flow and financial reporting quality. So, H0 can be rejected in 5 percent error level. Moreover, t statistic of the accepted error level for β8 represents that controlling variable of corporation size has no meaningful relationship with financial reporting quality. T statistic amount of the accepted error level for β9 represents that controlling variable of financial leverage has a negative meaningful relationship with financial reporting quality. Finally, determination coefficient and adjusted determination coefficient represent that entered variables in regression can describe 28 percent of the dependent variable changes.

Received conclusions indicate auditor specialty in industry has a negative meaningful effect on relationship between free cash flow and financial reporting quality in 5 percent error level and there is no meaningful relationship between controlling variable of corporation size with financial reporting quality, however; there is a negative meaningful relationship between financial leverage variable and financial reporting quality. Estimated model of the hypothesis will be as follow:

TA= (-0/301) + (-0/235) FCF+ (0/143) AIS+(-0/086) AIS*FCF+(-0/087) SIZE+(-0/360) LEV

After financial scandal in economic big corporations such as; Word come, some concerns have been raised for financial statements. However, responsibility of financial statement preparation is management duty. Based on the happened events, auditors are known as blames until these events are called auditing break. Generally believed that nonexistence of high qualified and independent auditors can cause these events. So, lawgivers and producers of accounting standards try to produce laws to promote auditor independence and auditing quality. Financial reporting is relationship between financial information and outer organization individuals. While there is a difference between beneficiaries of management and foreigner users, financial reporting auditing by independent individual can increase quality of reported financial information by management and investors about value of transacted stock exchange.

Totally, the research findings represent that auditing quality has positive meaningful effect on the relationship between free cash flow and reporting quality. It is suggested to board structure to approve instructions because managers can invest cash flows in profitable projects that aren`t related to their personal interests. So, managers will not change commitment items to access opportunistic behaviors because decrease of commitment items will be continued by increase of financial reporting quality. The research hypotheses conclusions are based on exhibited models by Ang & et.al (2000), Chen and et.al (2005), and Khodadadi and et.al (2009).

4. CONCLUSIONS

Based on the research conclusions, following suggestions will be attained:

Based on the first research conclusions, it is suggested to board structure to perform instructions that stop mangers to invest with their private interests in the projects. So, managers will not change commitment items to access opportunistic behaviors because decrease of commitment items will be continued by increase of financial reporting quality.

Based on the second research conclusions, auditor charge duration will decrease because decrease of auditor charge duration will help accounting to increase their information. One reason for this suggestion is that decrease of long term ownership auditor, auditors` independence will be kept which stop creating of friendly relationship between auditor and owner.

Based on the third research conclusions, corporation auditing should be done by big and famous auditing organization because these auditing institutes will do their duties with more accuracy to keep their places and decrease risks in the corporations with free cash flow. Finally, decrease of management outcomes will be continued by increase of auditing quality increase and financial reporting quality.

Based on the fourth research conclusions, in the charter of the accepted corporations auditing committee in stock exchange some requirements have been introduces on which some members of auditing committee members in industry will own specialties.

REFERENCES

Abidin S. and Ahmad-Zaluki, A. (2012) Auditor Industry Specialism and Reporting Timeliness, Procedia - Social and Behavioral Sciences 65, PP. 873 – 878

Aghaei, M.A., Nezemi Ardakani, M., (2011), "Auditor specialty in industry and management of voluntary commitment items", Auditing Knowledge, 12th, No., 46

Ahmadi, M., (2012), "Role of auditing quality on relationship between representative problems and financial information quality", M.A Thesis, Marvedasht Azad University, University of Literature and Human Sciences

Asadi, S., (2014), "Investigating relationship between auditing committee specialty, financial reporting quality and accuracy of management anticipation of the accepted corporations in Tehran stock exchange", M.A Thesis, Share Ghods Azad University, University of Human Sciences

Biddle, GC. & Hilary, G. (2006). "Accounting quality and firm-level capital investment". The Accounting Review, Vol. 81, pp. 963–982.

Hajia, Z., Ghane, A., (2015), "Investigating the effect of auditing quality on investment situations in the accepted corporations of Tehran stock exchange", 16th Year, No. 63

Hasas Yeganeh, Y., Bolo, Gh., Farokhi Zhad, F., (2009), "Relationship between voluntary commitment items and auditing report", Auditing Knowledge, 10th Year, No. 3

Hoshyar, A., (2014), "Investigating relationship between characteristics of auditing committee members with financial reporting quality in the accepted corporations in Tehran stock exchange", M.A Thesis, University of Tarbiyat Modares

Jahanshad, A., Alam Ahromi, M., (2012), "Investigating relationship between free cash flows and Q-Toobin ration with designs of managers` rewards", Magazine of Investment Knowledge, Research and Science, 2nd Year, No.,7

Khodaei, M., Valeh Zaghed, M., Yahyaei, M., (2009), "Investigating relationship between financial reporting quality and investment efficiency in Tehran stock exchange", Magazine of Management Accounting, 3rd Year, No. 5

Kothari, S. P., A. J. Leone, and C. E. Wasley. (2005). Performance matched discretionary accrual measures. Journal of Accounting and Economics (1): 163–197.

Moradzadeh Fard, M., Ghatasi, R., MasjedMisavi, M., (2009), "Investigating amount of relationship of corporation free cash flow and investor free cash flow with stock market value", Magazine of Financial Studies, No. 7

Namazi, M., Bayzidi, A., Jabarzadeh Kangarlooei, S., (2010), "Investigating relationship between auditing quality and profit management in the accepted corporations in Tehran stock exchange", Magazine of Auditing Studies, No. 9

Nonahal Nah, A., Jabarzadeh Kangarlooei, S., Yaeghob, K., (2009), "Relationship between auditing quality and commitment items", Investigations of Accounting and Auditing, 17th Duration, No.61

Rajgopal, S., M. Venkatachalam, (2011). Financial reporting quality and idiosyncratic return volatility. Journal of Accounting and Economics51: pp1-20

Richardson. S., (2006), "Over-investment of free cash flow, Review of Accounting Studies", Vol. 11, PP. 159-189.

Zohri, M., Afshar Kazemi, M.A., (2011), "Design of bankruptcy anticipation model by channels of phase nerve in the accepted corporations of Tehran stock exchange", Magazine of Management and Financial Engineering of Stock Exchange, No. 13

THE IMPACT OF ORGANIZATIONAL CITIZENSHIP BEHAVIOR ON ORGANIZATIONAL PERFORMANCE WITH RESPECT TO MEDIATOR VARIABLE CORPORATE ENTREPRENEURSHIP IN MAZANDARAN GOVERNMENT AGENCIES

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Abstract

The main objective of this study was to determine the impact of organizational citizenship behavior on organizational performance with respect to mediator variable entrepreneurship in Mazandaran province Government agencies. This study is applied and the method of data collection is descriptive and correlational. The study consisted of 2,100 executives, experts and employees of Mazandaran province Government agencies which based on Stratified random sampling, 410 samples were selected. Data were collected in this study by three standard questionnaires included: organizational citizenship behavior questionnaire Podsakoff (2003), a questionnaire organizational performance Fazel (2013) and corporate entrepreneurship of Anthonique and Hysrych (2003) that the credit validity by experts, validity, reliability by using Cronbach's coefficient alphabet and appropriateness of the data is verified using factor analysis. To analyze the hypothesis of structural equation modeling was performed using SPSS and LISREL. The results showed that organizational citizenship behavior effect on organizational performance, as well as corporate entrepreneurship as a mediator variable in this relationship is effective.

JEL classification: L26

Keywords: *Organizational citizenship behavior, Organizational performance, Corporate entrepreneurship, Government agencies, Mazandaran province.*

1. INTRODUCTION

The study human behavior in the workplace has long been of interest to Management Sciences scholars (Katz,Kahn, 1978). In the current changing and complex conditions, concerns and major organizations scrambling for survival, development and progress is pervasive. For this purpose, managers seek to identify and take advantage of resources and assets which their education is costly and required many efforts (Ghorbani, Abadi, 2012). Organizations, without non-voluntary willingness to cooperate, are not able to develop the effectiveness of their collective wisdom, between voluntary and compulsory collaboration there is great importance. In the case of compulsory person do hid duties in line with the rules and standards of organization but in voluntary case it is beyond the task and person's cooperation, effort, energy and insight is for developing their abilities in favor of organization benefits. But the argument rose in the past two decades. In addition to behavioral, psychologists and sociologists also has attracted, organizational citizenship behavior is called. Organizational citizenship behavior, voluntary and learned behavioral task that is effective in increasing the performance and effectiveness of organizations directly or indirectly by the formal reward system of the organization is not organized. Creating positive organizational citizenship behavior according to organizational justice can increase both the performance if manager's politeness, respect and dignity of the workers behave (Lim, Loosemore, 2017). The aim of this study was to investigate the effect of organizational citizenship behavior on organizational performance with respect to corporate entrepreneurship as mediator variable in government agencies of Mazandaran province. This study seeks to answer the question of what is the impact of organizational

citizenship behavior on organizational performance? What are the aspects of corporate entrepreneurship impacts on organizational performance? What is the role of corporate entrepreneurship in the process of influencing organizational citizenship behavior on organizational performance? Review the questions and their possible answers can achieve a new look to the government departments to increase performance levels and ultimately improve customer satisfaction, employee satisfaction and effectiveness in the organization.

2. THEORETICAL FOUNDATION OF RESEARCH

2.1. ORGANIZATIONAL CITIZENSHIP BEHAVIOR

Almost 40 years ago, Katz (1964) has noted the importance class of voluntary and spontaneous behaviors that is beyond the obvious requirements of the role, but is essential for efficiency and organizational effectiveness. Smith and colleagues in a report empirical research about the nature and history of such behavior, the partnership concept as organizational citizenship behavior by acting up later by an individual conduct is defined as behavior is optional and directly or explicitly recognized by the formal reward system and the total performance does not increase the effective and efficient organization (Lih Farh et al., 2004). Organ (1988) defined organizational citizenship behavior as a person under the authority of behavior and states that this category of behavioral explicitly and directly by the formal systems, are not considered compensation, but improved effectiveness of organizations. The word is optional for the show This behavior includes the behavior expected role or job description needs and the commitment not to recruit staff and the choice is quite short and it does not seek punitive actions to preserve and strengthen the social and psychological context are causing the issues, is useful and helpful for the organization and do not demand for any material (Organ, 1988).

There is no consensus about the dimensions of organizational citizenship behavior. Podsakoff survey (2000) showed that almost 30 types of organizational citizenship behavior are recognized that in some cases a lot of conceptual overlap between them. He summarized and categorized with different perspectives, behaviors showed seven main divisions is perhaps the most prestigious; OCB is provided by Oregon that are used in different studies. Organ dimensions of citizenship behaviors such states: 1.

Loyalty (if employees are already at work on time, use time effectively), 2. Altruism (point to effective and profitable behavior such as intimacy, empathy and compassion among colleagues), 3. Civic virtue (participation and accountability in corporate life), 4. Chivalry (patience in the face of adverse situations and poor organization without protest, dissatisfaction and complaints in the database), 5. Respect (treatment of people with co-workers, supervisors and audience Organization) (Appel baum et al, 2004). Organ After enumerating the dimensions, implying that the five dimensions of citizenship may not emerge, for example, people who we think has the duty may not be always altruistic and selfless or that some of these aspects, such as altruism and conscientiousness tactic to put managers are under pressure. The staff tries to do this exercise with managers to improve decision-making process or rewarding them corporately. The staff turns of being "The Good Soldier" to "good actor" in Organization (Castor et al, 2004). Organizational citizenship behavior, because the efficiency and effectiveness of organizations through resources development, innovation and adaptation will help a very important issue that deserves increasing attention has been many recent scholars (Koopman, 2001).

2.2. ORGANIZATIONAL PERFORMANCE

Organizational Performance can be defined according to the results of organizational performance can be related to human resource management such as mobility, absenteeism, job satisfaction and commitment or other organizational outcomes such as productivity, quality, service, efficiency and customer satisfaction. In addition to this organizational performance model could be based on indicators such as profit, sales, return on assets or capital or capital market results, market share, turbines, and stock price growth measured. Also, the performance of an organization could be different by individuals or institutional investors through net profit (Singh et al., 2012). The organizational performance is overall structure that refers to the organizational operation (Rahnavard, 2009).

2.3. CORPORATE ENTREPRENEURSHIP

Corporate entrepreneurship is a process by inducing an entrepreneurial culture within an organization leads to innovation in products and processes (Fry, 1993). Since the early 1980s, the global economy and dynamic entrepreneurial approaches to entrepreneurship considered, as a factor influencing the output of small organizations, medium and large (Antonic, 2004). The concept of corporate entrepreneurship through innovation, strategic changes and strategic management evolved and entrepreneurial activities in an organization, focused to improve organizational performance (Kuratko, Goldsby, 2004). Corporate entrepreneurship and organizational activities to the creativity, innovation, risk-taking and leadership leads (Hai, 2006). Corporate entrepreneurship process through the induction of an entrepreneurial culture within an organization leads to innovation in products and processes (Ahmadpur Dariani, 2012). Innovation is essential element in corporate entrepreneurship. Identify opportunities for the organization and ongoing innovation that makes it risky measures justified by entrepreneurial organization. Entrepreneurs are people who are hoping for any sign of business opportunities, observe your surroundings, more alert and nothing is habitual of their features cannot be in front of their success (Line, 2012).

Corporate entrepreneurship is a type of organizational behavior and organizational behavior as a function of structural factors, behavior is grounds for an organization to enable it to achieve its development goals, so these variables have to give up these factors are supportive of entrepreneurial behavior in organizations (Moghimi, 1384). Antonic, Hisrich (2003) according to the Studies carried out, eight referred for internal entrepreneurship. They believe that internal entrepreneurship as a multidimensional concept should be viewed with eight distinct. These dimensions are: 1. the new business 2.new investment 3. Innovation in the process, 4. Innovation in the process of innovation in products / services ,5. Organizations transform 6. Risk-taking 7. Pioneering 8. aggressive competition (Taslimi et al., 2007). Thompson (1999) for the development of entrepreneurship in the organization, five dimensions considered that the existence of these dimensions is essential for the organization. 1. Hard entrepreneurial 2. Creativity risk-taking 3. Paradigm risk-taking 4. design and ideas, 5- Soft entrepreneurial (Moghimi, 2005). Entrepreneur or researcher is at the individual level or at the enterprise level. At the individual level in terms of innovation happening at work or a new company. At the organizational level in terms of creating a new unit in the organization or a new company discharges (emotional friends and colleagues, 1392). In general, two approaches to classified entrepreneurship. The first approach, which according to Miller-oriented entrepreneurship and Frysn (1984) and classifying them develop innovative strategies. Miller and Friesen (1986 and 1991), Dess and Lumpkin (1996) and Nayt (1997) are also part of this approach, the second approach, it is entrepreneurial approach. This approach to entrepreneurship organization is concerned at the macro level. Ariella believes that entrepreneurship has three dimensions: innovation, product development and services and develops products and services. (Antoncic,Hisrich, 2004).

CE therefore means a multidimensional concept, dimensions and numerous components that can be included innovation, leadership, strategic renewal and risk assessment (Scheepers et al, 1998). Entrepreneurship is not limited only to the activities of individual independent venture, but also involves institutional collections. CE means that the organization can develop innovation by encouraging employees and to prosecute Programs, give freedom and flexibility, without them being drowned in the quagmire of administrative bureaucracy. CE means to develop competencies and opportunities within the organization through a combination of different sources (Stoner et al, 1998).

2.4. FOUNDATIONS OF EMPIRICAL RESEARCH

After explaining the importance of entrepreneurship, organizational performance and market orientation in this section, gradually the latest studies on the impact of these variables will be discussed.

Findings	Issue	Researcher
Interpersonal justice is a key factor in creating positive organizational citizenship behaviors projects and project performance that can increase performance if project manager's politeness, respect and dignity of the workers	The effect of internal justice on organizational citizenship behavior	Lim, Loosemore (2017)

Findings	Issue	Researcher
behave.		
Organizational citizenship behavior on work performance and dimensions affect job performance.	The importance of organizational citizenship behavior and attitude change on business performance in predicting job performance	Chiaburu et al (2017)
A high positive correlation between entrepreneurial orientation and performance as a result of success in the areas of strategic alliance.	The success of entrepreneurial orientation and strategic alliances: the possible role of relationship	Li et al.(2017)
Nations with strong market potential willingness to adopt corporate entrepreneurship activities to cope with environmental changes ambivalent, organizations with weak market capabilities actually reduce entrepreneurial activity in an environment very ambivalent.	CEOs, ambivalent interpretations, the enterprise market and corporate entrepreneurship as a response to strategic issues	Yuan et al. (2017)
Positive and significant effect of entrepreneurship, marketing capabilities, relational capital and empowering the innovation capability and performance. Significantly and positively affect the performance of competitive advantage. Innovation capability and performance may be through the development of entrepreneurship, marketing capabilities, relational capital and empowerment is increased.	Through innovation capabilities of small and medium entrepreneurship, marketing capabilities, relational capital and empowerment	Sulistyo, Siyamtinah (2016)
Entrepreneurs and managers can adjust entrepreneurial activity for organizations to achieve success and the proper functioning of their business model innovation.	Entrepreneurship, adopted business model, innovation, and performance	Karimi, Walter (2016)
Organizational citizenship behavior in the environment as a means to supplement increasingly effective in improving the environmental performance per unit area well.	Environmental performance improvements through unit-level organizational citizenship behaviors for the environment	Alt, Spitzeck (2016)
Mediating role in the relationship between market orientation and entrepreneurial intention has business results.	Entrepreneurship hotel performance trends: market orientation has anything to say?	**VegaVázquez** et al. (2016)
The ability to innovate a partial mediating effect of market orientation and export performance as well. SMEs may be able to achieve a competitive advantage through improved usability are market-driven innovation.	The mediating role of innovation in the market for export capability and performance: an implementation in small and medium companies in Turkey	Zehir et al. (2015)
Interaction entrepreneurship and market orientation and attention to human resource practices have the greatest impact on customer value and innovation	Entrepreneurship: its relationship with the market orientation and learning orientation and a history of innovation and customer value	Nasution et al. (2015)
Entrepreneurship and small and medium enterprises regarding performance, this relationship does not work. But the relationship between entrepreneurial orientation and the moderating role of environmental performance increases.	Entrepreneurial orientation and performance. Or the environment's role in this relationship?	**Kurtulmuş**, Warner (2015)

Findings	Issue	Researcher
Internal marketing has positive and significant effect on job satisfaction, organizational commitment and organizational citizenship behavior. A positive relationship between internal marketing and customer loyalty is evident that in this respect, organizational citizenship behavior, affective commitment and job satisfaction are mediating role.	Internal marketing and customer loyalty: analysis of paired	Awan et al. (2015)
A significant relationship between corporate entrepreneurship and financial performance and results there.	How to create sustainable entrepreneurship in Thailand	Lekmat, Chelliah (2014)
A positive relationship between human resource practices, with positive performance establishes that this depends on corporate entrepreneurship and the role of organizational behavior and practices of justice is very evident. Also on entrepreneurship corporations and their performance mediating role of organizational citizenship behavior and righteousness evident and significant correlation exists between them.	Develop entrepreneurship through a combination of performance measures provided Human Resource Management: Exploring the mediating role of organizational citizenship behavior and procedural justice in the workplace	Dikshit et al. (2014)
A significant positive relationship between organizational citizenship behavior and customer satisfaction there.	The effect of organizational citizenship behaviors (organizational citizenship behavior) towards customer	Hadjali, Salimi (2013)
Culture on organizational performance is a result of higher market levels leads to a high level of organizational commitment and organizational performance.	The role of culture, market orientation and organizational commitment on organizational performance Nonprofits	Carlos et al. (2013)
Due to the relationship between aspects of customer orientation, entrepreneurial employees and employee performance in companies.	Customer and entrepreneurial orientation effects on the performance of individual services in the banking sector	Zaferl, Zehir (2013)
There is a positive correlation between entrepreneurship and organizational citizenship behavior. This relationship is effective and affective commitment and continuance commitment.	The impact of entrepreneurship organizational citizenship behavior and organizational commitment SMEs in Turkey	Zehir et al. (2012)
Transformational leadership and transactional significant effect on the performance of employees with regard to the role of organizational citizenship behavior.	Alternative models for the relationship between leadership, organizational citizenship behavior and performance	Tai et al. (2012)
A significant relationship between entrepreneurial orientation and performance as well as between market orientation and performance there	Its function as an intermediary for the entrepreneurial orientation and market orientation	Raduwan, rasoli (2011)
Internal marketing, organizational commitment and organizational citizenship behavior have direct and positive effect on the orientation of the banking market.	Effect of Internal Marketing in the direction of the market, commercial banks	Awwad, Agti (2011)
The role of organizational citizenship behavior is useful for marketing. Marketing and organizational citizenship behavior is a positive and significant relationship.	Understanding the correlation between organizational citizenship behavior and performance of marketing	Bambale (2011)

Findings	Issue	Researcher
There is a strong correlation between Entrepreneurship and market orientation. In addition, it became apparent that both sides, have a strong relationship with performance, while simultaneously impact on performance and decreased slightly modified.	The relationship between entrepreneurial orientation, market orientation and business performance in socially and economically disadvantaged areas in Europe	Gonzalez et al. (2009)
Absorption capacity, through entrepreneurship, innovative performance impact, but a direct impact absorption capacity, in both the acquisition and transfer of knowledge on the innovative performance cannot be verified; In other words, increasing capacity to absorb knowledge in companies leads to corporate entrepreneurship, but this an increase in innovative performance is not direct.	The effect of the absorption capacity of knowledge on entrepreneurship	Nasr Esfahani et al. (2017)
Organizational citizenship behaviors need to improve in order to improve and strengthen the participation of empowerment, team-building and the development of employability for work.	Denison culture and organizational citizenship behavior model to study the relationship with the Ministry of Industry, Mine and Trade	Cheshme nooshi, Ghouchani (2017)
Organizational citizenship behavior and job performance, organizational support and commitment has a significant emotional impact.	Bonuses and voluntary behavior impact on perceived organizational support, leader-member exchange, organizational citizenship behavior, emotional commitment and task performance Isfahan education staff	Nadi et al. (2017)
Market orientation and management innovation, technological innovation will have a significant positive effect. The results showed that all three variables of market orientation, management innovation and technological innovation in products and processes, can lead to superior performance of the firm.	Explain the impact of market orientation and business performance management innovation with emphasis on the role of technological innovation	Grossi Mokhtarzadeh, Zamani (2016)
Statistically significant relationship between job satisfaction and organizational citizenship behavior, there is only statistically significant relationship between job satisfaction and work ethic component. The OCB is a significant component of rights and colleagues. The results also showed that among the five aspects of job satisfaction, none of the components are not able to predict the organizational citizenship behavior.	Examine the relationship between job satisfaction and organizational citizenship behavior Mashhad University of Medical Sciences	Heidari Molaei (2016)
Direct and significant relationship between job satisfaction and organizational entrepreneurship and organizational growth factors in insurance companies there. Also, results showed that one of the factors affecting the development of entrepreneurship, employees with high job satisfaction.	The relationship between job satisfaction, organizational entrepreneurship and business growth in insurance companies	Zamani et al. (2015)
Hypotheses, confirmed the impact of market	The impact of entrepreneurial	Hosseini

Findings	Issue	Researcher
orientation on the performance showed that in general, between EO and performance directly as well as indirectly through market orientation and there is a significant relationship between market orientation can have a significant impact on the relationship.	orientation on performance of banks with market-oriented mediator	Moghaddam, Hejazi (2015)
A positive relationship between entrepreneurship through emotional commitment and continuous commitment there. As well as between affective commitment and continuance commitment and organizational citizenship behavior has a positive correlation. In the end, it was shown that entrepreneurship has a positive impact on organizational citizenship behavior.	The effect of corporate entrepreneurship as organizational citizenship behavior through organizational commitment (the study: General Department of Vocational Training Khorasan Razavi)	Mousavi (2015)
There is a significant relationship between OCB and innovative behavior.	The relationship between psychological contract fulfillment and affective commitment, organizational citizenship behavior and innovative behavior	Modaresi (2015)
A significant relationship between internal marketing and internal marketing as well as market orientation and organizational citizenship behavior is observed. It is notable that the relationship between market orientation and organizational citizenship behavior in this research is significant.	Evaluation status of internal marketing on organizational citizenship behavior and market orientation	Zare (2015)
Variables courtesy and respect, civil behavior and altruism, to be able to predict organizational entrepreneurship in organizations. A significant relationship between organizational behavior and entrepreneurship there.	The relationship between organizational behavior and entrepreneurship	Hosseini, Karimi (2014)
Entrepreneurship, organizational citizenship behavior associated with positive as well.	Entrepreneurship and organizational citizenship behavior, organizational commitment central role	Modaresi, Norian (2014)
Philosophical mindset and organizational citizenship behavior and entrepreneurship and organizational citizenship behavior There is a significant positive relationship.	Investigate the relationship between philosophical mindset with entrepreneurial and organizational citizenship behavior among elementary schools North West of Tehran	Sharifzadeh (2013)
A close relationship between the ingredients that between organizational citizenship behavior and entrepreneur employees.	Examine the relationship between organizational citizenship behavior and personality traits to the development of entrepreneurship, entrepreneurial employees	Ebrahimpur et al. (2013)
Strengthen the entrepreneurial culture requires organizational citizenship behavior of employees and managers.	Examine the relationship between organizational citizenship behavior and organizational culture as one of	Habibian et al. (2013)

Findings	Issue	Researcher
	the entrepreneurship behavior	

Source: Author

3. ANALYTICAL FRAMEWORK

Now, by summing up the theories and empirical research findings mentioned theoretical model could be presented. Theoretical framework conceptual model based on theoretical relationships between factors and variables influencing the subject is derived from the research literature, as Figure 1.

3.1. CONCEPTUAL MODEL OF RESEARCH
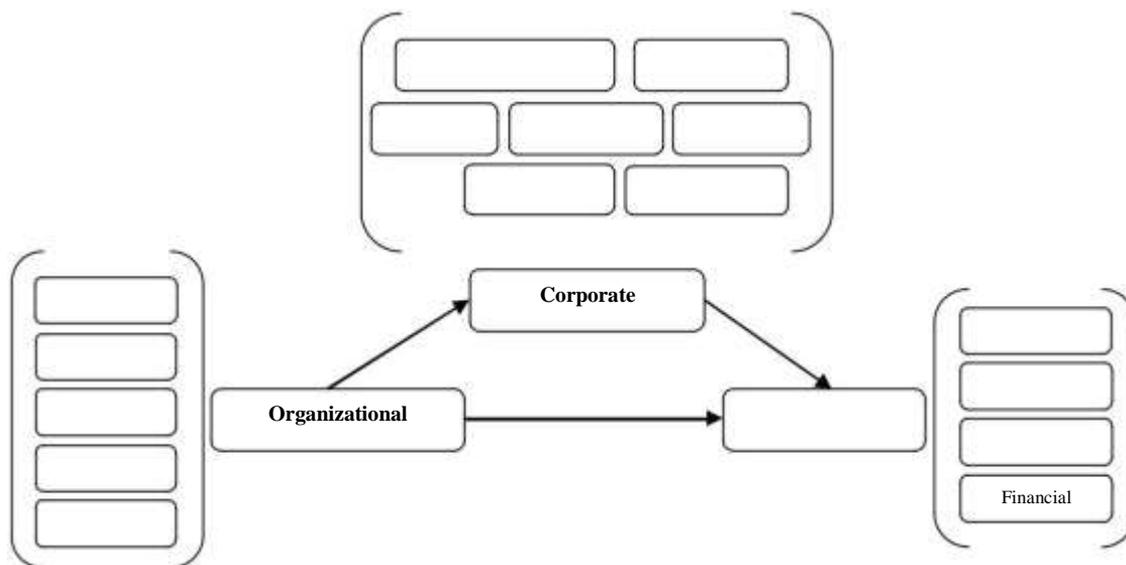
Figure 1: Conceptual Model Research

This study seeks to answer the main question: "Is there a significant impact of organizational citizenship behavior on organizational performance with respect to corporate entrepreneurship as mediating variable?" Following the question following hypothesis arises:

First hypothesis: organizational citizenship behavior has a significant impact on organizational performance.

The second hypothesis: organizational citizenship behavior has a significant impact on corporate entrepreneurship.

The third hypothesis: corporate entrepreneurship has a significant impact on organizational performance.

The fourth hypothesis: organizational citizenship behavior has a significant effect on organizational performance through the mediator's market orientation.

4. RESEARCH METHODOLOGY

The research in terms of data collection is descriptive -survey and in terms of purpose is applied. The study consisted of 2,100 executives, experts and employees of Mazandaran province Government agencies which based on Stratified random sampling, 410 samples were selected. Data were collected in this study by three standard questionnaires included: organizational citizenship behavior questionnaire Podsakoff (2003), a questionnaire organizational performance Fazel (2013) and corporate entrepreneurship of

Anthonique and Hysrych (2003) that the credit validity by experts, validity, reliability by using Cronbach's coefficient alphabet and appropriateness of the data is verified using factor analysis. Cronbach's alpha for organizational citizenship behavior obtained 0.08, organizational performance 0.87 and corporate entrepreneurship 0.92. In this study is to determine the validity of the methods used content validity. In a questionnaire based on this study, content validity by examining the number of professors and experts in the field of management was confirmed. To analyze the research hypotheses using SPSS and LISREL structural equation modeling was carried out.

Table 2. The reliability of variables

Variable	Components	Number of questions	number of samples	Cronbach's alpha
Organizational citizenship behavior	Work ethic	5	30	81.0
	Chivalry	5	30	880.
	social etiquette	4	30	76.0
	Courtesy	5	30	77.0
	Altruism	5	30	85.0
	total	24	30	80.0
Organizational Performance	Customer Satisfaction	8	30	85.0
	Employee satisfaction	12	30	85.0
	Organizational efficiency	4	30	70.0
	Financial results and market	7	30	91.0
	total	31	30	87.0
Corporate entrepreneurship	New business	3	30	68.0
	Innovation in product and services	3	30	82.0
	Innovation in process	3	30	80.0
	Reconsider	3	30	76.0
	Risk Appetite	2	30	94.0
	Initiative	3	30	69.0
	Aggressive competition	3	30	77.0
	total	20	30	92.0

Source: Author

According to the table above, measurement tools measure the main variables of the study as result the reliability was satisfactory Kolmogorov Smirnov test was used for data normalization which based on the results in Table 3, a significant level was less than 0.05 error level. Therefore, we can conclude that the data are not normally distributed.

Table 3. Normal test result variables based on the Kolmogorov-Smirnov test (k-s)

Variable	Kolmogorov Smirnov Test	DF	Probability value	Alpha value	Conclusion
Organizational citizenship behavior	049.0	410	0.000	0.05	Lack of Normal
Organizational Performance	086.0	410	0.000	0.05	Lack of Normal
Corporate entrepreneurship	068.0	410	0.000	0.05	Lack of Normal

Source: Author

4.1. FACTOR ANALYSIS

To check the suitability of the data analysis described above. One of these methods, KMO value is calculated whose value is always fluctuating between 0 and 1. If the amount is less than 0.50 KMO, the data will not be suitable for factor analysis and, if it is from 0.50 to 0.69, factor analysis can be done more careful, but if the amount is greater than 0.7 correlation in the data would be suitable for factor analysis. The results are shown in Table 3, the KMO index values obtained (less than 1 and greater than 5.0), Sig value of Bartlett's test is equal to 0.000. Indicates the suitability of the existing correlation between the data for analysis and sampling adequacy, therefore we can use factor analysis procedures.

Table 4. KMO and Bartlett's test

Variable	Components	Number of questions	special amount	Percentage of variance	kmo	Bartlett statistic value	Probability value
Organizational citizenship behavior	Work ethic	5	862.1	231.37	667.0	939.177	0.000
	Chivalry	5	764.2	271.55	817.0	697.535	0.000
	social etiquette	4	812.1	290.45	688.0	620.142	0.000
	Courtesy	5	849.1	977.36	683.0	822.148	0.000
	Altruism	5	003.2	065.40	664.0	629.242	0.000
Organizational Performance	Customer Satisfaction	8	293.3	158.41	774.0	960.934	0.000
	Employee satisfaction	12	015.5	790.41	878.0	610.1678	0.000
	Organizational efficiency	4	260.2	511.56	707.0	071.355	0.000
	Financial results and market	7	118.4	824.58	886.0	709.1315	0.000
Corporate entrepreneurship	New business	3	832.1	074.61	657.0	761.186	0.000
	Innovation in product and services	3	048.2	283.68	680.0	807.311	0.000
	Innovation in process	3	108.2	265.70	681.0	442.347	0.000

Variable	Components	Number of questions	special amount	Percentage of variance	kmo	Bartlett statistic value	Probability value
	Reconsider	3	962.1	414.65	685.0	580.248	0.000
	Risk Appetite	2	343.1	173.67	500.0	768.48	0.000
	Initiative	3	598.1	269.53	582.0	719.107	0.000
	Aggressive competition	3	729.1	645.57	629.0	731.146	0.000

Source: Author

Followed by confirmatory factor analysis, to ensure the validity of the questionnaire to evaluate the factor loadings, and their significance, the content validity of the questionnaire could be examined. The results of organizational citizenship behavior questionnaire showed CFI, NFI, NNFI, obtained 0.85, 0.80 ,0.84 and SRMR is equal to 0.088 and chi-square statistic value is equal to 810.16. Inventory levels of fitness for adaptive performance, fit the norm and not the fitness program obtained 0.91,0.92,0.93 by standard root mean square residual error and the index is equal to 0.083. Chi-square statistic value is equal to 1672.59. For corporate entrepreneurship questionnaire adaptive fitness values, fit the norm and not the fitness program in order 0.95,0.95,0.96 standard root mean square error indicator is obtained and the residual value and K 0.065 Square also is equal to 705.13 research tool content validity was confirmed.

Table 5. Indicators of distribution (skewness and kurtosis) and statistics K_s

Index	Average	The standard deviation	Skewness	Elongation	K_s	Significance level
Organizational citizenship behavior	59.19	10.12	293-.	200.	049.	0.027
Organizational Performance	68.98	15.76	343.	566.	086.	0.000
Corporate entrepreneurship	57.85	13.35	155.	265.	068.	0.000

Source: Author

Skewness and kurtosis is usually between +1 to -1 is the standard that is acceptable in this domain, and the distance is more than these That is, if data show the deviation from a symmetrical distribution is skewed value larger than 1 or smaller than -1 is a negative number or tilt skewed data distribution shows. In the case of the strain is too much of a strain distribution in bending up and down If it is negative, the stretch. The index data are distributed according to the results; the symmetry of the data is desirable. The correlation matrix between the variables is as follows.

Table 6. The matrix of correlations between variables

	E1	E2	E3	E4	E5	E6	E7	E	P1	P2	P3	P4	P	O1	O2	O3	O4	O5	O
E1	1																		
E2	.729	1																	
E3	.731	.684	1																
E4	.754	.741	.737	1															
E	.41	.48	.44	.50	1														

	E1	E2	E3	E4	E5	E6	E7	E	P1	P2	P3	P4	P	O1	O2	O3	O4	O5	O
E5	5	3	1	8															
E6	.724	.699	.761	.713	.459	1													
E7	.575	.530	.556	.624	.471	.653	1												
E	.862	.852	.860	.887	.639	.875	.765	1											
P1	.620	.624	.594	.644	.495	.634	.538	.722	1										
P2	.788	.765	.784	.786	.562	.812	.661	.899	.592	1									
P3	.680	.657	.664	.692	.478	.677	.590	.774	.364	.620	1								
P4	.651	.654	.677	.692	.487	.660	.635	.776	.365	.533	.674	1							
P	.860	.847	.857	.880	.633	.878	.757	.995	.722	.907	.775	.779	1						
O1	.620	.654	.673	.672	.454	.681	.526	.747	.568	.674	.579	.558	.745	1					
O2	.447	.417	.435	.467	.351	.433	.429	.518	.397	.413	.413	.423	.505	.382	1				
O3	.634	.600	.603	.627	.463	.625	.539	.712	.515	.630	.538	.576	.709	.461	.282	1			
O4	.542	.539	.486	.554	.392	.538	.487	.616	.478	.577	.456	.461	.624	.330	-.114	.401	1		
O5	.545	.552	.558	.529	.423	.595	.467	.639	.484	.574	.488	.494	.640	.412	-.089	.406	.670	1	
O	.835	.823	.822	.855	.628	.855	.742	.968	.733	.851	.743	.757	.964	.754	.560	.730	.624	.653	1

Source: Author

4.2. RESEARCH DESCRIPTIVE FINDINGS

All respondents to the questionnaire were (410 people) in terms of gender-264 were male and 146 were female. In terms of marital statues 18.3% were single and 81.7 percent were married. In terms of age, 21.4% under 30 years, 34.6% between 30 and 40 years and 44 percent over 41 years. In terms of education level diploma, 7.3%, 12.2% associate degree, bachelor's 49.5 percent, 31 percent had a master's degree. In terms of work experience less than 5 years of 23.7 percent, 28.5 percent and 47.8 percent between 5 and 15 years are more than 15 years. In terms of job 7.8 percent Manager, 26.3 percent corresponding Expert and 65.9 Expert.
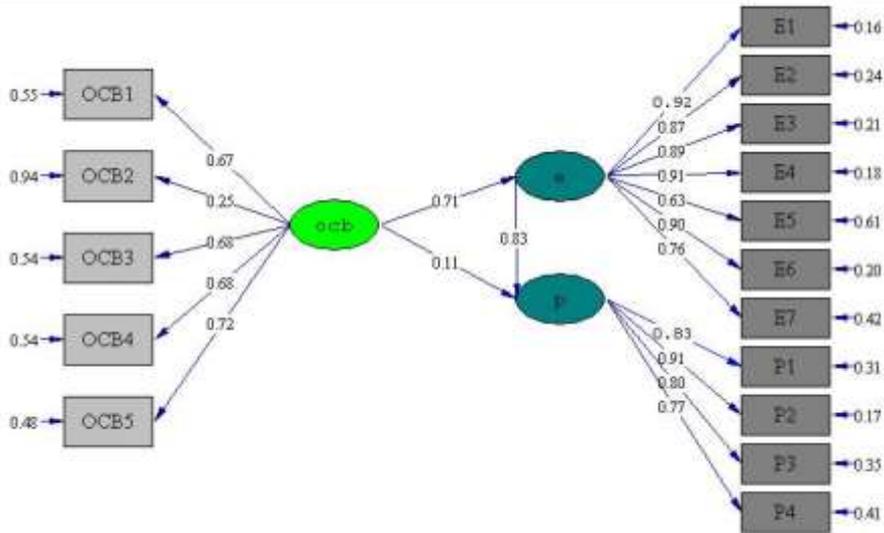
4.3. INFERIOR RESEARCH FINDINGS

Model

Figure 2. The structure of the research in significant numbers T-value

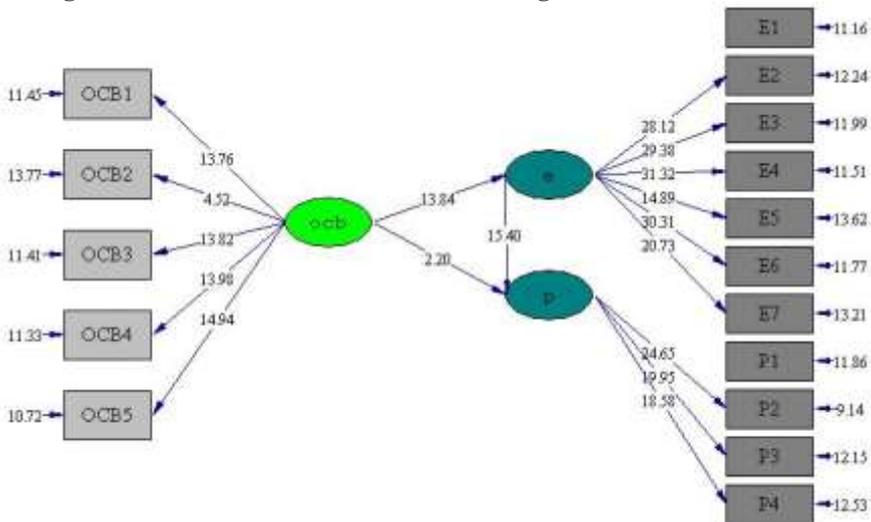**Figure 3. Diagram of standard and non-standard path coefficient**

Indicators of fit goodness are as follows.

Table 7. Indicators of goodness of fit

Index	Calculated value	The maximum allowable
Chi-square cover maps (P)	0.000	Higher than 0.05
Degrees of freedom (df)	103	Greater than zero
Xi two degrees of freedom (X2/ df)	2.57	Between 1 and 3 Desirable
Root Mean Square Error of Approximation (RMSEA)	0.14	Less than 0.08

Index	Calculated value	The maximum allowable
Standard root mean square residual (SRMR)	0.19	Less than 0.08
Comparative Fit Index (CFI)	0.85	Up to 0.9
Goodness of fit index (GFI)	0.74	Up to 0.9
Incremental Fit Index (IFI)	0.85	Up to 0.9
Non-Normed Fit Index (NNFI)	0.82	Up to 0.9
Normed Fit Index (NFI)	0.84	Up to 0.9
Relative Fit Index (RFI)	0.81	Up to 0.9
Root Mean square Residual (RMR)	0.19	Less than 0.08
Adjusted Goodness of Fit Index (AGFI)	0.66	Up to 0.9
Providence Goodness of Fit Index (PGFI)	0.56	Up to 0.9

Source: Author

Based on the conceptual model parameters indicate the suitability of the model structure. To put it simply, the data is a good fit with the factor structure and theoretical underpinning this results in line with the questions of theoretical structures. For the first three hypotheses of the model can be based on the number of hypotheses examined the relationship between latent variables in the structural model (Figure 1) there. To determine the approval or rejection of the hypotheses used t index. The following table t values with the hypothesis outlined.

Table 8. t values for relationships between latent variables

Hypothesis	Standard factor	amount of t	coefficient of determination	Condition
Organizational citizenship behavior has a significant influence on organizational performance.	11.0	20.2	49.0	Confirmed
Organizational citizenship behavior has a significant effect on entrepreneurship.	71.0	84.13	50.0	Confirmed
Corporate entrepreneurship is a significant impact on organizational performance.	83.0	40.15	690.	Confirmed

Source: Author

Due to the significance level (0.05), t values of hypotheses should be greater than 1.96 this indicates the confirmation of hypothesis. The results of the fourth hypothesis, the impact of organizational citizenship behavior on organizational performance through the mediation of entrepreneurship, using Baron and Kenny and Sobel found that the level of assumed 0.05 communication error mediator in the relationship between organizational citizenship behavior and organizational performance entrepreneurship approved.

The analysis of structural equation modeling, organizational citizenship behavior on organizational performance and organizational entrepreneurship has a direct and positive effect as well as has indirect effect on mediating organizational entrepreneurship.

Table 9. Relationship between organizational citizenship behavior and organizational performance through the mediation of Corporate entrepreneurship under way Kenny Barron Kenny and Sobel test

	relationship between variables			RSE	Estimating M Huber	R^2	Wald test			Parameter estimation		T-TEST		
	predictor	Mediator	Criterion				Statistics	df	P	Factor or Model	Standard deviation	T	Df	P
Step 1	Organizational citizenship behavior	-	Organizational Performance	307.1	212.	990.0	33097.52	1	000.0	400/1	0.00 96	146.1012	389	000.0
Step 2	Organizational citizenship behavior	Corporate entrepreneurship	-	6456.0	4.22	992.0	3005 8.98	1	000.0	779/0		134.622	-	000.0
Step 3	-	Corporate entrepreneurship	Organizational Performance	547.1	2.34	986.0	1819 0.72	1	000.0	829/6		2	-	000.0
Step 4	Organizational citizenship behavior	-	Organizational Performance	309.1	84.76	987.0	188.64	1	000.0	6105/0	0.0 2 7 5	22.177	388	000.0
		Corporate entrepreneurshi	Organizational Performance				232.68	1	000.0	9448/0		19.288	8	000.0

The effect of Corporate entrepreneurship mediate the relationship between Organizational citizenship behavior and organizational performance   0001/0>p086/19 = Sobel test

Source: Author

5. CONCLUSIONS

The purpose of this study was to evaluate the impact of organizational citizenship behavior on organizational performance with respect to corporate entrepreneurship mediator. The results showed that standardized coefficient (the ratio) between two variables (organizational citizenship behavior and organizational performance) is $\beta = 0.11$ and significant factor (t) between these two variables is t = 2.20 (greater than absolute value 1.96) that the organizational citizenship behavior has a significant effect on organizational performance. The results of this section is consistent with the findings of various studies such as Lim, Lvsmvry (2017), Chyabvrv et al. (2017), Enis and Aspytzk (2016), Evan et al. (2015), Dixit et al. (2014), Hdjaly and Solomon (2013) , Carlos et al. (2013), Tai et al. (2012), Bambala (2012), AWAD and Qty (2011), Cheshme noosh, Ghouchani (2017), Nadi et al. (2017), Heidari Molaee (2016) and Zare (2015).

The results showed that standardized coefficient (the ratio) between two variables (organizational citizenship behavior and organizational entrepreneurship) is $\beta = 0.71$ and significant factor (t) between these two variables is t = 13.84 (greater than absolute value 1.96) that the organizational citizenship behavior has a significant effect on entrepreneurship. The results of this section is consistent with the findings of various studies such as Dixit et al. (2014), Zaheer et al. (2012), Mousavi (2015), Modaresi (2015), Hosseini, Karimi (2014), Modaresi, Noorian (2014), Sharifzadeh (2013), Ebrahimpour et al. (2013) and Habibian et al. (2013).

The results showed that standardized coefficient (the ratio) between two variables (corporate entrepreneurship and organizational performance) is $\beta = 0.83$ and significant factor (t) between these two variables is t = 15.40 (greater than the absolute value of 1.96), which indicates corporate entrepreneurship is a significant influence on organizational performance. The results of this section is consistent with the findings of various studies such as Li et al. (2017), Yuan et al. (2017), Sulistyo and Siyamtinah (2016), Karimi and Walter (2016),Vagazkuz et al (2016), Nvsshn and colleagues (2015), Zahir et al. (2015), **Kurtulmuş and Warner** (2015), Lykmat, Chlya (2014), Zfral, Zaheer (2013), Radvan, Rasooli (2011), Gonzalez et al. (2009), Nasr Esfahani et al. (1395), Garosi, Mokhtar zadeh, Zamani (2016), Zamani et al. (2015), Hossein Moghadam, Hejazi (2015). As a result, based on the results obtained, organizational citizenship behavior has a significant impact on organizational performance through the mediating variable of organizational entrepreneurship.

6. RECOMMENDATIONS

According to the results of the research hypotheses it is recommended to organizations and firms to develop and improve organizational citizenship behavior among its employees. Development and improvement of organizational citizenship behavior will facilitate the application of marketing and entrepreneurship – which has a direct impact on organizational performance gradually. In other words, employees who have a high level of organizational citizenship behavior, in applying the principles of marketing management and entrepreneurship, are more active and more diligent. Managers by involving employees in setting goals and decisions of firms, develop the organizational citizenship behavior, because organizational variables, especially as organizational citizenship behavior has positive impact on organizational performance. To increase organizational citizenship behavior, organizational justice, organizational commitment, job satisfaction and leadership style should be noticed, because these factors have a very important role in the success of the organization. Therefore, organizations prioritize deploying organizational justice and organizational commitment in its policy.

The results of this study suggest that in order to create entrepreneurial organization, those senior managers should be selected who have high commitment to the organization and entrepreneurship. Managers should empower principle of risk-taking as a positive attribute. In order to achieve corporate entrepreneurship, rewards should be based on merit, encourage innovation based on the needs of employees, payments based on client satisfaction and reward work effort and on the basis of paid volunteer activities to provide grounds for entrepreneurship. Organizations should identify successful models of organizational, personnel, sample and recalling the celebration of success, innovation and taking advantage of the rewards innovation and entrepreneurship, promotion and promotion accompanying spirit of self-reliance and self-confidence and entrepreneurship in them.

7. RESEARCH LIMITATIONS

Like other studies, this study has limitations including, many factors and variables in this study such as the needs, interests, personality characteristics and cultural perspectives, socio-political, cultural rules and regulations governing the organization and the community can be influential which has been out of researcher's authority. Time limits and geographical scope, makes doing the research little difficult, but the problem will be fixed by with regard to time management and coordination with subsidiary offices.

REFERENCES

A.Zafer Acar, Cem**al Zehir, Nurhan Özgenel, Mehtap Özşahin (2013).** The Effects of Customer and Entrepreneurial Orientations on Individual Service Performance in Banking Sector. Procedia - Social and Behavioral Sciences, Volume 99, 6 November 2013, Pages 526-535

Abhishek Y. Dikshit, Preeti A. Dikshit. (2014). A study of corporate entre prenuership deveploment by incorporating high performance hrm practices: investigating the mediating role of ocb and procedural justice at workplace. International journal of management research and review. No 6.221-230.

Abo-jarard, I. Y. Yousof, N. Nikbin, D. (2010). A Review Paper on Organizational Culture and Organizational Performance. International Journal of Business and Social Science, 1 (3), 26-46.

Ahmad, P. D. D. (2012). Entrepreneurship (definitions, theories, models), ninth edition, publishing Jajarmi, Tehran.

Alaghe Band, A., (2011). public Management. Tehran: mental.

Antoncic, B., Hisrich R.D. (2004). Corporate entrepreneurship contingencies and organizational wealth creation, Journal of Management Development, Vol. 23 No. 6, pp. 518-550.

Appelbaum, S., Bartolomucci, N., Beaumier, E., Boulanger, J., Corrigan, R.,Dore, I., Girard, C., Serroni, C. (2004) organizational citizenship behavior: a case study of culture, leadership and trust, management decision Vol.42,No.1.

Awwad, M. S., Agti, D. A. M. (2011). The impact of internal marketing on commercial banks' market orientation. International Journal of Bank Marketing, 29(4), 308-332.

Bambale A.J. (2011). Understanding Significant Relationships between Organizational Citizenship Behavior (OCB) and Marketing Function. Faculty of Commerce and Management Studies.

Benson T.H. Lim, Loosemore,M. (2017). The effect of inter-organizational justice perceptions on organizational citizenship behaviors in construction projects. International Journal of Project Management, Volume 35, Issue 2, Pages 95-106.

Castro, C.B. Armario, E.M., Ruiz, D. M.)2004). The influence of employee organizational citizenship behavior on customer loyalty, International Journal Of Service Industry Management, Vol.15, No.1,p.30.

Cheshme nooshi, B., Ghouchani, F. (2017). The study of relationship between organizational culture and organizational citizenship behavior Denison model in the Ministry of Industry, Mine and Trade, Organizational Culture Management, Volume 14, Number 3, Pages 745-758.

Chiaburu, D.S., Oh, I.S., Wang, J., Stoverink, A.C. (2017). A bigger piece of the pie: The relative importance of affiliative and change-oriented citizenship and task performance in predicting overall job performance. Human Resource Management Review, Volume 27, Issue 1, Pages 97-107.

Daft, R. L. (2000). Organization Theory and Design. (7th ed.) South-Western College Publishing, Thomson Learning. U.S.A. PP:101-108.

Dollery, B.E. Worthington, A.C. (1996). The Evaluation of Public Policy: Normative Economic Theories of Government Failure. Journal of Interdisciplinary Economics, 7, 27–39.

Ebrahimpur, H., Habibian, S., Janly zadeh, M. (2013). Examine the relationship between organizational citizenship behavior and personality traits to the development of entrepreneurship, entrepreneurial employees. The first National Conference on Management and Entrepreneurship.

Elisa A., Heiko S., (2016). Improving environmental performance through unit-level organizational citizenship behaviors for the environment: A capability perspective. Journal of Environmental Management, Volume 182, Pages 48-58.

Esfahani, Ali Nasr, Ansari, R., Molaei Khorasgani, R. (2017). The effect of the absorption capacity of knowledge on entrepreneurship (the case of scientific research companies located in the town of Isfahan Province). Entrepreneurship Development, Volume 9, Number 2, Pages 377-395.

Fazel, R. (2013). The effect of knowledge management on organizational performance, master's thesis, martyr Chamran University.

Finch Stoner, J.A. Freeman, R.E. Gilbert, D.R. (1998). Management. New York: Prentice Hall.p. 157, 159, 263.

Fornell, C., Larcker, D. (1981); Evaluating Structural Equation Modeling with Unobserved Variables and Measurement Error; Journal of Marking Research, Vol. 18, No.1, pp. 39-50.

Frösén, J., Jaakkola, M., Churakova, I., Tikkanen, H. (2016). Effective forms of market orientation across the business cycle: A longitudinal analysis of business-to-business firms. Industrial Marketing Management, Volume 52, Pages 91-99.

Fry, F. L. (1993). Entrepreneurship: a planning approach. West Publishing Company.

Ghorbani, Choobghali Zadeh, S., Amro Abadi Sadeghi, B. (2012). Islamic morality based on the effects of occupational factors of cultural engineering organizational citizenship behavior monthly cultural engineering, numbers 61 and 62, pp. 47-29.

Grossi M. Zadeh, Nima, Zamani, Mahmoud. (2016). The effects of market orientation and business performance management innovation with emphasis on the role of technological innovation. Journal of Business Management, Issue 24, pp. 463- 484.

Guangping Wang, C., Fred, M, (2015). Effects of sales force market orientation on creativity, innovation implementation, and sales performance. Journal of Business Research, Volume 68, Issue 11, Pages 2374-2382.

Habibian, S., Janaly Zadeh, S. M., Mullee, M. (2013). Examine the relationship between organizational citizenship behavior and organizational culture as a factor of entrepreneurial behavior. National Conference on entrepreneurship and business management knowledge.

Hadi zadeh, M., Farajolah, M.R.F.A. (2016). Entrepreneurship, Publication: Janan, printing.

Ho, L. A. (2008). What Affects Organizational Performance? Industrial Management & Data Systems, 108(9).

Hosseini, S. A., Karim, AR. (2014). The relationship between organizational citizenship behavior and Entrepreneurship (CASE STUDY: Department of Cooperatives, Labor and Social Welfare Fars province). National Conference on University Entrepreneurship (knowledge-based industry).

Jahangir, K., Zhiping W. (2016). Corporate Entrepreneurship, Disruptive Business Model Innovation Adoption, and Its Performance: The Case of the Newspaper Industry. Long Range Planning, Volume 49, Issue 316, Pages 342-360.

Javier. (2002). A review paper on organizational culture and organizational performance. http:// www.ijbssnet.com / journals/.

Jiing-Lih, F., Chen-Bo, Z. Organ. Dennis, (2004). Organizational Citizenship behavior in the people s republic of China, journal Organizational Science, Vol.15, No.20.

Jorshiri Taghizadeh, M. Z., Taleghani, M. (2015). Assessment of market orientation-performance relationship: the satisfaction of employees and customers. Business review, Volume 12, Number 68, Pages 42-55.

Katz, D., Kahn, R. L. (1978), The Social Psychology of Organizations. New York, NY: Wiley.

Koopman, R. (2001). The relationship perceived organizational justice and organizational citizenship behaviours: a review literature. Applied Psychology, 1-10.

Kuratko, D. F., Goldsby, M. G. (2004). Corporate Entrepreneurs or RogueMiddle Managers? A Framework forEthical Corporate Entrepreneurship, Journal of Business Ethics 55: 13–30.

Kurtulmuş, B.E., Warner, B. (2015). Entrepreneurial Orientation and Perceived Financial Performance. Does Environment Always Moderate EO Performance Relation. Procedia - Social and Behavioral Sciences, Volume 207, Pages 739-748.

Laddawan, L., Chelliah, J. (2014). What Are the Antecedents to Creating Sustainable Corporate Entrepreneurship in Thailand? Contemporary Management Research, Pages 181-202, Vol. 10, No. 3.

Line,D.(2012), Entrepreneur Business Opportunity, Jul 11, www.articlesbase.com.

Linwei, L., Feifei, J., Yunlong, P., Nengqian, J. (2017). Entrepreneurial orientation and strategic alliance success: The contingency role of relational factors. Journal of Business Research, Volume 72, Pages 46-56.

Modaresi, S. (2015). The relationship between psychological contract fulfillment and affective commitment, organizational citizenship behavior and innovative practices case study organizations under Tehran's oil industry. (Masters dissertation). Tehran: PNU.

Modaresi, S., Noorian, K. (2014). Entrepreneurship and organizational citizenship behavior, the commitment of the organization (the Organization of Semnan). National Conference on University Entrepreneurship (knowledge-based industry)

Molaee, N, H. (2016). Examine the relationship between job satisfaction and organizational citizenship behavior Mashhad University of Medical Sciences. Well Mystery Magazine, Issue 41, p. 1.

Moorman, R. H.,Blakely, G. L. (1995), Individualism – Collectivism as Individual Difference Predictor of Organizational Citizenship Behavior, Journal Of Organizational Behavior, 16 (2), 127-138.

Moqimi, S. M. (2006). Entrepreneurship in government agencies, publications: Frandysh, printing.

Mousavi, SH. (2015). The effect of corporate entrepreneurship on organizational citizenship behavior through organizational commitment (Case Study: Department of Technical and professional education Khorasan Razavi). (Masters dissertation). Semnan: Islamic Azad University anymore. Faculty of Humanities.

Nadi, M. A., Mshfqy, N., Zaman, A. K. F. (2017). Bonuses and voluntary behavior impact on perceived organizational support, leader-member exchange, organizational citizenship behavior, emotional commitment and task performance of staff in Isfahan Education, Knowledge & Research in Applied Psychology, Issue 65, pp. 90- 101.

Najafi-Tavani, S, Sharifi, H and Najafi-Tavani, Z (2016) Market orientation, marketing capability, and new product performance: the moderating role of absorptive capacity. Journal of Business Research, 69 (11). pp. 5059-5064. ISSN 0148-2963

Nasution, H. N., Mavondo, F. T., Matanda, M. J., Ndubisi, N.O. (2015). Entrepreneurship: Its relationship with market orientation and learning orientation and as antecedents to innovation and customer value. Industrial Marketing Management, Volume 40, Issue 3, Pages 336-345.

Neely, A. D. Adams, C. Kennerley, M. (2002). The Performance Prism: The Scorecard for Measuring and Managing Stakeholder Relationships. London: Financial Times/Prentice Hall.

Organ, D.W. (1988). Organizational citizenship behavior: The good soldier syndrome. Lexington, MA: Lexington Books.

Pinho, J. C., Rodrigues, A. P., Dibb, S. (2013). The role of corporate culture, market orientation and organizational commitment in organizational performance The case of non-profit organizations. Journal of Management Development Vol. 33 No. 4, 2014 pp. 374-398.

Rahnavard, F. (2009). Factors affecting the performance of public sector organizations. Humanities and Social Sciences Management, 8 (4) (31).

Rivard, S. Huff, S.L. (1988). Factors of Success for End-User Computing, Communications of the ACM, Vol. 31, No. 5, pp. 552-561.

Scheepers, M. H., J., Bloom, J. (2008). Nurturing the corporate entrepreneurship capability. Journal of Southern African Business Review, 12 (3): 50- 75.

Sharif Zadeh, C. (2013). Investigate the relationship between philosophical mindset with entrepreneurial and organizational citizenship behavior among elementary schools North West of Tehran. (**Master's** thesis). Tehran: Islamic Azad University Schappe, S. P. (1998), The Influence of Job Satisfaction, Organizational Commitment, and Fairness Perceptions on Organizational Citizenship Behavior, Journal of Psychology, 132, (3), 277-287.

Singh, S., Darwish, T. K.,Costa, A. C., Anderson, N. (2012). Measuring HRM and organizational performance: concepts, issues, and framework. Management Decision, 50 (4). pp. 651- 667. ISSN 0025-174

Sulistyo, H., Siyamtinah, (2016). Innovation capability of SMEs through entrepreneurship, marketing capability, relational capital and empowerment. Asia Pacific Management Review, Volume 21, Issue 4, Pages 196-203.

Tai, C. L., Chang J., Li, Che-Ming, L., Yu, H., Chen, C. (2012). Alternative models for the relationship among leadership, organizational citizenship behavior, and performance a study of new product development teams in Taiwan. Social and Behavioral Sciences 57. 511 – 517.

Taslimi, M. S., Monavaryan, A., Ashna, M. (2007). The relationship between social capital and the entrepreneur, management culture Quarterly, Vol. 4, No. 14, p. 38.

Vega-**Vázquez, M.,** Cossío-Silva, F. S., Revilla-Camacho, M.A. (2016). Entrepreneurial orientation– hotel performance: Has market orientation anything to say?. Journal of Business Research, Volume 69, Issue 11, Pages 5089-5094.

Wenlong, Y., Yongjian B., Bradley J. O. (2017). CEOs' ambivalent interpretations, organizational market capabilities, and corporate entrepreneurship as responses to strategic issues. Journal of World Business.

Werts, C. E., Linn, R. L., Joreskog, K. G. (1974). Intraclass reliability estimates: testing structural assumptions. Educational and Psychological Measurement, 34(1), 25-33.

Zamani, M., Haghighi, M., Razmjoo, Sh. (2015). The relationship between job satisfaction, organizational entrepreneurship and business growth in insurance companies. Organizational Culture Management. Volume 12, Issue 4, Pages 635-653

Zare, S. (2015). The effect of the position and orientation of internal marketing on organizational citizenship behavior (Case Study Saderat bank branches Yazd). International Accounting Conference, economic and financial management.

Zehir, C., Köle,M., Yıldız,H. (2015). The Mediating Role of Innovation Capability on Market Orientation and Export Performance: An Implementation on SMEs in Turkey. Procedia - Social and Behavioral Sciences, Volume 207, Pages 700-708.

Zehir, C., Muceldili, B., Zehir, S. (2012). The Impact of Corporate Entrepreneurship on Organizational Citizenship Behavior and Organizational Commitment: Evidence from Turkey SMEs, 8th International Strategic Management Conference, Turkey.

RELATION BETWEEN CORRUPTION, BANKING SECTOR DEVELOPMENT AND STOCK MARKET DEVELOPMENT IN THE MIDDLE EAST COUNTRIES

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Abstract

Investors due to the recognition of the effects of macroeconomic variables such as economic corruption, the banking sector, exports, economic growth; etc. on the development of the stock market development their investment portfolio in such a way that the investment risk will reduce and the efficiency will increase. Thus, having enough information about the factors affecting the exchange market would create new opportunities for investors in order to diversify their investment portfolios. Therefore, the main purpose of the current paper was to investigate the effects of corruption, banking sector on the stock exchange development in a selection of Middle East member countries during the period from 2000-2014 using panel data approach. The results of the study indicated the banking sector had a positive effect on the development of the stock market and corruption had a negative effect on the development of the stock market in the studied countries.

1. INTRODUCTION

At the beginning of the twenty-first century, the need for a change in the administrative system and structural reforms was emphasized as a solution to most of the economic issues. Nowadays, in the current developed world in which the resources usually face with shortcomings against needs and expectations day by day, governments are under severe pressure to be efficient in their performance and drive various mechanisms to solve their issues. The government's reform measures have been established in various fields. Corruption is considered as one of the main factors in most studies conducted about the expansion of the size of governments and its consequences. Corruption encompasses a wide range of behaviors including illegal, dishonest, unprincipled and dissonant activities. Historically, corruption exists in all spheres of political, administrative and private sector. In fact, corruption is a major obstacle to economic growth, reducing government legitimacy and political stability over time. Most of the scholars believe that there is no purely clean country in the world. Therefore, many countries have sought to set up their political and institutional arrangements in a way that have the least amount of corruption and they can provide the least public services including security, provision of infrastructure, empowerment of the legal system and economic and political stability.

Corruption is a widespread phenomenon in all societies which occurs at different times varying degrees (Pellegrini and Gerlagh, 2008). Corruption is one the aspects of society dysfunction that undermines economic growth and development and is considered as the most important barriers to economic growth and political instability, particularly in developing countries. However, others claim that corruption may be aspects of the functioning of society in the interest of economic development (Glenn, 2007). Corruption as a fact of modern society have had unprecedented growth in administrative, political, economic and financial world. Dealing with the consequences of economic corruption is now mainly focused on the negative effects of corruption (Korneliussen, 2003). Recent events have shown that no country can claim with any degree of wealth and power that is totally immune from the devastating consequences of

corruption. The corruption is widely observed both in developed and developing countries. Since this phenomenon has various impacts on the society it is considered as a main object of study in political and economic sciences (Katra et al, 2010).

There are different opinions about stock market development in economic and financial literature. Hicks (1969) believed that the financial system had a crucial role by providing capital for large projects at the beginning of the industrial revolution. Financial banks strengthen the technical innovations by identifying those employers who have the best chance to produce new products or the implementation of their initiatives.

 In contrast Robinson (1952) believed that the financial system follows the real sector of the economy. If the real sector of economy expands, then the financial sector will develop subsequently. Accordingly, financial development led to the emergence of certain types of financial arrangements and the financial system responds to this demand automatically.

Basically, the development of the stock market and its attractiveness for potential investors can be possible through increased efficiency, transparency, control of corruption and the development of the banking sector in the financial sector and the price index of stock market on the stock exchange. Several factors including domestic, economic, psychological, political, etc. could affect the development of the stock market. The volatility and instability of the variables over time would lead to some deficiencies for firms and investors. Hence, the purpose of the current study was to investigate the relationship between corruption, the banking sector and stock market development in selected countries in the Middle East during the period from 2000 to 2012 using panel data approach.

2. LITERATURE REVIEW

Osman and Yacup (2004) evaluated the performance of macroeconomic indicators and real stock returns in Turkey. The study analyzed the actual performance of the Stock Exchange of Turkey with regard to macroeconomic indicators including money supply, exchange rates, corruption, trade balance, using Engel-Granger model. Corruption also has a negative correlation with stock market development. The results indicated that the mentioned variables had a significant role in Turkey's economic variables to changes the stock price index and there wasn't a stable relationship between stock price index and macro-economic indicators in Turkey. Moreover, corruption had a negative relationship with the development of the stock exchange.

 Fraser and Groenewold studied the stock price and supply and demand shocks in the United States of America using Vector Autoregressive Regression model for the period from 1947 to 2002. The results of the study indicated that economic impact of the stock market on the economy was more prominent than the effects of the stock market t on the economy. Other results of the study showed that the supply and demand shocks had a greater effect on the stock price than economic variables. On the other hand, the sensitivity of the stock price to the supply shocks was negligible while the stock price had a great sensitivity to the demand shocks. Valcarcel (20014) in a study entitled the adoption of the stock price dynamics and monetary shocks concluded that economic shocks were one of the main determinants of stock market development. The mentioned study discussed the structural vector autoregressive model in the presence of the random fluctuations and analyzed the effects of money supply and productivity on the real value of the USA stock price index and the overall economic activity and inflation in the USA. The results of the study indicated that monetary policy had a significant expanding effect in the short term movements of the stock price. Moreover, the banking sector, production and corruption had positive, positive and negative effects on the stock market development, respectively.

Pourheidari and Pahlavan (2008) investigated the effects of money stock, inflation rate and GDP on the stock exchange return during the period from 1990 to 2006. The results of the study showed that there was significant positive effect between inflation rate and the stock market return. On the other hand, no significant relationship was detected between money stock, GDP and the stock exchange returns.

Piraee and Shahsavar (2008) investigated the effects of ma examined the effects of macroeconomic variables including GDP, money supply, inflation and exchange rates on the stock price index for the period from 1991 to 2006 using co-integration, Autoregressive Distributed Lags (ARDL) and Vector Error Correction Model (VECM) approaches. The results of the study confirmed the direct relationship between the stock price index and GDP and price level and the reverse relationship between stock price index, money stock and exchange rate. The Error Correction coefficient of the model indicated that in each period 15 of the non-equilibriums in the model will be adjusted.

Najarzadeh and Aghaei (2009) studied the effects of price and exchange rate shocks on the stock market price index during the period from 2003 to 2006 using monthly data and Methods VAR model and impulse response functions and variance decomposition. The effects of the inflation rate shocks on the real returns of the stock was greater than the effects of the exchange rate.

Sajadi et al (2013) determine the long run relationship between the growth rate of total price growth in the stock market and a set of macroeconomic variables including inflation, liquidity, exchange rates and oil revenues. The results of the study indicated that the growth rate of liquidity return had a negative relationship with oil revenues and exchange rate and positive relationship with the inflation rate.

3. MODEL SPECIFICATION AND DATA ANALYSIS

The model used in the current study was as follows which is adapted from **Ayaydın and Baltagi** (2013):

$$MARKET_{IT} = \alpha_0 + \beta_1 cor_{it} + \beta_2 CAPITAL_{it} + \beta_2 M2_{it} + \beta_3 BANK_{it} + \beta_4 INF_{it} + \beta_5 GSYT_{it} + \beta_6 GSYH_{it} + \beta_7 FDI_{it} + \beta_8 RF_{ir} + U_{it} + \varepsilon_{it}$$

Where Market was the development of the stock market, Cor, the corruption index, M2 the Money supply Bank banking credit, INF, inflation. Capital, FDI, GSYH, GSYT and RF were capital, foreign direct investment, private saving, gross domestic product and interest rate, respectively.

The panel data approach was used to estimate the model. When panel data approach a variety of tests should be conducted to determine the ap propriate estimation method. Among all, the most common tests are Chow and Hausman tests.

Chow test is used to select between ordinary least squares method and fixed effects model. The assumptions of this test are as follows:

$$H_0 = \mu_1 = \mu_2 = \cdots = \mu_{n-1} = 0$$

$$H_1 = Not$$

If the probability of the test statistic was more than 0.05, the estimation of fixed effect model is preferred to random effect model at 95% level of significance, otherwise the fixed effects model will be chosen.

Using traditional estimation methods in econometrics is based on the assumption of stationarity of variables. Therefore, avoid the estimation of a spurious regression it is necessary to examine and tested the stationarity of variables.

To investigate the stationarity of variables in panel data approach particular tests can be used. The current study used the Levine and Lin (LL) test for the investigation of stationarity of variables in panel data approach. The tests were conducted using Eviews software version 8 at the 5% level of significance. As the null hypothesis indicates the existence of unit root for each variable, if the P-Value was lower than 0.05 the null hypothesis for the existence of unit root is rejected. The results of the stationary test were presented in Table (1).

Table 1. Results of the stationary test using Levine and Lin (LL) test

Stationary/ non stationary	Prob	Test statistisc	Variable	
Stationary	0.000	-4.09	MARKET	Level
Stationary	0.001	-3.93	COR	

Stationary/ non stationary	Prob	Test statistisc	Variable	
Stationary	0.01	-2.55	CAPITAL	
Stationary	0.000	-5.88	BANK	
Stationary	0.002	-2.54	INF	
Stationary	0.000	-3.79	M2	
Stationary	0.000	-5.42	GSYH	
Stationary	0.000	-3.86	GSYT	
Stationary	0.000	-3.54	FDI	

Source: Author

According to the results of the stationary tests all variables were stationary at 5% level of significance and we can estimate the model without any fear about the spurious regression.

The results of the diagnostic tests

According to the results of the stationary tests all variables were stationary at 5% level of significance and we can estimate the model without any fear about the estimation of a spurious regression. Due to the characteristic of data which includes the information of the time series and cross section data many studies has used panel data approach to estimate the model. The application of panel data approach has various advantage. It allows us to conclude the effects of omitted variables which persist over time in the model. In the panel data approach, we can omit the unobservable heterogeneous effects from the regression model. One of the questions which should be answered in this regard is the type of the selected model.

Various tests can be used for testing the strength of different models. The most common tests include Chow and Hausman tests. These tests could be conducted in Eviews8 software. The Chow tests id used to select between pooled data and panel data methods of estimation. The null hypothesis refers to the pooled data and H_1 refers to the panel data approach. The fixed effect can be accepted when the difference between cross sections can be explained by an intercept in the model. But the pooled data method of estimation uses similar intercepts. If the null hypothesis was rejected the Hausman test can be used for the selection of the appropriate model. The Hausman test is based on the existence or non-existence of the relationship between the error terms of the estimated regression and the explanatory variables of the model. If such a relationship exists between the error terms of the estimated regression and the explanatory variables the fixed effect model is used. The null hypothesis of the Hausman test stated that there wasn't any relationship between the explanatory variables and the error terms. Based on the results of the diagnostic tests the appropriate model was selected. On the other hand, the unviability of some variables data in some periods made it necessary to estimate the model using unbalanced panel approach.

5. THE RESULTS OF THE MODEL ESTIMATION

5.1. CHOW AND HAUSMAN TESTS

To estimate the model, diagnostic tests (Chow and Hausman) are conducted. For the Chow test, first of all, we estimated the fixed effect model. The Chow test is carried out and according to Lymer F-statistic the use integrated least squares method was rejected. Results of the Chow test can be seen in Table (2).

Table 2. Results of the Chow test to select between panel or pooled data

Results	P-Value	Calculated F-statistic	Chow Fixed effects
H_0 rejected	0.000	45.09	

Source: Author

Results of the Chow test confirmed the estimation of panel data against pooled method in both the estimated models. To conduct the Hausman test, first we estimated the model with fixed effects and then the Hausman test was conducted. Results of Hausman test were presented in Table (3) which confirmed the estimation of the fixed effect model against the random effect model.

Table 3. Hausman test to select between fixed and random effects

Results	Significance	Calculated test statistics	Hausman test
H_0 rejected	0.000	13.89	

Source: Author

The results of the estimation using fixed effect approach were presented in Table (4).

Table 4. Results of the estimation of the models (dependent variable GDP)

(Prob)	t-statistic	Coefficients	Variables
0.061	1.89	0.262	C
0.019	-2.35	-0.396	COR
0.061	1.89	0.0262	CAPITAL
0.05	2.05	0.045	BANK
0.061	-1.89	-0.262	INF
0.041	1.99-	-0.212	M2
0.17	1.34	0.043	GSYH
0.000	-2.99	-0.212	GSYT
0.041	1.99	0.212	FDI
$R^2 =$ 0.92		Prob (F-statistic) = 0.000	

Source: Author

The results of the Table (4) indicated that the estimated model had been in a good situation. F-statistic represents the significance of the whole regression. In other words, the hypothesis that the coefficient of the independent variables can be equal to zero will be rejected and the whole regression will be meaningful. The R^2 statistic which represents the explanation power of the model was equal to 92 percent. It means that 92 percent of the change in the dependent variable can be explained by the independent variables of the model. According to the other results of the model corruption has a negative significant effect on the stock market development in the studied countries. Nowadays, has become a global issue and all governments are completely aware of the destroying consequences of the corruption phenomenon which it knows no limits. Moreover, corruption can have various results and consequences based on the level of political, economic development of the organization. Any way corruption causes degeneration which puts the government policies in direct contradiction with the benefits of the majority and wastes the national resources.

It also leads to the reduction of the effectiveness of governments in policy making and decreases the reliability of people to governments and increases the behavior of indifference, laziness, incompetence. Corruption undermines moral believes and values, and thereby increases the cost of doing actions and crime in the community so that the community faces with major economic and social losses in dealing with crimes. It makes competitiveness and economic growth, human development very difficult. Corruption also causes the failure of poverty alleviation efforts, loss of social capital, and destroys motivations of good people and pessimism in the investment field.

Based on the results of the currents study banking sector had a positive and significant effect on the development of the stock market. The role of the intermediate financial institution is considered as the criterion of the financial institution development. As banking sector works as a channel to send the savings of people toward investment projects they can be complementary or substitutions of each other. Therefore, the development of the financial and banking sector have a significant effect in the development of the stock market through financing of the investment projects. According to the other results of the study, foreign positive investment has a positive and significant effect on the development of the stock market.

The investment rate is calculated as the ratio of the gross fixed capital to the gross disposable income. As the investment depends on the saving rate it can be said that investment is one of the main determinants of the capital in the stock market. According to the results of the study, economic growth had a positive and significant effect on the development of the stock market. The increase of the income the cyclical part of the income should have a positive effect on the size of the stock market. Moreover, the higher income, the better education, the better business environment and the richer citizens.

Also, inflation had a negative and significant effect on the development of the stock market. The increase of the inflation can decrease the long run return of the financial assets and lead to credit rationing and thus the expansion and financial depth. According to the other results of the study, the private sector investment didn't have a significant effect on the development of the stock market in the studied countries which can be attributed to the low saving rate in developing countries.

6. CONCLUSIONS

The role and the importance of the financial systems in the growth and development process is so great that scholars consider the development of financial markets as the prerequisite of sustainable economic development. Even some economist attributes the difference between developed and developing economies to the development of financial markets and underdevelopment of financial markets in the developing and transition economies.

The financial sector has a key role in the economic growth and it is believed that the differences observed in the quality and quantity of the financial services can explain the difference between the economic growth rates of the countries. Therefore, the cooperation and the co-movement of the financial sector is one of the main perquisites of the economic development. The financial system is one of the main components of the economy so that it can be considered as the driving force of any economy; because it provides services which no economy can survive without. In reality financial system can be attributed to a sub set of economic system which includes money and capital markets. In other words, financial system is a system in which financial assets can be exchanged. According to the negative effect of the corruption on the financial market development, the eradication of the corruption has two distinct aspects which are closely related to each other. The first aspect of fighting against refers to the set of norms and arrangements which concern the desirable behavior. The second aspect refers to the anticorruption rules (general or specific rules) which are aimed at providing appropriate compensation instruments including punishments and criminal penalties, rules of procedure and institutional mechanisms to deal with corruption which has been committed in the past.

 Most of countries use a combination of these two aspects. On the other hand, the punitive and disciplinary mechanisms of the financial and monetary mechanisms in the studied countries including Iran needs to be revisited. On one hand, the central bank or any other supervisory authority or the capital market should determine its supervision circle and prevent the overlapping functions of regulatory and assembly duties and obligations. In addition to these measures, the supervisory institution of the banking system should be strict against negligence and non-compliance and impose dissuasive and proportionate punishments against them.

REFERENCE

Gerlagh, R., and Pellegrini, L., **(2007); "Causes of Corruption: a Survey** of Cross-Country Analyses **and Extended Results", Springer 9:245–**263.

Glaeser, E.L. and Saks (2006); "Corruption in America. Journal of Public Economics**", 90:119**-143

Glenn, Collin T (2007); "Corruption and Economic Development in the Peoples Republic of China",. Corruption and Reform, 52: 237-261.

Goel, R. K., and Nelson, M. A (1998); "Corruption and Government Size: A Disaggregated Analysis", Public Choice, 97: 43-59.

Korneliussen, R. J., and Ona, E (2003); "Synthetic Echograms Generated From the Relative fr**equency Response", ICES Journal of Marine Science, 60: 636 –** 640**.**

Kotera, G., Okada, K.,and Samreth, S., **(2010); "A Study on the Relationship Between Corruption and Government Size: The Role of Democracy", MPRA Paper, No. 25.**

La Porta, R and al. **(1999); "The Quality of Government", Journal of Law, Economics and** Organization, 15: 125-139.

Myrdal, G., (1968);   **"**Asian Drama: An Inquiry Into The Poverty of Nations. Harmondsworth and New York: Penguin and Twentieth Century Fund**.**

Pellegrini, L. and Gerlagh, R.)2004**(; "**Corruption Effects on Growth and Its Transmission Channels**. Kyklos", 57: 429**-456.

Rose-**Ackerman, S (1999); "Corruption and Government", Cambridge University Press, Cambridge,** Journal of Law, Economics and Organization,16: 178-2001.

Scully,G.W (1991)**; "Rent**-Seeking in U.S. Government Budgets, 1900-**88", Public Choice 70.**

Tanzi, V. and Davoodi, H.)1997**(; "**Corruption, Public Investment and Growth**",** Working Paper No. 97**-**139, International Monetary Fund, Washington, D.C**.**

ORIGINAL RESEARCH PAPER

THE NEW REFERENCE DESIGN FOR DEVELOPING THE MARKETING STRATEGY USING THEMATIC ANALYSIS

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Abstract

Marketing strategy design, through a situation analysis, identifies market opportunities and by defining different market segments and recognizing the strengths and weaknesses of the organization, makes the competitive conditions possible. In the past decade, researchers have tried to provide models upon which we can determine the ideal types of marketing strategies and by aligning and conforming them, makes the organization synergies possible, at large. This study is based on the theory of Strategic Reference Points (SRPS) that using the thematic analysis and given the characteristics of the organization and the industry in which it works new, explains new pattern and strategic reference points to demonstrate the marketing strategy tailored to the electronic payment industry and coordination between the business marketing strategies of business level. The marketing strategy development, particularly in the realm of electronic payment, would be an issue that there have been less works of this research field. The study aimed to design the model to explain the electronic payment industry strategy. The methodology was in-depth semi-structured interviews for 21 industry executives and experts. Data was analyzed by the theme grid. By extracting the aspects of strategic reference points and theoretical and practical definitions of the concept of electronic payment industry, the findings lead to design a model of industry's marketing strategies PSP. Major aspects that were used in the design of final model are: the intensity of competition and the amount of attention to the client. It seems, the results and the model can be suggested as a way to exit the current challenges of the agile industry PSP and to explain the strategy.

JEL classification: M31

Keywords: *Strategy, Marketing strategy, Theory of strategic reference points; Analysis of theme.*

1. INTRODUCTION

In the present era, the marketing concepts and techniques are formulated and performed by developed countries, and at least there are a few doubts about its necessity, but it must be acknowledged that in our country, like many other developing countries, there are debates about how to use the marketing concepts; and many believe that the opinions and points of view that transformed by competitive and developed western markets cannot simply employ in a country like Iran with an economic, cultural, social and

political situation is quite different. In this regard, there are also numerous intellectual currents. An intellectual current knows the marketing based on the assumption that managers control the marketing elements of their products, whereas this assumption is not true in all economies. Another view holds that the marketing concepts and techniques are used in developing countries, but lack of marketing knowledge and experience in these countries would prevent to implement it, importantly, a dynamic model lacks in marketing management. A model of how to apply the concepts and techniques of marketing is justified, both in advanced economies and in-transition economies, taking into account the conditions of the country and the company. Perhaps the lack of such a comprehensive model in the marketing literature was the incentive to encourage conducting this paper. In fact, this article seeks to explain the new strategic reference points appropriate with the business which using thematic analysis can be explained and designed and then the appropriate strategies of the different levels of the organization would be adapted coordinately. It is clear that the outcome of this analysis and coordination is nothing other than the synergy and practical strategies in organizations.

1.1. THE IMPORTANCE AND VALUE OF RESEARCH

Importance and necessity of this article would be debatable, in both terms of theoretical and applied. Perhaps because of the theory-centered subject under study, its importance is highlighted more, but it would be not without significance that if a theory developed or improved in both fields of management and marketing; given the practical effects, the researchers hope the theory to be created with the development. Literature review of marketing texts specialized and very search in numerous books, journals, online texts and other sources have shown that there is a little empirical research on defining and developing of marketing strategies using strategic reference points, but this study is to explain and design of marketing strategy according to the new strategic reference points that was extracted according to interviews with industry experts and data analysis through thematic. Considering the strategic importance of electronic payment industry in Iran and according to the process of globalization in the post-sanctions period and general orientation of organizations and companies towards the global and open economy, it makes to ease the most significant points to concentrate in order to develop the different-level strategies and also, there become a significant positive relationship between the prioritization and the development of related strategies.

2. BACKGROUND AND THEORETICAL CONTEXT

2.1. THEORETICAL CONTEXT

Marketing Strategy

Strategic planning is a structured effort to make fundamental decisions and take essential actions carry out the activities that gives shape to and direct the nature of the organization, kind of activities and the reasons of why the organizations to do so. The management strategy is the art and knowledge of formulation, implementation and evaluation of multi-functional decisions that enables the organization to achieve its long-term goals. As derived from the definition, the strategic management for organizational success is

emphasized on several factors: coordinating the management, marketing, finance (accounting), manufacturing (operations), research and development and computer information systems. In many universities and colleges, the term "strategic management" has been known as a synonym of "business policy", which includes all the content of the lessons and units that students passed the curriculum of Business Administration. The main focus of marketing strategies would be appropriate allocation and coordinating activities and marketing resources in order to meet the operational objectives of the company considering a market - specific product, therefore, the main issue concerns the scope of marketing strategy is to determine the specific target market for a product family or a specific product, according to the needs and desires of potential customers in the target market to take competitive advantage and create synergy.

A strategy is considered as a fundamental model of current and planned targets, operation and resource allocation and an interaction between the organization and markets, competitors and other environmental factors. In other words, the strategy is of broad concept, and entails all the ways that the organization wants or is going to travel to achieve the goal. A well-defined macro strategy could affect the strategic decisions that the marketing managers and other operations managers can at adopt lower levels of the organization and sometimes make them limited. Rather than adopting a comprehensive and unified strategy, most organizations use a set of relevant strategies that each are designed in different levels of the company. This significant strategy level in most large multi-product and -service organizations include: (1) strategy for a company or a firm, 2- business strategy and 3-functional strategy for a product/market - specific. Functional units in the organization include human resources systems, marketing systems, production systems, R&D and information systems. Among the functional strategies mentioned, the main focus of the research is on marketing strategy that how an organization to enable to compete in its industry is the midst of the marketing strategy. The business strategy would stress on improving the competitive position of a company or a firm's products and services in a particular industry or a segment of the market. The business strategy can be competitive and to gain advantage or be a partnership or both. The marketing strategy suggests that how a company should compete or cooperate in a particular industry.

Strategic Reference Points

One of the newest theories of strategic management is the strategic reference points that were provided by Feigen Baum et al in 1996. In 2000, Peter Bamberger and Lane Mashoulem established new developments based on the combined research logic on two aspects, by introducing and explaining integrated approach model. The strategic reference points are considered as the targets and reference points that the managers use them to evaluate the options, make strategic decisions and communicate organizational priorities to key people in the systems. The experts believe that in the field of strategic management one of the classic problems has been that how to make coordination between the needs of external (environmental) and internal resources (institutional) and maintain the harmony. The reference point is a place and or a point with where all measurements and choices are compared (Askafy, 2005). Required, that to understand the strategy, we need two reference points in our organization. The theory of strategic reference points poses a combined approach by rational and natural ones which makes between the two approaches and benchmarking the central criteria, determines the overall priorities to have set in the strategy so that interest groups in accordance with the principles to be guided. According to their different theoreticians

any specific reference points to the success of organizations named. The costs (Porter, 1980), quality (Imai, 1986), speed (Astack and Houdd, 1990), innovation (Foster, 1986), the needs of customers (Ohmayeh, 1988 and Peters, 1987) and stakeholders (Henderson, 1990) are included among the points that **in offer theorists' viewpoint preparing them, provided emphasizing on each of these points, the**

organization will achieve success. Of course, some theorists have used a combination of multi-dimensional and strategic reference points. Using the combined points made the strategic types and species come into existence. Three popular and common strategic reference points that exist in the literature include:

- Provide four paradigms for analysis of social science theories in general and managerial and organizational theories in particular; using the default reference points of philosophical and sociological change, by Burrell and Morgan (1979).

- **Combining three perspectives on organizations' theoretical models and providing a framework. For**

categorizing organization and management theories, using two reference points of organization type and system type, by Richard Scott (1981).

- **Preparing an effectiveness model and set of the values, using two reference points of organization's**
focus and control level, by Richard Hull (2001)

Thematic analysis

The theme process analysis is a recursive one in which there are back and forth move between six stages (Brown and Clarke, 2006). In addition, the theme process analysis occurs over time. This method is suitable for a wide range of research interests and theoretical perspectives as a "basic" method; because: First, it is applied in a wide range of research questions – from questions that relate to the experiences and perceptions of people to those related to the representation or establishment of a particular phenomenon in a particular field; second, it can be used to analyze different types of data - from secondary sources such as media to transcripts of interviews and focus groups; third, it works with small or large data sets; and fourth, it can be used in the production of theory-based or data-driven analyses. Although fact-oriented

and principle-oriented analyses are used to describe or summarize patterns existing in data, in Brown and **Clarke's opinion, a good them**e analysis contains nothing more than a simple reporting of what is in the data; it involves telling a commentary story on the data in relation to the research question. Brown and Clark developed provided a systematic and advanced approach of theme analysis after which it has been widely adopted. The two researchers presented six stages of themes analyses that including: getting to know the data, creating the initial codes, search for themes, reviewing themes, defining and naming themes and finally reporting.

2.2. BACKGROUND

Some of the research that has been done in the field of strategic reference points is not directly related to the marketing strategy and may have been related to the structure or practices of marketing; but they have a model to explain, integrate and coordinate the strategies are mainly normal rational patterns. The only study in the field of a model design in formulation of marketing strategy on the basis of the strategic

reference points is that was projected by taking advantage of strategic reference points, with two **dimensions of the market' focus and the competition level, and based on which the suitable strategy is**

designed. According to prospect theory, this provides a mathematical model that describes the individual decisions and then discusses organizational decide and including the decision to establish the strategic coordination. Other research in this includes:

1. Paresis, Garcia, Anna Maria, Yancey Estevez and Vanessa et al., (2014), "strategic reference points, risk and strategic choices of SMEs", Journal of Economics and Business Administration, June 2014. This study explains how the companies take their own strategic decisions with emphasis on the role of managers and their own perceptions and understanding, and specifically, this removes the gap in the literature by integrating two approaches related to the strategic management: vision theory (Kahneman, Touresky, 1979) and the theory of Strategic Reference Points (SRP).

2. J. Harvey, Michael, Timothy S. Kesling and R. Glenn Richie (2008), "World-era social marketing perspective: the application of the theory of Strategic Reference", Journal of International Marketing Review, Vol. 25, pp. 146-165. The ultimate goal of this article is to encourage scientists of international business and managers to pay more attention to the social world eras when researching and developing the business strategies. The theory of strategic reference point (SRP) as a foundation to help visualize the social meaning was used in a global context. According on the basic points, the authors made special offers of being an important subject, despite ignoring them in international research since Hofstede by now. The time tools differ significantly in marketing management and global market management. The concept of time can prepare different meaning, in different cultures, on the basis of strategic reference **points of each organization's how to measure social performance. Exigencies of the cultural differences**

would have flexible orientation on the social times that leads effectively to the development and implementation of global marketing strategies. This study aims to break the concept of time into its social underlying dimensions and to develop the strategic implementation steps using the time dimensions as a competitive means in the global market.

3- Heidari, Maryam, "Development and examination of the effect of marketing mix strategies on an increase in sales of the consumption goods using a model of strategic-marketing reference points; case study: Tolypers Co.", Payam Noor University, Tehran, 1388. The study aims to develop a strategic plan of business for the production of consumption goods (in this research: manufacturing units of detergents, Tolypers Co.), compile and categorize functional marketing strategy and marketing mix strategies at the operational level for each of the products manufactured based on marketing strategic reference points, and examine the effect of the implementation of the marketing mix strategies proposed by the model Marketing SRP's on increasing the market share of these products over Tehran.

4- Arabi, Seyed Mohammad and Hamid Reza Rezvani, (2007), "The relationship between business and marketing strategies suitable with organizational performance: study on the pharmaceutical supply investment company", Journal of Management Sciences, spring 2007, No. 5, pp. 71-97. This article is to study the compatibility between the business strategy and marketing strategy focusing on the strategic reference points. Three compatibility models have been identified in management literature: logical,

natural and comprehensive. By comparing these three models, a comprehensive model was chosen to establish the strategy compatibility. After studying philosophy and logic of SRP, two reference points became identified as reference points: control (down or up) and focus (internal or external). According to the reference point strategy, the marketing and business strategies were determined as instances and the relationship between different types of strategies were studied. The statistical population consists of pharmaceutical companies of Iran and the statistical sample includes pharmaceutical investment company (TPICO). The findings show that there is a fit and compatibility between the strategy to entry and explore the market, development marketing strategy and analysis, defense and mature market strategy and, a reduced marketing and cost reduction. It has been seen the compatibility at high level of appropriate performance.

3. RESEARCH METHODOLOGY

The present study is formed by a qualitative approach based on assumptions of the strategic reference points, as basic movement guide. Electronic payment industry and Asan Pardakht Persian Company were the research population collected by semi-structured interview with an emphasis on exploratory approach (Cowaal, 1996). Exploring concepts existing in policy-making and evolutionary economic, it must inevitably be done based on qualitative research projects. The qualitative research generally refers to any type of research that the findings would be not reached through statistical processes and quantification purposes.

To collect the data, the themes analysis of the thematic networks (Sterling, 2001) was used to analyze the data. In this regard, there are six steps (according to Clark and Brown, 2006): familiarity with data, creating the initial codes, searching themes, reviewing themes and redefining the themes and creating a map of the theme analysis (primary and extended), defining and naming the themes and finally, preparing a report and mapping themes and using them as a new strategic reference points. As stated in the definitions and also according to the data of the present study was of significant nature and seeking to identify new items of the strategic reference points, so we emphasize, in data collection, on words rather than the quantity. Accordingly, this study is a qualitative research, in terms of types of data. Company executives surveyed felt the need to carry out this study, and sought to identify the strategic points. Since the study seeks to identify areas of strategic knowledgeable in the electronic payments industry, so in this respect, it is an applied study in terms of the nature. Because it existed in the organization and the results can be used directly in the organization under study. Since the discovery is considered as the inherent **characteristics of qualitative research, therefore, according to the main question of the research, the study's**

nature is the exploratory thing. It is an exploratory research because there is no much information of the topic, particularly domestic researches, so to find, the preparatory work must be done to collect prerequisites for further qualitative and quantitative research in this area. A qualitative research is organized based on various analytical methods. Thematic analysis would be as one of strategies, since the study takes into consideration of inputs modeling based on collecting, classifying, conceptualizing and evaluating various topics in the field of science and technology policy-making with the evolutionary

approach, so the thematic analysis method was used. There are various procedures to travel the process of thematic analysis. But despite the apparent differences, all these methods have three steps of collecting and describing, organizing and setting, and finally interpreting and representing. Accordingly, it is **investigated by Walcott's simple model based on which the report is set. In Walcott's thematic model,** three stages have been separated, including description, analysis and interpretation.

The case study includes employees of Asan Pardakht Company at two levels of deputy and director which equals to 21 people. Having done 21 interviews and analyzed the organizational documents, the researcher came to the conclusion that new information cannot be reached anymore. Therefore, according to the results of analyzing interviews and examining documents and evidence, it could be said that what the **indicators of study organization's strategi**c reference points would be. So, the results obtained by the study

on Persian Asan Pardakht Company, it was determined 9 dimensions to the identification of strategic reference points include: 1) advertisement, 2) customer satisfaction, 3) value creation, 4) loyalty and retention of customers, 5) customer market segmentation, 6) innovative and up to date, 7) distribution capabilities, 8) communications and 9) brand and trademark. Finally, with regard to 9 themes were extracted, two strategic reference points were selected and for the first time, were studied, according to industry under study: (1) a level a customer to be paid attention (2) the intensity of competition. Themes identified in this study are the final type in terms of identification of themes (Ryan and Bernard, 2003), in terms nature of themes, the interpretation type (King and Horrocks, 2010), in terms of themes hierarchy, the original type (King, 2004, Ryan and Bernard, 2003), in terms of the position in the network of themes, the three types of basic and comprehensive and organizer (Sterling, 2001), in terms of format to obtain the themes in text, some, latent and some, quite evident, in terms of the source to identify themes, the data-centric type (Brown and Clark, 2006), in terms of the role of themes in the analysis, large-scale and integrated type (King and Horrocks, 2010) and in terms of the positioning of themes, the fixed type (Richards, 2008). To determine the validity of interview conducted, it should be the entire research process under investigation. Perhaps, as Kouzmanik said, we could have four stages in this process, although many researchers have focused on two stages. First, the data generation is as an aspect of judgment about the validity, and second, as other aspect, the data is presented and interpreted. In other words, there is a difference there is difference between the assessment of validity and interpretation of data. Kouzmanik also in addition to the production and interpretation of data focused on the process of preparation and transcription of verbal data. Although they may seem trivial, they nevertheless would play an important role in the research process and its validity.

His intention of preparing was to understand the importance of theory behind the scenes of interviews, i.e. the researcher have mastered on theoretical and epistemological background on the topic of study. It is also necessary the researcher acknowledges that how much the information potentially important in the conversion of verbal data to written text may be missed (Kouzmanik, 2009). Most qualitative methodology, instead of using the vocabularies, qualitative validity, would use the criterion "reliability or confidence" to refer to assess the quality of the qualitative results. The reliability, in simple words, is the extent to which it can be relied on findings of a qualitative research and its results could be trusted. Guba and Lincoln (1985) argued that the reliability criterion involves four separate but interrelated criteria

following, including credibility (the credibility can be created through maintaining and expanding relationship with respondents to achieve what they really know and how they act), verifiability (refers to the "objective quality" naturalistic quality report where the researcher must demonstrate that his findings are based on data virtually and really), transferability (the applicability of the research findings and, in fact, it refers to the degree in which the results of a qualitative study can be transferred to a different environment and used to a different population) finally, reliability (the ability to identify a place from where the data of a specific study have come, collected and used). An auditing test would be key strategy for providing reliability. With the implementation of an auditing test, clear and steady path between the data and their application is determined. In addition, the qualitative researchers can increase the reliability of results through the method of control. Member check or respondent validity is a technique by which the researchers examine their hypotheses with help of one or more people who are knowledgeable. During the investigation, two of the knowledgeable individuals who studied the relevant issue, have provided the guidelines and additional details to the researcher. In addition to the documents based on organizational performance report were observed by the investigator.

4. DATA ANALYSIS

As mentioned, having classified, 9 themes were extracted, two strategic reference points selected and for the first time, according to industry under study, they were presented: (1) how much the customer gets attention and (2) the intensity of competition. Then to develop appropriate marketing strategies, according to new strategic reference points, the questionnaire was provided to determine the strategies. Concepts and themes extracted are shown in Table 1.

Table 1. Collection of theme identified

SRP	Title of identified concept	Code	Title of identified concept	Code of	SRP
	Advertisement champions		Advertisement ease of service champions		
	Media advertisements		Media advertisements		
	Classifying advertisements		Innovations and technologies of payment industry		
	Investigation to identify the **customer's latent needs**		Cohesion in R & D		
	Ethical code		Specialized staff skills		
	Customer retention		Attract customers in new channels		
	Stability		Simplicity and		
	Providing additional services		Reducing barriers		

SRP	Title of identified concept	Code	Title of identified concept	Code of	SRP
	and cost in addition to the basic services A variety of discounts with the electronic payment		to accessibility		
			CRM		
	Systems and incentive packages (Festival)		Interactions and communication channels active		
	Value-added services		And a variety of communication channels to increase the share of active websites	8Theme communication	
	Continuous communication and a season		Customer support 24 hours a day		
	Customer information system		Good communication skills and specialized staff		
	Engaging customers	4Theme retention andloyalty of	Advertising on the brand and the company's brand to differentiate from competitors		
	The incidence and services Advertisement Quality of Services		Try the famous brand and corporate brand	9Theme tradeandBrand mark	
	Segmenting customers		The use of the brand and the brand fit and studied		
	Specialized units and has the potential to provide services	segmentation5Theme of market/customer			
	Try the famous brand and corporate brand Providing additional services and cost in addition to the basic services				

Source: Author

After exploring and acquiring new strategic reference points, to create a matrix, and to develop appropriate marketing strategies to every cell, the questionnaires of developed strategy was completed and the strategies as shown in Figure 1 which is a conceptual model were extracted.
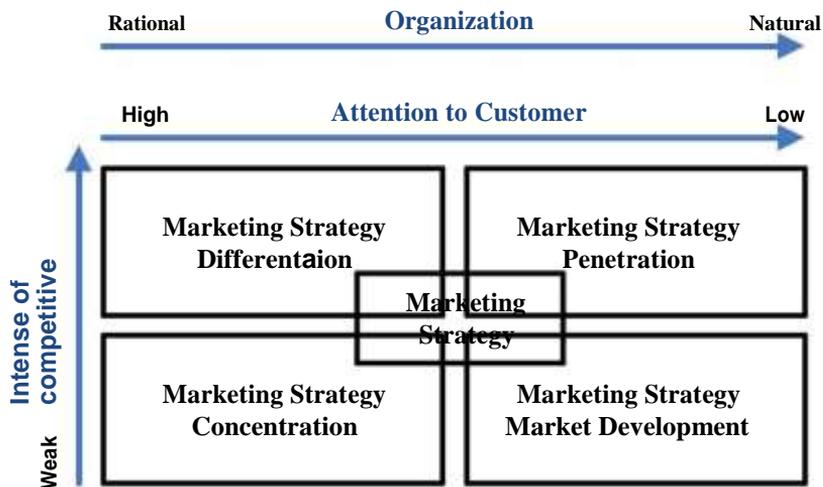
Fig 1. New conceptual model

Source: Author

5. THE INTERPRETATION OF THE RESULTS AND CONCLUSIONS

Conclusion of any investigation should answer the question that finally, what results are obtained and what is added into our prior knowledge about the subject. The main and focus direction of the present study was around the dynamic strategic issue to explain. Coordinated with a series of structural and behavioral mechanisms of inside and outside organization and linked the components together and achieving organizational goals are called by the marketing target and how it wants to achieve the desired goals is called by the marketing strategy, so marketing strategies are ways of achieving marketing objectives. In this study, to answer this question that what the strategic reference points appropriate with electronic payment industry are, by means of the interviewed senior manager and their thematic analysis, 9 nine themes were obtained that each was reviewed and categorized, and finally led to two strategic reference points customized to the electronic payment industry that affect the strategies more than others. In fact, given that the new strategic reference points lead directly to business-level strategy to select, the identification of these reference points would be key thing and of great importance to the organizations. In the next stage, according to the knowledgeable points and corporate strategy development and marketing strategies were developed and put within the matrix and the strategic coordination between marketing strategies and reference and knowledgeable points would be explained based on an exhaustive pattern and the strategies extracted from the questionnaire are presented as follows:

The first type – concentrated strategy: under this strategy, the company is put in a weak competitive position and customer paid low attention. Accordingly, the strategy seeks to establish the current position in the market that in conditions, to repair the poor effects of competition field and also little attention to the customer. The reduction is not meant to outsourcing the activity, but also because of the weakness of the organization, essentially costly activities get reduced. Thus, it is possible a lot of services, facilities and

customer relationships to be reduced and gradually the factors get improved influencing strategic reference points. The main approach in this strategy is to increase interaction with customers and increase the **abilities to compete in the market. These types of customers' strategy are based on** any defensive or decrease strategy the organization is tried to reduce the weaknesses and threats.

The second species-market development strategy: under this strategy, the company is placed in a weak competitive position and customer paid high attention. When the organization would be paying attention from inside to outside environment, indeed, the organization would pay more attention to the customers in the weak competitive position. Maintaining its activities, the organization is thinking to reduce the threat **posed by its competitive position and improve its position with respect to customer. Hence, the company's** special work against the clients should seek to retain the customers and satisfy them. This strategy is based on competitive strategy that the organization seeks to overcome external threats using internal strengths.

The third type-the differentiation strategy: under this strategy, the company is put in a strong competitive position and customer paid low attention. In this strategy, the organization maintains their own operations and tries to offer differentiated services and better than competitors and is always trying to support them by taking advantage of environmental opportunities, therefore, by using environmental opportunities, overcomes its weaknesses and thus moves towards the vision. This strategy is based on the conservative strategy. Thus, according this strategy, the company's special activity is to try to increase the quality of its own services.

The Fourth type-influence strategy: under this strategy, the company is put in a strong competitive position and customer paid high attention. The influence strategy seeks not only to pay attention to its customers, but also to grow in a competitive market. So it to use the new resources must be making an effort to diversify their activities in order to realize the vision. Hence, the company uses any tools such as measurement, making customer satisfaction, obtaining service quality standards, and the establishment of customer relationship management systems, to increase their effectiveness. This strategy is matched on an aggressive strategy in where the organization is trying to use the opportunities of the environment, by using internal strengths.

REFERENCES

Aaker, David & Shassby, Gary, (1982). *Positioning your product, Business*. Horizons.

Bamberger, P., Figenbaum, A., (1996); *"The role of strategic reference points in explaining the nature and consequences of human resource strategy"*; Academy of Management Review; V (21); N (4); pp. 926-958.

Burrell, G. & Morgan, G (1979). *Sociological Paradigm and Organizational Analysis,* London: Heinemann.

David, F.R.; (2001); "*Strategic management*"; New Jersey; Prentice-Hall, Inc.; 8th ed.

Ebrahimi, T, (2001)*: Statistics and application in management (1), (2),* Tehran: management studies and research Centre, 3th ed.

Fiegenbaum, A. Harts, S, Shendel, D. (1996). *Strategic Reference Point theory, Strategy Management,* Journal, Vol, 17, NO.3.

Hall, R.H. (2001). *Organization: Structures, Process & outcomes,* New jersey: Prentice- Hall Inc. 8th.ed.

Hart, S.; (1992); "*An integrative framework for strategy making process*"; Academy of Management Review; V (17); pp. 327-351.

Hunger, J., D., and Wheelen Thomas L. (2001). *Essen trials of Strategic Management,* 2nd ed.

Kotler, P., (2004)"*Marketing management: Analysis, planning, implementation*, and control"; New Jersey; Prentice-Hall;11th ed.

Kotler, Philip, (1999)"*Marketing management: Analysis, planning, implementation*, and control"; New Jersey; Prentice-Hall;9th ed.

Norton, P. (1999). *Competitive Marketing Strategic, St.* Lucie Press, 2nd.

Samadi, E, (2004)*: Management and Strategic Planning Models,* Tehran: management studies and research center

Scott, W.T. (1981). *Organizations: Rational, Natural, and open System,* Upper Saddle River N.J, Prentice-Hall, 4th ed.

Skaffi, A, (2004)*: Based Organization strategic reference points,* Tehran: Allame Tabatabaee university.

Spanos, Y.E.; Lioukas, S.; (2001); "*An examination into the causal logic of rent generation: Contrasting po**rter's competitive strategy framework and the** resource-based perspective***";** Strategic Management Journal; V (22); pp. 907-934.

Walker, Orville & et.al (2003). *Marketing Strategy:* A Decision-Focused Approach, 4th ed.

Walker, O.C.; Boyd, H.W.; Mullins, J.; L**arreche, J.; (2003); "***Marketing Strategy: A decision0focused approach***"; New York; McGraw**-Hill, Inc.; 4th ed.

Wheelen, T.L.; Hunger, J.D.; (1992); "*Strategic management and business policy***"; Wokingham;** Addison-Wesley; 4th ed.

Wilson, M.S.; Gilligan, C.; (2**005); "***Strategic marketing management: Planning, implementation & control***"; Burlington; Elsevier Butterworth**-Heinemann; 3th ed.

Wolker, O.C.; Ruekert, R.W.; (1987); "Marketing's role in the implementation of business strategies: A critical Review and conceptual **framework"; Journal of Marketing; V (51); July; pp. 15**-33.

ORIGINAL RESEARCH PAPER

THE EFFECT OF AUDIT QUALITY ON COSTS STICKINESS IN MANUFACTURING COMPANIES LISTED IN TEHRAN STOCK EXCHANGE

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Abstract

One of the most fundamental presumptions of management audit shows that change in costs is in fir correlation with increase and decrease in activity level. However, this assumption is discussed with considering the cost stickiness by Anderson et al. it means that the amount of increase in costs with the increase in activity level is more than reduction in costs per same amount of reduction in activity level. On the other hand, audit could increase the reliability of information available for the users and with the increase in audit quality; quality of information is also enhanced. The main purpose of this study is to investigate the effect of audit quality on cost stickiness in manufacturing companies listed in Tehran Stock Exchange. Statistical population of this study consists of companies listed in Tehran Stock Exchange from 2007 to 2014. To measure the correlation of research variables, Pearson correlation test is used and finally, to test research hypotheses, generalized ordinary least-squares regression is used. The results obtained from testing hypotheses how that size of audit and audit tenure (more than 3 years) could affect cost stickiness positively and significantly. However, the expertise of auditor in the industry and importance of a company for an audit institution could have no effect on cost stickiness.

JEL classification: M42

Key words: *The importance of a company, Auditory expertise, Auditor size, Corporate value, Auditor's tenure*

1. INTRODUCTION

The occurrence of recent financial crises has highlighted the vital and underlying role of reliable and high quality financial reporting. Moreover, the recent crises have revealed the necessity of considering the role of audit quality in improving financial reporting more than before. Achievement to high quality of financial reporting is depended on accuracy of action of each ring of the supply chain of financial reporting and independent audit as one ring of this chain plays critical role in preserving and enhancing quality of financial reporting. Moreover, audit services play key role in reduction of information asymmetry and reduction of problems of representativeness between managers and stockholders and between stockholders and creditors. Realization of these fundamental functions is depended on audit quality (Mashayekhi et al, 2013, 105).

Audit quality is one of the most underlying issues in field of audit and capital market. In order to identify the different dimensions of audit quality, various researches have been conducted to explore the relationship between audit quality and other variables. However, as audit quality could be observed hardly in practice, researches in this field have faced many difficulties.

Similar to other professions, audit profession needs gaining public trust to maintain its position. Something that is expected by the society from audit profession is presenting audit report with desirable quality (Hassas Yeganeh and Azinfar, 2010, 86). This is the value added that only audit can add it to financial information of companies.

Awareness of the behavior of costs against changes in activity level or sales level could be the important information for decision making by managers in field of planning and budgeting, pricing products,

determining the breakeven point and other managerial issues. In traditional models, the behavior of costs in management audit and the variable costs are increased or decreased against changes in volume of activity appropriately. It means that the size of changes in costs is only depended on size of changes in activity level and the direction of changes (increase or decrease) in activity level has no effect on size of changes in costs (Namazi and Davanipour, 2010, 86).

The size of change in costs is just depended on amount of change in activity level and not on the way and direction of changes. However, some scholars like Nuren and Souderstorm (1998) believe that costs would be increased with the increase in activity level more than the decrease because of decrease in activity level. This kind of cost behavior is called as "sticky costs" by Anderson et al (2003). According to Anderson et al, costs are sticky when the amount of increase in relevant costs of increased volume is higher than the reduction of relevant costs with same amount of reduction in volume. Moreover, if the volume of activity is decreased, the companies with sticky costs experience higher decrease in income than the companies without sticky costs (Islamil Zadeh and Mehrnoosh, 2014, 38).

In traditional models, behavior of costs regardless of management decisions affecting adjustment of cost resources is depended on different levels of activity. Accordingly, according to these models, it is expected that the behavior of costs is determined just based on activity level in current period and with no relationship with the activity level in past or future. However, the theory of cost asymmetric behavior (cost stickiness) reveals a different thinking manner about the cost behavior presented by Bunker et al (2011) and according to the theory; lot s of but not all costs are increased as a result of management decisions in field of cost allocation. Asymmetric behavior of costs (cost stickiness) observed in the periods of sales reduction could reduce the period earning. However, one of the most important interpretations about cost stickiness is that managers have more emphasis on long-term earnings. Tolerance of costs of surplus resources in the periods of sale reduction taken for preparedness to increase sales in future could lead to tolerance of fewer costs in long-term and this could enable the company to take benefit of increased sales opportunities in future. However, the requirement to preserve the resource to achieve more earnings in future is that manager could predict the decline in demand as temporary phenomenon and expect for increase in sales in future (Hemmati and Molaei, 2014, 2).

Therefore, the present study tends to answer the question that what is the effect of audit quality on cost stickiness in manufacturing companies listed in Tehran Stock Exchange?

2. THEORETICAL FRAMEWORK

In this study, cost stickiness has been measured as dependent variable of the research based on theories of Anderson et al (2003) and Subramaniam & Weidenmier (2003).
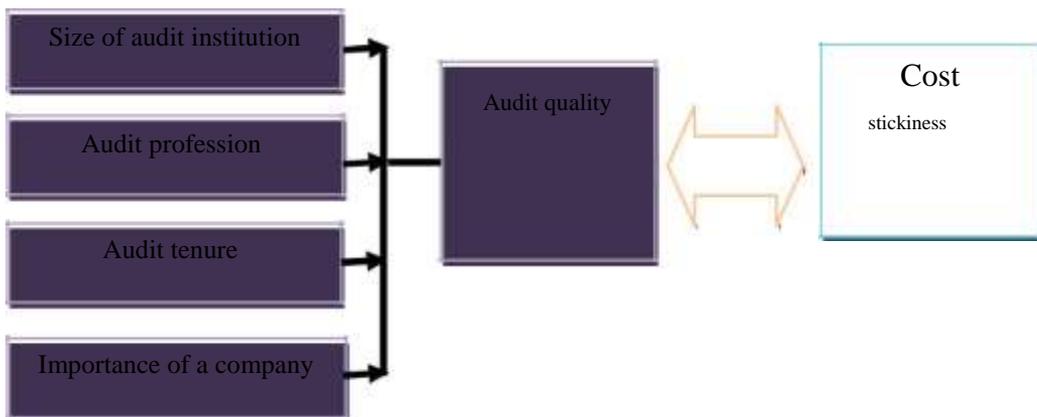

Figure 1. Analytical model of research

To measure the audit quality as independent research variable, according to the theory of Susanty et al (2015), in 4 general dimensions, 1) audit institution, 2) audit profession, 3)

audit tenure and 4) importance of a company for the audit institution have been considered as theoretical framework. Moreover, according to the mentioned in field of audit quality and cost stickiness and the measurement methods, the analytical model of research could be as follows:

3. DATA ANALYSIS METHOD

In this study, for purpose of data analysis and extraction of results, Excel, Eviews and SPSS software programs are used. Firstly, raw data have been prepared on Excel software and then, they have been entered to SPSS and Eviews software for final analysis.

To test normality of data distribution, K-S test is used and to test research hypotheses, regression test is used.

4. DEFINITION OF CONCEPTS, EXPERTISE TERMS AND RESEARCH VARIABLES

4.1. AUDIT QUALITY:

The most common definitions of audit quality in view of audit scholars are as follows:

1. Evaluation of market of the probability that financial statements contain important distortion and the auditors have the ability to explore and report the distortions.

2. The probability that auditor issue no acceptable report about the financial statements containing important distortion (Malekian Kalebasti et al, 2011, 70).]

4.2. COST STICKINESS

Identification of cost behavior in reaction to changes in production and sales level is important for management of companies. Recent empirical researches about the cost behavior have shown that cost reduction while sales is less than cost rise while same increase in sales volume. The behavior of costs is known as cost stickiness (Kordestani and Mortazavi, 2012, 74).

4.3. STATISTICAL POPULATION AND SAMPLE

The statistical population in this study consists of companies listed in Tehran Stock Exchange.

4.4. SAMPLING METHOD

In this study, to determine statistical sample, eliminate sampling is used. In other words, those companies with following conditions were selected as sample and other companies were excluded:

1. To observe their comparability, fiscal year of companies is ended in March of each year.

2. During the research period, the company should have no pause of activity and have not changed their fiscal period.

3. All required information of companies should be available for the research.

4. They should not be among banks and financial institutions (investment companies, financial mediators, holding companies, leasing companies and insurance companies).

Through applying the above mentioned limitations, 95 companies were selected as statistical sample of the study.

4.5. RESEARCH HYPOTHESES

Through reviewing the relevant researches to answer the research questions and achievement to research objective, the following hypotheses are provided.

- **Main hypothesis**: audit quality could affect cost stickiness in manufacturing companies listed in Tehran Stock Exchange.

The secondary hypotheses resulted from the main hypothesis:

- **Hypothesis 1**: size of audit institution could affect cost stickiness in manufacturing companies listed in Tehran Stock Exchange.

- **Hypothesis 2**: auditor expertise in the industry could affect cost stickiness in manufacturing companies listed in Tehran Stock Exchange.

- **Hypothesis 3**: the auditory tenure could affect cost stickiness in manufacturing companies listed in Tehran Stock Exchange.

- **Hypothesis 4**: importance of a company for an audit institutioncould affect cost stickiness in manufacturing companies listed in Tehran Stock Exchange.

In this study, audit quality is considered as independent variable and cost stickiness is considered as dependent variable. Moreover, the variables ofintensity of investments in fixed assets and the value of Tobin's Q have been considered as control variables and are explained as follows.

4.6. AUDIT QUALITY INDEPENDENT VARIABLE (AQ)

The dimensions of audit quality are defined in 4 dimensions as follows:

1. Audit institution size: size of audit institution is a dummy variable and if a company is inspected by the audit institution, it takes point 1; otherwise, it takes point 0.

2. Audit expertise in the industry: it refers to total sales of all employers of an audit institution in a special industry divided by total sale of employer in the industry. The market share of audit institution is calculated in eq.1 and as follows:

Total assets of all employers of an audit institution in a special industry divided by the total assets of employers in this industry:

$$MS_{ik} = \frac{\sum_{j=1}^{J_{ik}} AT_{ijk}}{\sum_{i=1}^{I_k} \sum_{j=1}^{J_{ik}} AT_{ijk}} \tag{1}$$

MS_{ik}= market share of i audit institution in k

industry TA= total assets of employers

i= the symbol for audit institution

j= symbol of employer company

k= symbol of desired industry

I_{ik} = symbol for the number of employers in i audit institution in k industry

I_k = symbol of number of audit institutions in k industry

According to San and Liu (2013), this study has considered those institutions specialized with the symbol (SPEC) that their market share is presented as follows based on the previous equation.

$$MS_{ik} > \frac{1}{N_K} \times 1.2 \tag{2}$$

Where; $N_{..}$ refers to number of companies listed in k industry. Hence, if the company is audited by the specialized audit institution, we have (SPEC=1); otherwise, we have SPEC=0.

1. Auditor tenure: the auditor tenure is divided to two groups: short-term tenure (short=0) if the customer is inspected by audit institutions for 3 years of less and (long=1) if the tenure is more than 3 years (Susanty et al, 2015, 104).

2. Importance of a company for an audit institution: to measure this variable, the ratio of desires corporate assets to total assets of exchange company handled by the relevant institution in desired year is used (Susanty et al, 2015, 104).

4.7. DEPENDENT VARIABLE (COST STICKINESS):

In this study, using theories of Anderson et al (2003) and Subramaniam & Weidenmier (2003), logarithm model is used to calculate cost stickiness:

$$\log\left[\frac{SGA_{i,t}}{SGA_{i,t-1}}\right] = \beta_0 + \beta_1 \log\left[\frac{REV_{i,t}}{REV_{i,t-1}}\right] + \left\{y_0 + \sum_{j=1}^{n} y_j CON_{i,t,j}\right\} * DUM * \log\left[\frac{REV_{i,t}}{REV_{i,t-1}}\right] + \varepsilon_{i,t}$$

(3)

Where;

SGA= general and administrative costs

REV= revenue natural logarithm

DUM= dummy variable with value of 1, if revenue is reduced in current year; otherwise, the value is 0.

4.8. CONTROL VARIABLES

CAPR= fixed asset investment intensity: fixed asset value divided by sales

TOBQ= growth rate, Tobin's Q (i shows companies / t shows the year)

Hence, the model 1 is revised as follows:

$$\log\left[\frac{SGA_{i,t}}{SGA_{i,t-1}}\right] = \beta_0 + \beta_1 \log\left[\frac{REV_{i,t}}{REV_{i,t-1}}\right] + \beta_2 DUM * \log\left[\frac{REV_{i,t}}{REV_{i,t-1}}\right] + \beta_3 DUM * CAPR_{i,t} * \log\left[\frac{REV_{i,t}}{REV_{i,t-1}}\right] +$$
$$\beta_4 DUM * TOBQ_{i,t} * \log\left[\frac{REV_{i,t}}{REV_{i,t-1}}\right] + \varepsilon_{i,t}$$

(4)

According to the definition of cost stickiness, a significant **negative coefficient of β_2** is existed in model (4) that shows cost stickiness (Xue & Hong, 2015, 5).

4.9. CONTROL VARIABLES

Investment intensity in fixed assets: fixed asset value divided by sales

Q Tobin (QT): Q Tobin value as a ratio of capital market of company to asset book value (Susanty et al, 2015, 104).

4.10. THE RESULTS OF TESTING HYPOTHESES

In this study, to answer the research questions, a main hypothesis is tested usinglinear least square regression as follows.

- Audit quality could affect cost stickiness in manufacturing companies listed in Tehran Stock Exchange.

The hypothesis is tested in frame of 4 secondary hypotheses and using 4 features of audit quality in the following.

4.11. RESULTS OF TESTING HYPOTHESIS 1

Hypothesis 1: size of audit institution could affect cost stickiness in manufacturing companies listed in Tehran Stock Exchange.

To test the hypothesis, multivariate regression model is used as follows and the results are presented in table 1.

$$\log(\frac{SGA_{i,t}}{SGA_{i,t-1}}) = \beta_0 + \beta_1 \log(\frac{REV_{i,t}}{REV_{i,t-1}}) + \beta_2 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) + \beta_3 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times AUDIT_{i,t}$$

$$+ \beta_4 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times CAPR_{i,t} + {}_5 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times Qtobin_{i,t} + \varepsilon_{i,t}$$

$$\beta$$

According to results of testing hypothesis 1 as it is presented in table 1, sig level of F Limer (Chow) is equal to 0.997 and is higher than desired p-value and the model of Pooled data is used to for the regression. Sig level of White test is equal to 0.000 and lower than desired p-value and hence, the results show that inequality of variances is existed in the model. In this case, regression is used after meeting the inequality of variance (generalized least-squared regression). Moreover, according to high sig level of Breusch-Godfrey test compared to acceptable p-value (5%), the results of Lagrange factor test (Breusch-Godfrey X^2) show that there is no serial correlation in regression model. Also, Durbin-Watson value is in acceptable range (1.5 and 2.5), which shows that there is no correlation between model error components. Sig value of F-value (0.000) is lower than acceptable p-value (5%) shows that the total regression model is significant. According to low level of probability level (prob.) of t-value from the desired p-value level for the β_3 coefficient, the test results show that auditor size has positive statistically significant effect on cost stickiness of manufacturing companies. In other words, choosing great auditors could increase cost stickiness of manufacturing companies. Therefore, the hypothesis 1 could not be rejected at the confidence **level of 95%. According to the expectations, the** β_2 is also negative; although it is insignificant. Hence, it could be found that among the selected companies in sample, cost stickiness is not existed significantly. Moreover, the results obtained from the study show that control variable of intensity of investment in fixed asset has also positive and significant effect on cost stickiness of manufacturing companies. The Q Tobin value also has no significant effect on cost stickiness of manufacturing companies. The coefficient of determinations (R^2) and adjusted coefficient of determination (Adj.R^2) show that independent and control variables putted into the model could determine 9.7% of the variances in dependent variable.

Table 1. Regression test results for hypothesis 1

Putted variable into model	$\beta_4 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times \frac{CAPR_{i,t}}{REV_{i,t-1}}$
β_0	
$\beta_1 \log(\frac{REV_{i,t}}{REV_{i,t-1}})$	
$\beta_2 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}})$	
$\beta_3 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times AUDIT_{i,t}$	

Coefficient	t-value	Prob.
0.046	5.940	0.000
0.350	6.436	0.000
-0.081	-0.268	0.788
0.580	2.815	0.005
0.058	2.163	0.010

Putted variable into model	Coefficient	t-value	Prob.
$\beta_5\ DUM \times \log(\dfrac{REV_{i,t}}{REV_{i,t-1}}) \times Qtobin_{i,t}$	0.039	0.237	0.813
F value Sig (prob.)		16.225 0.000	
Durbin-Watson		2.056	
Breusch-Godfrey test Sig (prob.)		0.676 0.508	
White test (inequality of variances) Sig (prob.)		9.727 0.000	
Coefficient of determination (R2) Adjusted coefficient of determination (AdjR2)		0.097 0.091	

Source: Author

4.12. RESULTS OF TESTING HYPOTHESIS 2

Hypothesis 2: auditor expertise in industry could affect cost stickiness in manufacturing companies listed in Tehran Stock Exchange.

To test the hypothesis, multivariate regression model is used as follows and the results are presented in table 2.

$$\log(\frac{SGA_{i,t}}{SGA_{i,t-1}}) = \beta_0 + \beta_1 \log(\frac{REV_{i,t}}{REV_{i,t-1}}) + \beta_2\ DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) + \beta_3\ DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times SPEC_{i,t}$$
$$+ \beta_4\ DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times CAPR_{i,t} + \beta_5 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times Qtobin_{i,t} + \varepsilon_{i,t}$$

Table 2. Regression test results for hypothesis 2

Putted variable into model	Coefficient	t-value	Prob.
β_0	0.047	5.537	0.000
$\beta_1 \log(\dfrac{REV_{i,t}}{REV_{i,t-1}})$	0.346	4.885	0.000
$\beta_2\ DUM \times \log(\dfrac{REV_{i,t}}{REV_{i,t-1}})$	-0.163	-0.739	0.460
$\beta_3\ DUM \times \log(\dfrac{REV_{i,t}}{REV_{i,t-1}}) \times AUDIT_{i,t}$	0.214	0.973	0.331
$\beta_4\ DUM \times \log(\dfrac{REV_{i,t}}{REV_{i,t-1}}) \times CAPR_{i,t}$	0.069	3.013	0.003
$\beta_5\ DUM \times \log(\dfrac{REV_{i,t}}{REV_{i,t-1}}) \times Qtobin_{i,t}$	0.106	0.643	0.520

Putted variable into model	Coefficient	t-value	Prob.
F value Sig (prob.)		14.806 0.000	
Durbin-Watson		2.057	
Breusch-Godfrey test Sig (prob.)		1.036 0.355	
White test (inequality of variances) Sig (prob.)		12.141 0.000	
Coefficient of determination (R2) Adjusted coefficient of determination (AdjR2)		0.089 0.083	

Source: Author

According to results of testing hypothesis 2 as it is presented in table 2, sig level of F Limer (Chow) is equal to 0.997 and is higher than desired p-value and the model of Pooled data is used to for the regression. Sig level of White test is equal to 0.000 and lower than desired p-value and hence, the results show that inequality of variances is existed in the model. In this case, regression is used after meeting the inequality of variance (generalized least-squared regression). Moreover, according to high sig level of Breusch-Godfrey test compared to acceptable p-value (5%), the results of Lagrange factor test (Breusch-Godfrey X^2) show that there is no serial correlation in regression model. Also, Durbin-Watson value is in acceptable range (1.5 and 2.5), which shows that there is no correlation between model error components. Sig value of F-value is (0.000) lower than acceptable p-value (5%) shows that the total regression model is significant. According to high level of probability level (prob.) of t-value from the desired p-value level **for the β_3 coefficient**, the test results show that auditor expertise has positive statistically insignificant effect on cost stickiness of manufacturing companies. Therefore, the hypothesis 2 could not be confirmed **at the confidence level of 95%. According to the expectations, the β_2 is also negative; although it is** insignificant. Hence, it could be found that among the selected companies in sample, cost stickiness is not existed significantly. Moreover, the results obtained from the study show that control variable of intensity of investment in fixed asset has also positive and significant effect on cost stickiness of manufacturing companies. The Q Tobin ratio also has no significant effect on cost stickiness of manufacturing companies. The coefficient of determinations (R2) and adjusted coefficient of determination (Adj.R2) show that independent and control variables putted into the model could determine 8.9% of the variances in dependent variable.

4.13. RESULTS OF TESTING HYPOTHESIS 3

Hypothesis 3: audit tenure (more than 3 years) could affect cost stickiness in manufacturing companies listed in Tehran Stock Exchange.

To test the hypothesis, multivariate regression model is used as follows and the results are presented in table 3.

$$\log(\frac{SGA_{i,t}}{SGA_{i,t-1}}) = \beta_0 + \beta_1 \log(\frac{REV_{i,t}}{REV_{i,t-1}}) + \beta_2 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) + \beta_3 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times TENURE_{i,t}$$

$$+ \beta_4 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times CAPR_{i,t} + \beta_5 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times Qtobin_{i,t} + \varepsilon_{i,t}$$

Table 3. Regression test results for hypothesis 3

Putted variable into model	Coefficient	t-value	Prob.
β_0		6.747 / 0.724	0.000
$\beta_1 \log(\frac{REV_{i,t}}{REV_{i,t-1}})$		6.945 / 0.334	0.000
$\beta_2 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}})$		-0.039 / -0.103	.848
$\beta_3 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times AUDIT_{i,t}$		2.341 / 0.429	0.019
$\beta_4 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times CAPR_{i,t}$		3.029 / 0.078	0.002
$\beta_5 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times Qtobin_{i,t}$		0.073 / 0.013	.941
F value Sig (prob.)		15.689 0.000	
Durbin-Watson		2.051	
Breusch-Godfrey test Sig (prob.)		0.817 0.442	
White test (inequality of variances) Sig (prob.)		10.081 0.000	
Coefficient of determination (R2) Adjusted coefficient of determination (AdjR2)		0.094 0.088	

Source: Author

According to results of testing hypothesis 3 as it is presented in table 3, sig level of F Limer (Chow) is equal to 0.996 and is higher than desired p-value and the model of Pooled data is used to for the regression. Sig level of White test is equal to 0.000 and lower than desired p-value and hence, the results show that inequality of variances is existed in the model. In this case, regression is used after meeting the inequality of variance (generalized least-squared regression). Moreover, according to high sig level of Breusch - Godfrey test compared to acceptable p-value (5%), the results of Lagrange factor test (Breusch-Godfrey X^2) show that there is no serial correlation in regression model. Also, Durbin-Watson value is in acceptable range (1.5 and 2.5), which shows that there is no correlation between model error components. Sig value of F-value is (0.000) lower than acceptable p-value (5%) shows that the total regression model is significant. According to low level of probability level (prob.) of t-value from the desired p-value level for **the β_3** coefficient, the test results show that auditor tenure has positive and statistically significant effect on cost stickiness of manufacturing companies. In other words, selecting auditors for more than 3 years could

increase cost stickiness of manufacturing companies. Therefore, the hypothesis 3 could not be rejected at the confidence level of 95%. **According to the expectations, the β_2 is also negative; although it is**

insignificant. Hence, it could be found that among the selected companies in sample, cost stickiness is not existed significantly. Moreover, the results obtained from the study show that control variable of intensity of investment in fixed asset has also positive and significant effect on cost stickiness of manufacturing companies. The Q Tobin ratio also has no significant effect on cost stickiness of manufacturing companies. The coefficient of determinations (R2) and adjusted coefficient of determination (Adj.R2)

show that independent and control variables putted into the model could determine 9.4% of the variances in dependent variable.

4.14. RESULTS OF TESTING HYPOTHESIS 4

Hypothesis 4: importance of a company for an audit institution could affect cost stickiness in manufacturing companies listed in Tehran Stock Exchange.

To test the hypothesis, multivariate regression model is used as follows and the results are presented in table 4.

$$
\log(\frac{SGA_{i,t}}{SGA_{i,t-1}}) = \beta_0 + \beta_1 \log(\frac{REV_{i,t}}{REV_{i,t-1}}) + \beta_2 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) + \beta_3 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times M_{i,t}
$$
$$
+ \beta_4 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times CAPR_{i,t} + {}_5 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times Qtobin_{i,t} + \varepsilon_{i,t}
$$

$$\beta$$

Table 4. Regression test results for hypothesis 4

Putted variable into model	Coefficient		
β_0	0.045		
$\beta_1 \log(\frac{REV_{i,t}}{REV_{i,t-1}})$	0.355		
$\beta_2 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}})$	-0.251		
$\beta_3 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times AUDIT_{i,t}$	-0.268		
$\beta_4 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times CAPR_{i,t}$	0.067		
$\beta_5 DUM \times \log(\frac{REV_{i,t}}{REV_{i,t-1}}) \times Qtobin_{i,t}$	0.096		
F value Sig (prob.)			
Durbin-Watson			
Breusch-Godfrey test Sig (prob.)			
White test (inequality of variances) Sig (prob.)			
Coefficient of determination (R2) Adjusted coefficient of determination (AdjR2)			

t-value	Prob.		
5.231	0.000		
4.977	0.000		
-0.950	0.342		
-0.638	0.524		
2.288	0.022		
0.394	0.694		
			14.646
			0.000
			2.056
	1.076		
	0.342		
			11.711
			0.000
	0.089		
	0.082		

According to results of testing hypothesis 4 as it is presented in table 4, sig level of F Limer (Chow) is equal to 0.999 and is higher than desired p-value and the model of Pooled data is used to for the regression. Sig level of White test is equal to 0.000 and lower than desired p-value and hence, the results show that inequality of variances is existed in the model. In this case, regression is used after meeting the inequality of variance (generalized least-squared regression). Moreover, according to high sig level of Breusch-Godfrey test compared to acceptable p-value (5%), the results of Lagrange factor test (Breusch-Godfrey X^2) show that there is no serial correlation in regression model. Also, Durbin-Watson value is in acceptable range (1.5 and 2.5), which shows that there is no correlation between model error components. Sig value of F-value is (0.000) lower than acceptable p-value (5%) shows that the total regression model is significant. According to low level of probability level (prob.) of t-value from the desired p-value level for the β_3 coefficient, the test results show that importance of a company for audit institution has negative and statistically insignificant effect on cost stickiness of manufacturing companies. Therefore, the hypothesis 4 could not be confirmed at the confidence level of 95%. **According to the expectations, the β_2 is also** negative; although it is insignificant. Hence, it could be found that among the selected companies in sample, cost stickiness is not existed significantly. Moreover, the results obtained from the study show that control variable of intensity of investment in fixed asset has also positive and significant effect on cost stickiness of manufacturing companies. The Q Tobin ratio also has no significant effect on cost stickiness of manufacturing companies. The coefficient of determinations (R^2) and adjusted coefficient of determination (Adj.R^2) show that independent and control variables putted into the model could determine 8.9% of the variances in dependent variable.

4.15. SUMMARY OF RESULTS OBTAINED FROM TESTING HYPOTHESES

Summary of the results obtained from testing research hypotheses are presented in table 5.

Table 5. Summary of results obtained from testing hypotheses

Hypothesis	Description	Test result	
		Confirmed	Rejected
H1	size of audit institution could affect cost stickiness	** positive effect	
H2	auditor expertise in the industry could affect cost stickiness		**
H3	the auditory tenure could affect cost stickiness	** positive effect	
H4	importance of a company for an audit institution could affect cost stickiness		**

Source: Author

5. CONCLUSIONS

In general, awareness of cost behavior is important for accountants, auditors, researchers and all people involved in field of management and those who evaluate changes in costs based on changes in income to evaluate underlying issues such as planning, decision making and budgeting. Managerial inference of the analysis is that cost stickiness could be identified and controlled. Managers should evaluate the reason for cost stickiness through considering sensitivity of cost changes compared to changes in activity volume and should enhance the company's reaction against decline in demand for products and services. This could help improvement of the process of responsiveness. Moreover, through specifying cost stickiness, owners of company could analyze that whether managers could cause cost for the firm or not? Managers could identify and control cost stickiness in the company. They could also conclude some contracts to lease the operating assets and employment of personnel (e.g. conclusion of short-term contracts) to reduce the required adjustments to reduce operating asset level in the periods of decline in demand and sales level and reduce the cost stickiness. Through considering cost stickiness in budgeting, managers could provide more logical estimations in years that they expect reduced sales level. Moreover, the suggestion for the

investors is to consider the issue of cost stickiness in financial analysis of those companies, which may face reduced sales level in future.

REFERENCES

Ahmadpur, A, Kashani, M, Shojaei, M., (2010), the effect of corporate governance and audit quality on the cost of financing through debt (borrowing), review of accounting and auditing, Volume 7, Number 62, Spring, pp. 17-32**.**

Anderson. T, Bollerslev. T, Diebold. F (2003). Modeling and Forecasting Realized Volatility Ecometrica 71, 579-626**.**

Carsten, H & Julia, N, (2008), How Timely Are Earnings When Costs Are Sticky? Implications for the Link between Conditional Conservatism and Cost Stickiness, Working paper, Accounting Department, University of Cologne, Germany**.**

DeAngelo, L. E, (1981), "Auditor Size and Audit Quality", Journal of Accounting and Economics. Vol. 3, No. 3, pp 183-199**.**

Dies, D. R & Giroux, G. A, (1992), "Determinants of Audit Quality in the Public Sector" The Accounting Review, Vol. 67, No .3, pp. 462-479**.**

Hassas Yeganeh, Y, and Azinfar, K., (2010), the relationship between audit quality and auditor size, check accounting and auditing, Volume 17, Issue 61, Spring, pp. 85-98.

Hemmati, H and Mollaei, S., (2014), examining the relationship between financial and non-financial factors on cost stickiness, Journal of Economics and Business, Volume 5, Number 9, Winter, pp. 1 - 13.

Ismailzadeh, A. and Mehrnoosh, A., (2014), the relationship of costs stickiness with earning quality and prediction error, financial, accounting and auditing, Issue 21, Spring, pp. 37-61**.**

Knechel, Robert, & Gopal V, Krishnan, & Pevzner, Mikhail, Shefchik, Lori, & Velury, Uma K, (2013), Audit Quality: Insights from the Academic Literature Auditing: A Journal of Practice & Theory American Accounting Association, Vol. 32, Supplement 1, pp. 385–421**.**

Kordestani, GH and Mortazavi, Sayed M., (2012), the effect of deliberate decisions of managers on costs stickiness, review of accounting and auditing, Volume 19, Issue 67, Spring, pp. 73-90**.**

Lavin, D, (1977), "Some effects of the perceived independence of the auditor", Accounting, Organizations and Society, Vol. 2, No. 3, PP. 237–244**.**

Malekian Kalebasti, E., Moein al-Din M, Kalantari, E, (2011), relationship of independent audit quality and bid sale of stock in Tehran Stock Exchange, investigate the accounting and auditing, Issue 66, Winter, pp. 69-80

Mashayekhi, B., Mehrani K., Rahmani, A, Maddahi, A., (2013), developing a model of audit quality, Quarterly Stock Exchange, No. 23, Volume 6, Fall, pp. 103-137.

Namazi, M and Davanipour, I., (2010), Experimental Investigation of Cost Stickiness in Tehran Stock Exchange, accounting and auditing researches, Volume 17, Issue 62, Winter, pp. 85 to 102**.**

Namazi, M, Ghaffari, MJ, Fereydooni, M., (2012), Fundamental analysis of cost stickiness and costs with emphasis on the changes in the Tehran Stock Exchange, The Journal advances accounting Shiraz University, Volume IV, Number second, autumn and winter, pp. 151-177**.**

Peecha, Mark E, (2005), 'It is all about audit quality: perspectives on strategic – system auditin**g',** Accounting organization and society, vol. 12, pp. 129-145**.**

Subraman. C, Weidenmier. M (2003). Additional Evidence on the sticky Behavior of cost. Texas Christain University **.**

Susanty, Meinie, Gunawan, Juniati, (2015), Audit quality to manage sustainable auditor reputation, Issues in Business Management and Economics Vol.3 (7), pp. 100-108, July.

Zanjirdar, M, Ghaffari Ashtiani, P, Maddahi, Z. (2014), analyzing the factors affecting the stickiness behavior of costs, management accounting, Year 7, Issue 20, Spring, pp. 79-91.

EFFECT OF THE MORAL INDIVIDUAL FACTORS ON MORAL BEHAVIOR DEVELOPMENT IN ACCOUNTING PROFESSION

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Abstract

Accounting Moral is a collection of characteristics that will enable an accountant to choose the best intent as regards of professional and spiritual criterions. The notability difference of accounting profession is accepting duty toward society and having high degree of honesty. The research aim is investigating moral individual factors (virtue and self-control) in the accounting profession. This research is application oriented as regards of its aim and is descriptive-measuring based on its data. Research statistic population includes accounting faculties, CFOs, CPAs, PhD and graduate accounting students in Iran. Information gathering instrument is a questionnaire and data have been analyzed by use of Spearman correlation coefficient and model of structural equations. Research findings represent that moral individual factors (virtue and self-control) in moral behavior development in accounting have sequentially 37 and 42 percent effects on moral behavior betterment in accounting. So, it can be concluded that accounting profession requires a model that could lead to objectives of professional betterment in the field. Therefore, it is necessary to codify an educational program in this base to increase moral awareness and to develop ethical knowledge all the planners in the country by universities and professional associations.

JEL classification: C91

Keywords: *Accounting Moral, Education, Virtue, Moral Behavior betterment, Professional Self control*

1. INTRODUCTION

Increases of accountants` roles, as regards of wide spreading of markets in the world and financial enormous scandals, have caused that compliance with professional ethics to be important and to be considered in the corporations. Most people believe that accountants and auditors are the active participants in this base and the main culprits for financial crises are the accountants who haven`t done their duties correctly, (Lari Dasht Bayaz and et.al. 2013:2). For the reason of these difficulties, it can be indicated to governmental defective provisions and regulations and legislations of professional associations. Some critics believe that deficiency or lack of government supervision have caused these corruptions. Hajazi & MesriPoor (2012: 139), in their research concluded that educations of professional moral regulation in B.A duration will have no effect on professional moral criteria observance improvement of accounting students.

Why should an accountant have knowledge about moral base? Duska R.F. Duska B. (2003), answered: at first, individual moral believes may be insufficient. Secondly, in some situations because of different

moral doctrine, determination of an activity that should be done may be encountered by difficulty, (Saghafi & et.al 2010: 8). Findings of done research by Saghafi & et.al (2010**:16), "Education of Accounting Moral in B.A Duration", indicated that introducing of professional mora**l lesson is necessary
and its subjects would not be covered by other lessons.

Changes and new advances in technology have great effects on new commercial world. Accountants are among individuals who have main roles in the different aspects of these changes and advances. In process **of any development, accountants' professional knowledge and expertise** should be alongside with professional moral values, to create and improve commercial affairs. Consideration of professional behavior and code of professional ethics are necessary factors for the accountants. So, every individual who is active in this profession should pass necessary and sufficient moral educational durations to represent his moral capacities in the suitable situations to exhibit his abilities and profession to society and to increase his profession reputation, (Rafiei, 2007:15).

Anderson was Enron Corporation external auditor in 1980s and was chosen as an internal auditor for the corporation in the middle of 1980s. He received a noticeable reward for his mutual role (both independent and internal auditor), (Sarlak, 2008:76). This event and its similar events indicate that sensitivity toward moral behavior and moral development are necessary in accounting profession and it is necessary more awareness should be done to prevent loss of credibility of the accounting profession by various groups associated with the accounting profession. So, it is needed to codify an educational program in this base to increase moral awareness and to develop all accounting programmers` knowledge in the country by universities and professional communities, (Mahdavi, 2010:36).

Based on the mentioned subjects, studying and investigating of different researches about moral individual factors on moral behavior betterment in accounting profession, importance and place of this subject can be understood. This importance represents that not only an accountant should have sufficient domination on his profession, but also he (she) should consider some moral doctrine. The research aim is investigating moral individual factors (virtue and self-control) in the accounting profession to exhibit effective solutions based on the received analyses.

2. THEORETICAL BASES AND RESEARCH BACKGROUND

Golden rule is a moral origin that indicates the two following subjects:

1- An individual should behave in such a way that he likes to be behaved by others, (the positive mode of the rule).

2- An individual shouldn`t behaves in such a way that he doesn`t likes to be behaved by others, (the negative mo**de of the rule) and it is sometimes called "silvern rule".**

The positive mode of the rule will cause an individual plays a good activity and the negative mode of the rule will cause an individual plays no bad activity, (Eslami, 2007:5).

3. DEFINITIONS

Behavior: Oxford dictionary defines behavior as: the way that a person acts, conduct and method of reacting meet that a person will show in the different situations.

Moral: In Amid**'s** dictionary, moral has been defined as society accepted normal which indicates correctness or incorrectness of individual behavior. Theoretician as Mabry believed that moral means correct behavior and its study. Moral doctrines are rules for correct behaviors, (Mabry, 1993:200). Some of other theoreticians believed that moral is an individual definition of a thing which is good or correct, (Thorne, 2001:342). Moral word points to an aspect of human experience which includes access to the intentions and aims that exhibit unbiased judges for correctness and incorrectness of human behavior, it also consists of values that should be initialized in time of individual, political and social decision making, (Setayesh, 2012:19).

Moral Doctrine: moral view of each person with its category including individual moral principle and professional moral principle will be more understood. Reflected individual moral principle is public expectations of each person in each situation. While professional moral principle has been imposed on

individuals in professional situations and includes needed behavior frameworks of professional methods such as; accounting, medical, law and engineering, (Yunanda & Majid, 2011: 128).

Moral Science: moral science expresses good behavior which means everything that should happen and it is looking for principles and doctrine that will be followed by welfare, goodness and happiness for humans. Otherwise, moral science studies good and bad characteristics, honorable and non-honorable behavior, (Bayat, 2008: 55).

Professional Moral: professional moral is a knowledge that codifies suitable and correct behavior in each profession neatly and exhibits practical and applied guidelines to codify limitations and borders of responsibilities. In the otherwise, professional moral are admirable methods and orders that are used in a profession (Bayat. 2008:55). GharaMaleki (2016), defines professional moral as a collection of doctrine and standards of human behavior which determines individual behavior in groups, in fact professional moral is a rational thought process which its aim is vindicating this factor that in an organization which and when values should be kept and published.

DEVELOPMENT OF MORAL BEHAVIOR IN ACCOUNTING PROFESSION

Salman Panah & Taleb Nia (1393: 89) believes that professional moral behavior is a vital element in profession formation. Moral behavior emphasizes on this point that quality in accounting not only relate to technical and professional knowledge of this profession but also accounting quality should include accountants` moral behaviors. Michelle Foucault was a thoughtful thinker with new views in individual moral. He believed that moral was taken optionally from individual mind and was not reflection of defined rules and doctrine for the individual. He believed that beautiful moral view has given his place to moral rule and legislation, orders that had been caused by rules and doctrine. Foucault believed that these orders were not valuable and would not be known as moral. In fact, Foucault believed that there was a different between moral provisions and moral act and he was a fan of moral act, Lari Dasht Bayaz & et.al (2013:4).

Moral aim is deducting of behavioral doctrine that will help individuals to choose among different **alternatives of act. Moral behavior practically is what is accepted as "good" and "correct" in contrast to "bad" or "incorrect" in a social base.**

APPROACHES OF RATIONAL DECISION MAKING AND ITS TYPES

Methods of decision making sometimes are above standards and legislations of accounting professional code of ethics. Most of the decisions are made based on the situation that has no background for their decision making. There have been introduced moral considerations for theoretic different approaches and each of them has its own special characteristic. Several approaches have been existed for behavior description and moral branches during years. An individual of expressive approach with accountants` observations may gain a new insight for moral known approaches such as; Utilitarianism Approach, Pragmatism Approach and Religion Approach, (Keller & et.al. 2007:300). Some of the descriptions have been introduced as follow:

Utilitarianism Approach (Utilitarian Origin)

Totally, utilitarian origin can be summarized as: a correct act from moral view is an act that maximizes pure of social utilities. Hossein Zadeh (2012) described this origin as: based on utilitarian origin an act is correct while it creates the best welfare for individuals. In the otherwise, not only my person happiness and benefit are important and valuable, but also other person happiness and benefit that have related to my act are important and valuable. Based on utilitarianism approach, public utilities are in higher level than personal utilities, (Dellaportas & Davenport, 2008:1081).

Pragmatism Approach

In the pragmatism (egoism) approach, it is necessary that utility should be known just for the decision maker and this orientation is ultimately easier, so pragmatism can be a moral approach that people will use ultimately. In pragmatism system, there are much potential for differences of utilities. It is assumed that corporations maximize their profits by minimizing their costs. An accountant has individual motivations to gain maximized profit because treatment state of account can effect on gaining profit, (Keller & et.al. 2007: 301). Egoism philosophy like utilitarian philosophy concentrates on conclusions of an act but

egoism philosophy preferences individual long term utilities in contrast to utilitarian philosophy, (Jabari & et.al. 2010:49).

Religion Approach

Theological moral is dependent on God guidance and it is a collection of correct and incorrect standards, so the source of theological moral is God. God is providing moral direction by Holy Books and Prophets` Miracles. Religion has vast bases and it provides society for moral and internal justification of most of the

moral acts such as; exhibition of securement working situations, employments` treatments and **conservation of existence situation, (Keller & et.al. 2007:302). Obligatory concepts or "must and mustn't"**

are philosophical concepts and they represent real and essential relationship between human optional act and continuous conclusions on it. So, this function is an effect that the act has to arrive human to real completeness and the need to understand the relationship between human actions and ultimate perfection, revelation and wisdom and conscience, (Mahdavi & et.al. 2010:38).

MORAL DECISION MAKING

Moral decision making is using moral doctrine and balances to evaluate truth and correctness of a decision and behavior, (Hasas Yeganeh, 2013:54). In accounting of moral behavior, one subjective view (not a collection of rules) includes all aspects of correct behavior versus incorrect behavior, (Khozin & Mohammdi, 2015:140). When a decision is made about a subject in these days, both decision maker and most of other individuals inside and outside of the corporation will be affected by the decision. In the new world several models have been introduced to understand moral decisions. Moral behavior model of James Rest is one these models.

MORAL BEHAVIOR MODEL OF JAMES REST

Rest introduced four dimensional models in regards of moral growth theory of Kleberg in 1986. Rest model has been one of the most famous models about moral behavior. Four dimensional models of rests

are based on the basic hypothesis from rational base of moral judgment procedure. Dimensional Four **model of rest is trying to answer this Question; "Which process should** as regards of our psychology be **assumed as a moral behavior happens?" Rest argues that four levels** are required to indicate moral behavior:

First level: people should understand that the condition (situation) has moral dimension (moral awareness).

Second level: people should indicate their moral judges about the condition (moral judgment).

Third level: people should situate their moral values versus reciprocal values (moral motivation).

Fourth level: people should do moral acts (moral behavior).

Based on Rest view, break in each of the above level will cause immoral act, (Armstrong, 2003:2). Picture 1 indicates four dimensional model of Rest as follow:

Table 1. Four Dimensional Model of Rest- 1986

First Level	Moral Awareness
Second Level	Moral Judgement
Third Level	Moral Motivation
Fourth Level	Moral Behavior

Source: Author

A) Moral Awareness

It means identification ability of a moral subject to interpret situations and to understand effective condition of one special act on others, (Abas Zadeeh & Moeini Zadeh, 2013: 6). In the otherwise, moral sensitivity is awareness of this topic of how different situations attend individuals. This step includes individual understanding of a moral topic in a situation or recognition of a relative moral rule and standard to the happened subject.

B) Moral Judgment

This step points to one ideal moral judgment for a dilemma. This step includes a judgment about which accountant**'s** action is considerable based on a moral concept, (Yi-Hui-Yi, 2007:47). Kleberg found that moral logical awareness will be higher by individual growth and he evaluated this function valuably positive.

C) Moral Motivation

Moral motivation has been introduced as a degree of commitment based on moral function. Moral intention interface moral judgments on the one hand and ethical behavior on the other. Moral argument advisedly will not end to mapping of suitable intend of moral behavior, however; we can`t always trust on moral observers with hidden and non- appeared considerations, (Jabari & et.al. 2010:50).

D) Moral Behavior

Moral character means performance of moral act and it includes insistence on moral duty, braveness, conquest on weak points such as; tiredness, temptation and behavior to access moral aim, (Lari Dasht Bayaz & et.al. 2013:4). One of the effective factors on moral behavior is individual control center (such as; fair conscience, virtual intention or justice friendship). Individuals, **who's** their control centers are internal, can see their behavior relation and it conclusions with more possibility, so they accept their behavior responsibilities with more possibility and based on their moral judgments, they can act on correctness of a behavior, (Rest, 1986: 6).

Rest believes that a mixture of moral sensitivity, moral judgment, moral motivation and moral character will cause moral act and performance, so there is a complex relationship between moral judgment and moral behavior and more development will not lonely guarantee moral behavior.

PROFESSIONAL CODE OF ETHICS

Professional code of ethics is used as accountants` guidelines and an example of correct behavior in this profession. Although, some of the researchers doubt on efficiency of professional code of ethics, several accounting **associations have considered the "professional code of ethics"** as a more suitable guideline for professional accountants, (Royaei & et.al. 2089:89).

Moral source, which is usually referred to in accounting profession, is moral codes of professional code of ethics in accounting. Investigations of these codes are important because concepts, doctrine and rules in different codes of behavior represent the view of the profession from what should be done by behavior. Moreover, moral is expressed in formal and informal ways such as professional publications and news agencies, (Everett & et.al. 2005:419). In code of ethics of International Federation of Accountants, professional behavior is expressed as: necessity observance of rules and provisions and avoidance of the acts that may hurt the profession**'** reputation. Acts that have undesirable effects on the profession fame, (Arbab Solaimani, 2014: 28). The importance of professional code of ethics is because of the limitations that it codifies for immoral behavior and the guidelines that professional code of ethics exhibits for the situations with vagueness such as clear codification of moral values that have not been introduced before or they have not been precise, (Salman & Taleb Nia, 2013:89). Accounting profession is formed to exhibit precise and real image of organization financial performance. In the introduction of professional code of ethics of Audit Organization is pointed to this subject that accounting profession has high validity and reliability because of the services that it exhibits. Continuation of the mentioned validity and reliability and its amplification will depend on thoughts and performances of profession**'s** members to its moral and behavioral criterions, (Modares & Rafiei, 2008:8).

The question that is investigated in the research is whether some factors such as; virtue and self-control in accounting effect on moral behavior development or not?

SELF-CONTROL IN ACCOUNTING

Self-controlling is an internal care that accountants perform their devolved duties based on it and prohibit from non-normal behaviors and behaviors against professional behavior legislation. Professional moral investigates moral subjects and questions, doctrine and moral values of a professional system and it is a

supervisor on voluntary acts of professionals in their professional activities. Accounting moral like moral in each other professional system should reflect internal norms of profession and sensitivity of moral commitment by its professionals, however; accounting moral shouldn`t be reflection of external and official cares and supervisions by government in the form of must and mustn`t that are imposed, compiled or mentioned to them, (Faraestekhah, 2006:16). Accounting profession situation has been damaged in the world during the recent years, some of these damages are because of accounting scandals which eradicate self-consciousness in the profession (for example; Enron and World Come) and the other parts of the mentioned damages are because of self-controlling and autonomous discomforts in the profession while some people think that self-controlling is lack of any controls and provisions. If individuals who are in high level of organization structure indicate lower level of their moral growth, they will be master while they are responsible for their self-control. So, how this behavior can effect on self-controlling? Professions autonomous and self-controlling have been investigated by Mitchell & et.al. (1994, 1998) in attention to inexistence of fines against busy corporations in accounting inadequacies. Mitchell & et.al (1994) in their research found that while most of the auditing institutes with different sizes have been investigated, 45 percent of the corporations have been punished and no auditing partner of a profession has been forbidden. They found that self-controlling and self-control is an ineffective defense in contrast to misuse of power and a profession should be independent from provision subject, (Bampton & et.al. 2013: 555).

Commitment

Mutual relationship of society and profession that requires on the one hand, providing professional services to the society and on the other hand, provide employment services for these providers, therefore this relationship should include the criteria that had to be careful the two sides are aware of each other's rights. The governed system on each profession is a mixture of codified rules and provisions of inside and outside of the profession. Rules and provisions are codified in inside or imposed completely from outside of the profession in few societies. So, it should be a balance between these two groups of rules and provisions based on the society need to the profession and its reputation, (Sarlak, 2008:73). Accountants should consider intention and attention of moral view and ability of doing an act to perform moral and professional commitments. Moral contention happens in accounting when accountants see their responsibilities toward one group or towards personal benefits versus with their duties to another group. The method that accountants address with these opposite duties is a personality issue, (Stephen & Smith, 2009:8). Based on the previous studies it seems that self-controlling procedure of accounting profession is more about damage control through protection of accountants` profession fame and not about protection of public utilities. In the otherwise, self-controlling will be ineffective while institutions are acting toward the best utilities of their members and not toward utilities of public, (Davenport & Dellaportas, 2008:1092). Sociological studies in accounting profession have been based on this approach that this profession has been based on one checklist of characteristics or key criterions which concentrate on difference of accounting profession from other professions. In this characteristic it is imagined that accounting profession run and its continuance on service performance is not for its utilities, and are dependent on utilities of public. Based on this approach, profession has been created because of the human**'s** real need. Profession social commitment has been created to give service to people equally with their profession advancement and gradation. Instead of this improved situation, profession members will be agreed on protection of public utilities in all factors of act performance, so in the heart of this profession, there is a commitment to service and protection of public utilities, (Davenport & Dellaportas, 2008:1081).

Job Conscience

Doctors have duties to be cared of patients but this aim may be endangered by sending the patients to their private drug stores and hospitals by doctors. Moreover, drug producers try to attract doctors` attentions to prescribe the drugs they produce and they provide doctors with free drug production, free food and free journey to access their aims. Doctors don`t want to confess that the opposites of utilities effect on their judges. While their subsistence depends on opposites of utilities of other and prescription of the services that they have done. So, we deduce that doctors` suggestions are biased because of the opposites of utilities, (Moore & et.al. 2006:10). One of the considerable characteristics of spiritual process in job place in the opposite utilities is that opposites can help individual to create corruptions in their work places unconsciously. This subject can describe why citizens let the creation of the opposites of utilities. In

accounting course, the models of independent auditor, researchers believe that independent subject is that whether an auditor decides to do an auditing unbiased or he will not collude with managers, (Moore & et.al. 2006:16). Self-controlling is one of the considerable characteristics of independent auditing profession. If trust to a profession is annihilated because of continuous crises of ignoring public utilities, people may not protect self-controlling anymore and may ask developed provisions by government, (Davenport & Dellaportas, 2009:15). Self-controlling process indicates that professional association ask their members to continue their educations by advanced studies that will aware member of information about changes in the rules that may happen in that profession or industry. One education in moral can provide moral analyses of students, development of essential skills to recognize and analyze moral subjects in accounting, (Kisielnicki, 2008:5).

Discipline

Self-controlling is a privilege that awarded to professional accountancy, just as long as the society in relation to its regulatory processes, trusts the profession. Continuous of scandals have cast doubt on the ability of the accounting profession effectiveness, (Askary & Olynyk, 2006:5). Members of the accounting profession are possibly will have less unethical behavior and more control over personal interests versus public interest if they know reprimanded, fined or removed from membership, (Askary & Olynyk, 2006:57). After Sarbanes Oxley Rule, investigation of coworkers` self-controlling has been replaced by independent investigation and supervision of public accounting board in accounting corporations. Self-controlling critics believe that investigation program of coworkers` self-controlling has no validity, (Hillary & Lennox, 2005:211). Sarbanes Oxley Rule constituted Public Company Accounting Oversight Board because of concerns about that self-controlling of accounting profession that couldn`t protect investors from bad quality of auditing. One of the duties of Public Company Accounting Oversight Board is performing independent investigations of auditing institutes (Hillary & Lennox, 2005:212). Public Company Accounting Oversight Board has been created as one main components of Sarbanes Oxley Rule. For many years, before Sarbanes Oxley Rule, accounting profession had known self-controlling as one point of pride and honor. After viewing this negligence in accounting, the U.A Government found that this profession couldn`t do supervision of self-controlling and a new act was needed by government. Before that American Institute of Certificated Public Accounting (AICPA) was responsible to create and perform code of professional ethics about auditing behavior and standards. Creation of Public Company Accounting Oversight Board recaptured more privileges of self-controlling from AICPA. Finally, Securities and Exchange Commission Controls Public Company Accounting Oversight Board, (Laughlin 2009:13).

VIRTUE

Virtue means appearing of religious lessons in professional behavior such as; respecting religious doctrine **and effect on moral behavior. Virtue means "self-protection and righteous".**

Virtue is internal disincentive powers which is created in human essence and protect him from doing delict acts. The root of all moral goodness is virtue and the root of all evilness is lack of virtue. Each individual has duty of auditing his acts and don`t pass his life in unconsciousness and neglect he should know that he will be audited one day. Religious belief (religious ideology) is dealing with individual judgment of correctness and incorrectness. Therefore, it is reasonable, in particular to theorize that "there is a significant relationship between religiosity and moral judgment**",** (Siu et al., 2000: 239). Siu et al. (243: 2000) add that several studies conducted in relation to business ethics and religious belief and with the general conclusion that: the relation is real. A requirement condition but not sufficient for a moral code to be effective on a decision is that it will change individual believes, (Lere & et.al.2003:367). Virtue is an important subject of moral value which forces human to do their duties far away from any deviations and depicts while no other moral value has been ordered by God such as virtue. This moral important characteristic, which is the result of trust and belief to God, is the only way of human completeness that has amazing effect on behavior and human cooperation with each other, (Salehi & Sadeghi, 2011:14).

Hasas Yeganeh & et.al. (2016) concluded that the existence of meaningful difference between auditors` mind and act was result of belief to moral discussions in the individual mind and ability of its use in act

and development of rules and provisions without considering auditors` moral growth would not be enough.

Sepasi & Hasani (2015: 34) concluded that religious social norms were bringing a mechanism to decrease representative opposition. And while external supervision on corporation was less, the norms were mechanism to supervise on reporting behavior of corporations. So, religious belief level of managers was one of the ways that could have evaluation for corporations. This research conclusion indicated that religious believes and religious levels of managers could play important roles in their decision making.

Keller, Smith & Smith (2007), in their research investigated the future auditors` moral standards based on the moral models that best described personal decisions. Their research findings indicated that religious doctrine played basic role in the formation of moral standards for most of the students.

Conclusions of the research done by Salehi (2016), indicated that auditor commitment to integration and truth, auditor commitment to professional behavior in auditing profession and auditor professional performance had positive meaningful effect on auditing quality. While professional moral consideration have effect on auditing quality, it is necessary that governed organizations on auditing profession should have more attention to auditing moral aspects.

Salman Panah & Taleb Nia (2013) investigated effective factors on auditors` moral judgment in their research. The research statistic population included 182 employed individuals in the institutes that were organization members, 761 partner employed individual in the institutes that were society members, 257 employed individuals in auditing institutes and 467 unemployed individuals. Research findings indicated that professional behavior legislation of CPAs effected on auditors` moral judgment.

Modares & Rafiei (2008), in their research found that auditors` answers, M.A accounting students` answers and Ph.D. students` answers were thoughtful to lack of performance guarantee of professional behavior and supervision of CPAs in Iran. They expressed that if these two groups didn`t fell continuous and effective supervision on their behavior, moral values will wane severely.

Hasas Yaganeh (2011:62) concluded that in attention to the positive effect of professional behavior legislation on auditing judgment, importance of one unit as professional behavior legislation would be necessary in B.A duration and students should be acquainted with profession subjects and would be aware of society expectations. An important role that a moral code has for an organization is having an effect on decision making.

Sullivan (2004), concluded that the effects of educations such as; deep acquaintance with mentioned contents in professional behavior legislation of auditors` communities would increase students` uses of professional judgment in solution of accounting moral problems. Based on the results of this research, accounting masters should prepare the students to be accounting future leaders and they should consider doctrine and rules of professional code of conduct more severely.

Evidence from studies of Lere & et.al. (2003:365) indicated that apparently moral codes had no considerable effect on decision making.

4. RESEARCH CONCEPTUAL MODEL

This research has three variables such as; virtue, self-control and development of ethical behavior. Chart 1 represents the research conceptual model:
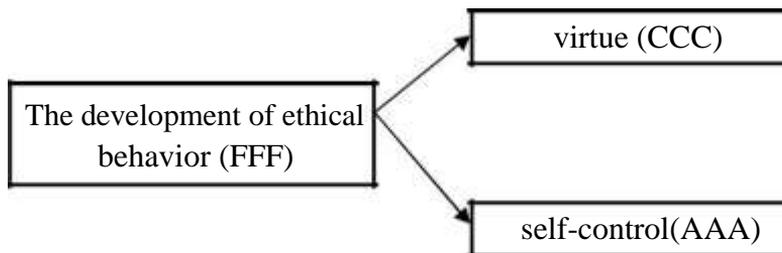
Chart 1.Research Conceptual Model

RESEARCH QUESTIONS

Based on the mentioned theoretical bases about relationships between virtues, self-control the development of ethical behavior, two questions will be introduced:

1- How is the effect of virtue on the development of ethical behavior in accounting profession?

2- How is the effect of self-control on the development of ethical behavior in accounting profession?

RESEARCH METHODOLOGY

The research method is measuring- analytic. The research statistic population includes experts and specialists in accounting area such as; accounting faculty members, auditors, accountants and senior managers with a focus on corporate finance and accounting professors. 384 individuals have been chosen as the research sample, based on Kerjesi and Morgan Table. Instrument of data gathering is a questionnaire designed by the researcher. At first, a superficial validity questionnaire was given to seven members of accounting board and experts and a final questionnaire was corrected based on their ideas. The received gathered ideas of these individuals indicate that the questionnaire owned suitable superficial and conceptual validity. Then Cronbach Alfa coefficient has been calculated to clarify correlation of each locution (gap) with total score. Conclusions of this coefficient indicate that self-control is 0/914 and virtue is 0/879. It shows that the questionnaire has owned desirable stability. Finally, data and model analyses have been done by Spearman Correlation Coefficient, Linear Regression, and Structural Equations by use of SPSS and Amos software.

RESEARCH FINDINGS

Investigation of answerers` demography characteristics to questionnaire 60/2% of men and 39.8% of women from 384 samples were chosen randomly. Moreover, 2.86% of answerers have Ph.D. degrees, 18.49% of answerers are Ph.D. accounting students, 15.37% of answerers have M. Degrees, 45.05% of answerers are M.A accounting students, and 18.23% of answerers have B.A degrees or other degrees.

TEST OF DATA NORMALITY

To investigate normality distribution of questionnaire variables Kolumo Goroof- Smirnoff Test has been used. Zero hypotheses in this test is normality test of variable distribution. If meaningfulness level of test is less than 0/05, zero hypotheses will be rejected and it can be concluded that data distribution of considered variable is not normal. If meaningfulness level of test is more than 0/05, zero hypotheses will not be rejected and it can be concluded that data have normal distribution.

Table 1. Conclusions of Kolumo Goroof- Smirnoff Test to investigate data following of normal distribution

Variable	number	average	Standard deviation	Statistic amount of z	Meaning-fulness level	Result
Self-control	384	3/2181	0/91484	0/141	0/000	abnormal

Variable	number	average	Standard deviation	Statistic amount of z	Meaning-fulness level	Result
Virtue	384	3/0736	0/87984	0/082	0/000	abnormal

Source: Author

As indicated in table 1, received conclusions of data analysis represent that meaningfulness level of Kolumo Goroof- Smirnoff Test for all research variables is less than 0/05, zero hypothesis will not be accepted and investigating variable distribution is not normal.

Investigation the Effect of Self-control Variable on the Development of Ethical Behavior in accounting profession

Based on inexistence of normality of variables, Spearman correlation coefficient is used to investigate relationship between virtue and the development of ethical behavior in accounting profession. The research conclusions of this test have been indicated in table 2 as follow:

Table 2. Spearman correlation coefficient relationship between Self-control and ethical behavior in accounting profession

Relationship between self-control and development of ethical behavior	Spearman correlation coefficient	0/663
	Meaningfulness level of F=0/000	F=281/288
	R^2)determination coefficient(=0/424	R=0/651

Source: Author

Based on received meaningfulness level of data analysis which is 0/000 and its comparison with amount of justified error 0/05 (p<0/05), it can be said by 95 percent certainty that there is a meaningful relationship self-control and development of ethical behavior in accounting profession. Moreover, received correlation coefficient is 0/663, this relationship is positive. So, this research hypothesis is accepted.

Investigation the Effect of Virtue Variable on the Development of Ethical Behavior in Accounting Profession

Based on inexistence of normality of variables, Spearman correlation coefficient is used to investigate relationship between virtue and development of ethical behavior in accounting profession. The research conclusions of this test have been indicated in table 3 as follow:

Table 3. Spearman correlation coefficient relationship between Virtue and Development of Ethical Behavior in Accounting Profession

Relationship between virtue and development of ethical behavior	Spearman correlation coefficient	0/729
	meaningfulness level of F=0/000	F=471/958
	R^2)determination coefficient(=0/553	R=0/743

Source: Author

Based on received meaningfulness level of data analysis which is 0/000 and its comparison with amount of justified error 0/05 (p<0/05), it can be said by 95 percent certainty that there is a meaningful relationship between virtue and development of ethical behavior in accounting profession. Moreover, received correlation coefficient is 0/729, this relationship is positive. So, this research hypothesis is accepted.

Modeling of Structural Equations and Test of Research Hypotheses

Totally, research hypotheses have been tested by finding model technique of structural equations and AMOS 23 software. To access research aim, at first data normality test has been performed. Then, validity factoring analysis has been done for each of the questionnaire. Finally, relative model of research questions has been fulfilled.

In this study questionnaire has been used to gather data, so by use of valid factoring analysis of total structure research questionnaires have been evaluated validly conceptual.

Measuring model represents factoring loads of observed (factor) variables for each latent variable. Power of relationship between factor (hidden variable) and observed variable indicates by factoring load. Factoring load is an amount between 0 and 1. If a factoring load is less than 0/3, weak relationship will be considered and factoring load between 0/3 and 0/6 will be average and bigger than 0/6 will be very desirable.

In validating factoring analysis attention to model fitness is very important. Common fitness indicators in measuring models for the research latent variables have been exhibited below. Among the fitness indicators if ratio of Kay-Du to freedom degree is less than 2, model will own more suitable fitness. RMSEA indicator will be desirable if it is less than 0/05. Other indicators will be more desirable if they are nearer to 1.

In following relative picture of these analyses and results of factoring analysis will be exhibited. It should be mentioned that relationship between errors in picture has taken model fitness higher. These relationships have been exhibited based on correction indicator in AMOS software. While there is a higher correction indicator for a relationship, adding of that relationship in the model will cause bettering of that fitness continuously.

Exploratory Factoring Analysis of Self-control variable

Received conclusions of KMO-Bartlett have been indicated in table 4. Based on the conclusions levels of validating factoring analysis can be done on data. Mount of more than 0/6 of KMO statistic is a reason of sampling efficiency and certainty level of 0/000 for the test of Bartlett Test load indicates suitability of factoring model. Amount of calculated KMO of self-control variable is 0/705 (more than 0/6), so indicated calculations are efficiencies of sampling.

Table4. Conclusions of KMO-Bartlett Test of self-control variable

Efficiency criterion of KMO sampling		0/80
Test of Bartlett	Chi-square	1157/39
	Freedom degree	6
	Meaningfulness level	0/000

Source: Author

In the next level, recognition the numbers of latent factors will be done. In table 5 determination of latent factor numbers has been exhibited in term of special amounts. Column of the first special amounts is indication of the research latent factor numbers and numbers of total special amount are higher than 1 that indicates latent factors. So, column of special amounts of self-control variable will introduce a factor with special amount of higher than 1. So, suggesting factoring structure will have one factor.

Table5. Total variance explained of latent factor of self-control variable

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.141	78.515	78.515	3.141	78.515	78.515
2	.461	11.514	90.029			
3	.281	7.027	97.056			
4	.118	2.944	100.000			

Extraction Method: Principal Component Analysis.

Source: Author

Table 6. Reproduce correlation matrix based on factoring loads of self-control variable

Questions	ID (Identification	Factoring load
1- The policy of self-control leads to sluggishness and dysfunction in the accounting profession.	Q1	0/851
2- Self-controlling has effective roles in the recent	Q2	0/954

Questions	ID (Identification	Factoring load
scandals.		
3- Self-control policy is not in the public interest	Q3	0/912
4- Present legislation of professional behavior will not strengthen self-control policies.	Q4	0/822

Source: Author

Chart (2) represents measuring model of self-control latent variable in the condition of standard estimation. Factoring loads of the model in the condition of standard estimation indicates amount of each effect of the variables or locutions in the description and specification variance of variable of main factor scores. In the otherwise, indicated factoring load is amount of correlation of each locution with latent variable.
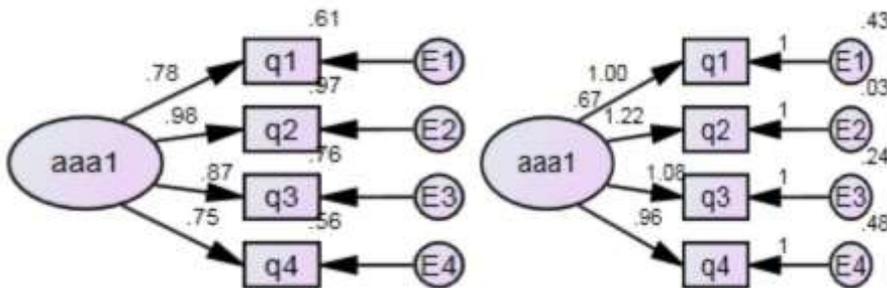
Chart 2: Measuring model of self-control variable in standard and substandard estimation conditions

In this research to investigate suitable model, the relative indicators to the exhibited model fitness have been used in table 7. Estimation conclusions (model practice) represent the suitability of the model, so received model is validated.

Table 7. Indicators of the measuring model practice of self-control variable

	Indicator title	Amount	Desirable amplitude	Result
Kay Squared	$\frac{x^2}{df}$	2/949	$0 < \frac{x^2}{df} < 5$	Model validation
Average error root of approximation squares	RMSEA	0/071	RMSEA < 0.05	Model validation
Average root of remained squares	RMR	0/016	**RMR ≥ 0**	Model validation
Goodness of practice	GFI	0/99	GFI > 0. 9	Model validation
Goodness indicator of corrected practice	AGFI	0/96	AGFI > 0.85	Model validation
Normed practice indicator (Bent leer- Bont)	NFI	0/99	NFI > 0.90	Model validation
Accommodation practice indicator	CFI	0/99	CFI > 0. 90	Model validation
Increasing practice indicator	IFI	0/99	IFI > 0. 90	Model validation

Source: Author

χ^2/df : In making model of structural equations, Chi squre is a traditional method to evaluate total fitness of model. Based on the statistic, the zero hypotheses is that model has totally fitness with statistic

population data. Statistically, when χ^2/df is meaningful, this hypothesis will be rejected and represents

that the considered model hasn`t own total fitness and will be rejected. To reject zero hypotheses χ^2/df is used, too. While this ratio amount is less than 5, zero hypothesis will be accepted, in the otherwise model

has fitted with statistic society data. While amount of χ^2/df calculated of service quality structures is zero, it will represent zero hypothesis validity of zero hypothesis and model total practice with statistic population of data, (it should be mentioned that this model is saturation kind). GFI and AGFI: are two fitness indicators and GFI is adjusted fitness indicator and AGFI is absolute fit. Amounts of these indicators should be between zero and 1. Bigger amount than 0/9 represents model acceptable fitness.

Dimensional fitness measurement which will appear in program output, it compares relative fitness indicators and represents that how much model fitness is more suitable than basic line model, in fact independent model. Abnormal fitness indicator (NFI) is in this group, if it amount is close to 1, it will represent good fitness of model. Another indicator of this group is CFI and its amount should be between zero and 1 while NFI can be bigger than 1. If amount of CFI is close to 1, it will represent good fitness of model. Calculated amounts indicate validity of model fitness based on these three indicators.

Measurement Model of Virtue Variable

In this part factor structure of virtue variable will be investigated. To measure this variable, four locutions have been used, so SPSS 21 software has been used for the exploratory factor analysis on all measures. Mentioned factor analysis has been implemented by use of likelihood optimized method, variance method and special amounts bigger than 1. Table 8 represents received conclusions of KMO-Bartlett Test. Conclusions indicate that performance of factor analysis on data is permitted.

Table 8. Conclusions of KMO-Bartlett Test of virtue

Efficiency criterion of KMO sampling		0/668
Test of Bartlett	Chi-Square	1384/895
	Freedom degree	6
	Meaningfulness level	0/000

Source: Author

In the next level, recognition the numbers of latent factors will be done. In table 9 determination of latent factor numbers has been exhibited in term of special amounts. So, suggesting factoring structure will have one factor.

Table 9. Total variance explained of latent factor of virtue variable

	Total Variance Explained					
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.701	67.513	67.513	2.701	67.513	67.513
2	.780	19.488	87.001			
3	.495	12.366	99.368			
4	.025	.632	100.000			
Extraction Method: Principal Component Analysis.						

Source: Author

Table 10. Reproduce correlation matrix based on factoring loads of virtue variable

Questions	ID (Identification)	Factor loading
5- Accountants consider religious believes in the solution of moral subjects.	Q5	0/774
6- Individual moral believes are solutions for complex subjects.	Q6	0/621
7- accounting moral educations believe religious doctrine and orders	Q7	0/928
8- In the mind of accountants, attitude toward religious	Q8	0/924

Questions	ID Factor loading (Identification)	
approach is more than attitude toward moral approaches.		

Source: Author

After detection of latent virtue, be sure the likelihood relationship between these factors and observable variables are test. Diagram chart 3 represents measuring model of virtue latent variable in the condition of standard estimation.
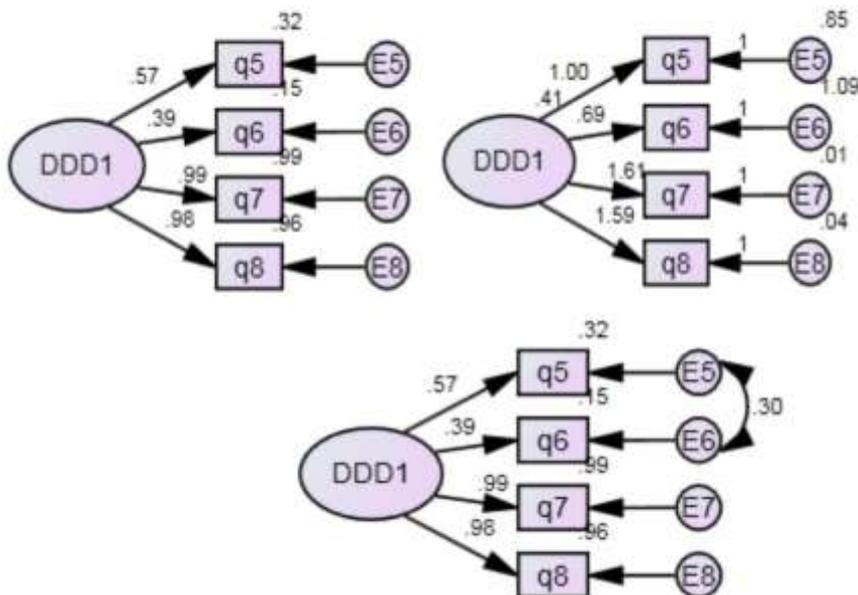

Chart 3. Measuring model of virtue variable in standard and substandard estimation conditions

In this research to investigate suitable model, the relative indicators to the exhibited model fitness have been used in table 11. Estimation conclusions (model practice) represent the suitability of the model, so received model is validated.

Table 11. Indicators of the measuring model practice of virtue variable

	Indicator title	amount	Desirable amplitude	Result
Chi-square	$\frac{x^2}{df}$	0/007	$0 < \frac{x^2}{df} < 5$	Model validated
Average error root of approximation squares	RMSEA	0/000	RMSEA < 0.05	Model validated
Average root of remained squares	RMR	0/000	**RMR ≥ 0**	Model validated
Goodness of practice	GFI	0/100	GFI > 0. 9	Model validated
Goodness indicator of corrected practice	AGFI	1	AGFI > 0.85	Model validated
Normed practice indicator (Bent leer-Bont)	NFI	1	NFI > 0.90	Model validated
Accommodation practice indicator	CFI	1	CFI > 0. 90	Model validated
Increasing practice indicator	IFI	1	IFI > 0. 90	Model validated

Source: Author

As indicated in the above table Chi squared amount for each of variable has been desirable in amplitude limit that is acceptable. Average error root amount of approximation squared (RMSEA) for variable of virtue has been 0/080 while amount lower than 0.05 is more suitable. If amount of (RMSEA) indicator is closer to zero, sample will have better fitness. Amount of average roof of remained squares (RMR) should be equal or more than zero and in the investigation this function has happened, so indicator has good fitness. Indicators of goodness fitness, indicator of adjusted fitness goodness, indicator of normed fitness, indicator comparing fitness and indicator of increasing fitness have between 0/90 and 1. If the amounts of mentioned indicators are closer to 1, sample will have better fitness. Amounts of mentioned indicators are more than 0/90, so fitness is suitable.

Based on the received conclusions and their comparisons with accepted amplitude, it can be asserted that all suitability indicators of the above model have been situated in the acceptable amplitude, so coordination of gathered data with the model is desirable. Finally, suitability of final model of moral individual factors of both variables is validated.
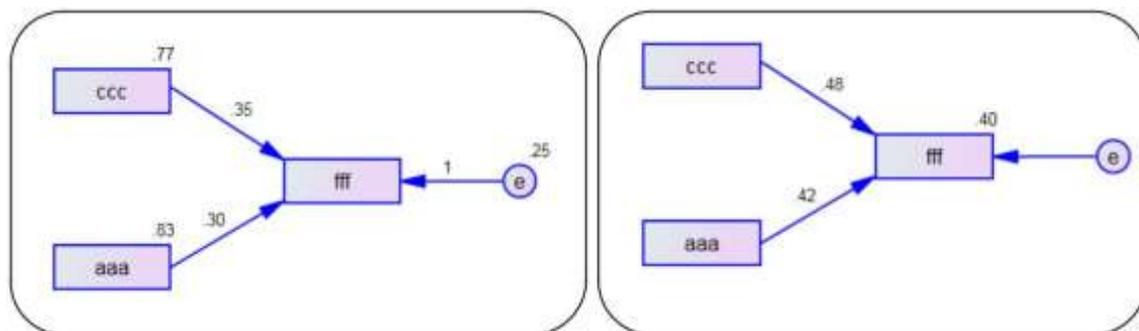
RESEARCH STRUCTURAL MODEL

Chart 6: Research structural model with standard and substandard coefficients

Fitness Indicators

Fitness indicators of research total model have been shown in table 12 as follow:

Table 12. Fitness indicators of total model

The model	X2/df	RMSEA	NFI	CFI	IFI	RFI	PRATIO	PNFI	PCFI
Accepted amount	<2	<0/05	>0/9	>0/9	>0/9	>0/9	>0/50	>0/50	>0/50
Calculated amounts	217/993	0/753	0/568	0/567	0/569	0/297	0/333	0/189	0/189

Source: Author

Chi-square structural model ratio to freedom degree is 217/99 and is unsuitable. Indicators of comparing fitness are all lower than 90 percent and are unsuitable. RMSEA indicator is higher than 5 percent and is unsuitable. Thrifty indicators (economical) are all lower than 50 percent and are unsuitable, so there is a need to reformation in the model. By use of Amos reform indicators, the model will be reformed and there will be relationships between errors with the highest modification index.

Research Modification Model

Chart 7 and table 13 will show research modification model with substandard coefficient and research modification model with standard coefficient and total model estimations sequentially.
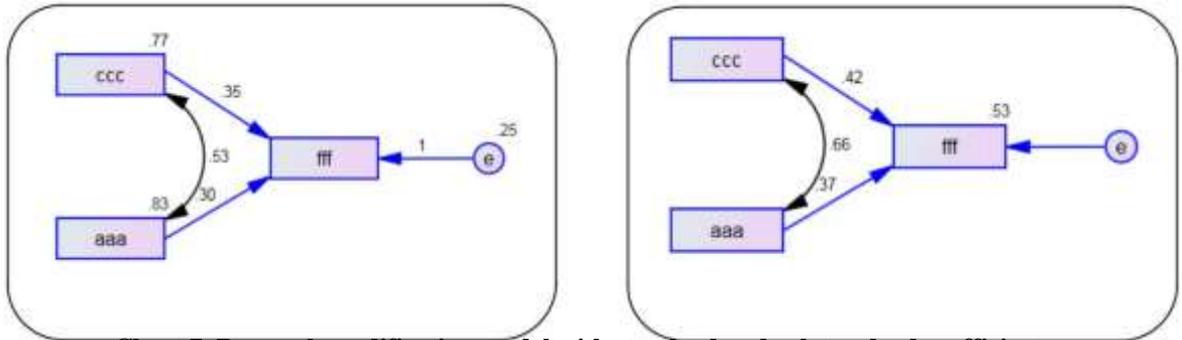
Chart 7. Research modification model with standard and substandard coefficients

Table13: Estimations of total model

			Estimate	S.E.	C.R.	P	Label
fff	<---	ccc	.353	.039	9.090	***	.425
fff	<---	aaa	.297	.037	7.944	***	.371

Source: Author

As indicated in table 13, independent variables (self-control and virtue) have 37 and 42 percent effects on development of moral behavior in accounting sequentially.

5. DISCUSSION

The research aim is importance specification and necessity of effect of moral individual factors (self-controlling- virtue) on moral behavior development in accounting to suggest effective policies and guidelines to increase attention to this subject based on analysis of the received conclusions. At first, spearman correlation has been calculated for relationship between research variables. Then, linear regression analysis has been done to determine more clear relationship and the effect of each variable.

Investigations of conclusions for the first question indicate that there is positive meaningful relationship between virtue and development of accounting professional behavior. Previous studies indicate to the similar conclusions. Conclusions of the research by Mahdavi & Ali Poor (2009) indicated that virtue role was very important in financial mangers` decisions. Research findings by Keller & et.al. (2007), represented religious bias would cause differences in standards. Moreover, research findings by Hasan GholiPour and et.al. (2010) showed that religious view had effect on Students` moral views. MacGuire `s findings (2012), indicated that virtue was a mechanism to decrease costs of corporation different views while other outside supervisions were less.

Investigations of conclusions for the second question indicate that there is positive meaningful relationship between self-controlling and development of accounting professional behavior. Previous studies indicate to the similar conclusions. Research done by Salman Panah (2012) indicated that professional behavior legislation of Iran certified public accountants was a guideline to specify and solve moral subjects. Research by Hasas Yeganeh & Maghsoudi (2010) represented that achievements of each profession were provisions of each profession and its performance by members. Unfortunately, accounting profession involvers couldn`t provide users` expectations of profession internal and external uses of accounting services. This research is in contrast with Velayutham`s research (2003), which represented that professional behavior legislation from emphasis on moral responsibility tended toward emphasis on specialty professional characteristics of accounting. Finally, Modares & Rafiei (2007), in their research showed that while people trusted auditors relatively, but they knew supervisions of responsible institutes were insufficient and non-transparence.

6. CONCLUSIONS

In the research, the researchers tried to investigate the effect of moral individual factors such as; self-controlling and virtue on moral behavior development in accounting profession and tried to create essential base for moral behavior development. Based on the research results and acceptance of effect of the factors, it is expected that professional institutes try to empower accountants` individual factors and increase moral behavior development in accounting profession. Answerers believe that accountants will consider religious believes in their decisions. They know moral believes as the solutions for complicated subjects and problems and accountants who have religious approaches will believe on religious doctrine and orders. Moreover, answerers know that self-controlling is the most negative effect of financial scandals. They assert that self-controlling politics are not only against public beneficiaries but also they are laziness and hypothyroidism (less working) in accounting profession. It is suggested that different institutes, organizations and corporations should consider professional knowledge of demanders and their religious bases while they want to employ individuals in their financial expertise. Moreover, they should consider professional behavior to exhibit suitable programs for accountants` educations by their associations.

RESEARCH SUGGESTIONS

Recognition of effective factors on professional behavior changes by use of educational instruments.

Research to be done to exhibit moral education before entering to a profession by accounting professional associations.

LIMITATIONS

In the researches that questionnaires are used, answers may not be correlated with real performance and they may change in real situations of performance method of each individual. So, extensions should be done cautiously. And no individual factors have been considered in the research as; experience, sexuality, culture, age, geographical regions, and kind of educational degrees. These factors can have random effect on the research conclusions.

REFERENCES

AbasZadeh, M.R., MoeiniZadeh, M. (2013), "The Effect of Difference in Cultural Values on Understanding the Accounting Principles of Students in Accounting: A Comparative Study in Iran and the United Kingdom", 11th Iranian National Accounting Conference, Mashhad, Ferdowsi University of Mashhad, (In Persian).

Arbab Solimani, A. (2014), professional code of ethics for professional accountants, International Federation of Accountants, Center for Education and Research, Accounting and Auditing, (In Persian).

Armstrong, M. B. Katz, J. E. & Owsen, D. (2003). Ethics education in accounting: Moving toward ethical motivation and ethical behavior. Journal of Accounting Education, 21(1), 1-16

Askary, S., & Olynyk, M. (2006). Public interest, ethics, and the balanced scorecard: Implications for the accounting profession. Australian accounting review, 16(38), 51-58

Bampton, R., & Cowton, C. J. (2013). Taking stock of accounting ethics scholarship: A review of the journal literature. Journal of business ethics, 114(3), 549-563

Bayat, G.H. (2008), "Professional moral in accounting and auditing", Accountant Magazine, N. 204, p.p. 54-61(In Persian).

Davenport, L., & Dellaportas, S. (2009). Interpreting the public interest: A survey of professional accountants. Australian accounting review, 19(1), 11-23

Dellaportas, S., & Davenport, L. (2008). Reflections on the public interest in accounting. Critical perspectives on accounting, 19(7), 1080-1098

Esalmi, S.H. (2007), "The Golden Rule in Hadith and Ethics," The Journal of Hadith Sciences, Volume 12, Issue 45-46, pp. 5-33, (In Persian).

Everett, J., Green, D., & Neu, D. (2005). Independence, objectivity and the Canadian CA profession. Critical Perspectives on Accounting, 16(4), 415-440

Farsatkhah M. (2006), Scientific Ethics of Improvement of Higher Education, Position and Mechanisms of "Scientific Professional Ethics" in guaranteeing the quality of higher education in Iran, Journal of Ethics in Science and Technology, No. 1, pp. 13-28, (In Persian).

GharaMaleki, A. (2016), "Professional Ethics", Tehran, Majnoon Publication, (In Persian).

Hajazi, R., Mesri Poor, M. (2012), "The Relationship between Professional Accounting Ethics with Academic Education", 10th National Accounting Conference of Iran, Tehran, Alzahra University, (In Persian).

Hasan Gholipour, T., Dehghan Nayeri, M., Mir Mahdavi, S.M. (2011), Investigating Factors Affecting the Ethical Attitudes of Management Students, Journal of Ethics in Science and Technology, Vol. 6, No. 4, pp. 63-74, (In Persian).

Hasas Yeganeh, Y., Kazempour, E. (2013), The relationship between the skill level of auditors with sensitivity and ethical judgment, Experimental Accounting Research, Third Year, No. 10, pp. 53-70, (In Persian).

Hasas Yeganeh, Y., Khadem, H, Marvian Hosseini, Z. (2016), Ethical Growth or the Occupational Behavior: The Difference Between Auditor's Subjectivity and Practice, Journal of Ethics in Science and Technology, Year 11, No. 2, p.p. 113-122, (In Persian).

Hasas Yeganeh, Y., Maghsoudi, O. (2011), Ethical Values in the Professional Judgment of the Auditor, Journal of Ethics in Science and Technology, Year 6, No. 1, pp.62-73, (In Persian).

Hilary, G., & Lennox, C. (2005). The credibility of self-regulation: Evidence from the accounting profession's peer review program. Journal of accounting and economics, 40(1), 211-229

Hossienzadeh, A. (2012), The Effect of Ethical Profitability Approach on Management and Organizational Knowledge, Journal Islam and Management, No. 2, pp. 105-124, (In Persian).

Jabari, H., Rahmani, H. (2010), Measuring ethical considerations in accounting, Journal of Ethics in Science and Technology No. 3 & 4, p.p. 47-56, (In Persian).

Keller, A. C., Smith, K. T., & Smith, L. M. (2007). Do gender, educational level, religiosity, and work experience affect the ethical decision-making of US accountants? Critical Perspectives on Accounting, 18(3), 299-314

Khozin, A., Mohammadi, J. (2015), A Comparative Study of the Concepts Included in the Accountants Professional Codes of Ethics in the View of Suppliers and Users of Financial Reports, Audit Knowledge, Vol. 15, No. 60, pp. 139-160, (In Persian).

Kisielnicki-Hubler, M. (2008). Multiple Methods Study of Ethics Education and Its Role within the Undergraduate Accounting Curriculum. ProQuest

Lari Dasht Bayaz, M., Khadem, H. Lari Dasht Beyaz, A. (2013), "Accountants` Moral Behavior– Differences Between Ideas and Practice," Eleventh National Accounting Conference of Iran, (In Persian).

Laughlin, C. P. (2009). Rebuilding the Foundation: Reestablishing Ethics in the Accounting Profession

Lere, J. C., & Gaumnitz, B. R. (2003). The impact of codes of ethics on decision making: Some insights from information economics. Journal of Business Ethics, 48(4), 365-379

Low, M., Davey, H., & Hooper, K. (2008). Accounting scandals, ethical dilemmas and educational challenges. Critical Perspectives on Accounting, 19(2), 222-254

Mabry, L. (1999). Circumstantial ethics. American Journal of Evaluation, 20(2), 199-212

Mahdavi, G.H., Ali Poor, S. (2090), "Approaches to the decision-making ethics of corporate finance managers", Accounting Knowledge, Year One, Vol. 2, pp. 33-53, (In Persian).

McGuire, S. T., Omer, T. C., & Sharp, N. Y. (2011). The impact of religion on financial reporting irregularities. The Accounting Review, 87(2), 645-673

Modares, A., Rafiei, A. (2008), "A Review of the General View on the Observance of the Professional Practices by Auditors and its Implementing Guarantees in Iran", Audit Knowledge, No. 25 and 26, pp. 4-20, (In Persian).

Moore, D. A., Tetlock, P. E., Tanlu, L., & Bazerman, M. H. (2006). Conflicts of interest and the case of auditor independence: Moral seduction and strategic issue cycling. Academy of Management Review, 31(1), 10-29

Rafiei, A. (2007), "The Impact of Gender, Degree, Religiosity and Work Experience on Accountants Ethical Decision Making in Iran", Master's Theses, Tehran University, (In Persian).

Rest, J. R. (1986). Moral development: Advances in research and theory. New York: Praeger

Rouyaei, R.A., Rahnamaye Roodpooshti, F., Jabari, H. (2009), ""The Impact of Culture on the Ethical Inference of Accounting Students," Journal of Cultural Management, Third Year, No. 5, pp. 85-101, (In Persian).

Saghafi, A., Rahamani, H., Rafiei, A. (2010), Accounting moral education in B.A duration, Journal of Ethics in Science and Technology, Vol. 1 & 2, pp. 7-18, (In Persian).

Salamn Panah, N., Talibnia, G. (2013), "Factors Affecting the Ethical Judgments of Iranian Official Accountants", Journal of Management Accounting, Vol. 6, No. 18, pp. 87-96, (In Persian).

Salehi, J., Sadeghi Rad, E. (2011), "Islamic teachings: the gateway to social prevention of crime", Monthly Cultural Engineering, No. 61, p.p. 10-20, (In Persian).

Salehi, T. (2016), "The Relationship between the Professional Ethics of the Auditor and the Audit Quality", Journal of Ethics in Science and Technology, 11 (2), pp. 113-122, (In Persian).

Sarlak, N. (2008), "Accounting Ethics", Journal of Ethics in Science and Technology, Third Year, No. 1 & 2, pp. 71-83, (In Persian).

Sepasi, S., Hasani, H. (2016) "The Relationship Between Religious Beliefs of Managers and Profit Management", Journal of Value and Behavioral Accounting, First Year, No. 2, pp. 17-40, (In Persian).

Setayesh, M.H., Maher M.H. and Aboul Hallaj (2012), "Investigating the Impact of Individual and Social Structures on Understanding the Principles of Financial and Budget Managers in Iran's Medical and Health Universities", Journal of Health Accounting, Vol. 1, No. 1 , Pages 17-32., (In Persian).

Siu, N. Y., Dickinson, J. R., & Lee, B. Y. (2000). Ethical evaluations of business activities and personal religiousness. Teaching Business Ethics, 4(3), 239-256

Stephens, B., & Smith, D. (2009). Accounting ethics and educational interventions: A combination of both the discrete and pervasive method. Journal of the Academy of Business Education, 10 (proceedings)

Sullivan, G. R. (2004). Enhancing Public Trust in the Accounting Profession Using Professional Judgment Rather Than Personal Judgment in Resolving Accounting Ethics Dilemmas (Doctoral dissertation, Regent University)

Thorne, L., & Hartwick, J. (2001). The directional effects of discussion on auditors' moral reasoning. Contemporary Accounting Research, 18(2), 337

Velayutham, S. (2003). The Accounting Profession's code of Ethics: is it a code of Ethics or a Code of Quality Assurance? Critical Perspectives on Accounting, 14(4), 483-503

Yi-Hui.Ho. (2007). Undergraduate accounting students' perceptions of accounting ethics: A cross-cultural comparative study. A dissertation submitted to the faculty of the graduate school of the University of Minnesota

Yunanda, R. A. (2011). The Contribution of Islamic Ethics towards Ethical Accounting Practices. Issues in Social & Environmental Accounting, 5

AN INVESTIGATION ON THE EFFECT OF POLITICAL RELATIONSHIPS AND ACTIVITIES ON THE TAX AVOIDANCE IN TEHRAN STOCK EXCHANGE LISTED FIRMS

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Abstract

The aim of this paper is to investigate the relationship between political relations and activities within the company with its tax avoidance. In order to determine the political relations within the company, we have focused on 2 separated items: first the board members who have a relationship with the government, parliament or another related organization or second the existence of a major governmental or semi-governmental shareholder whom owns at least ten percent of the voting shares. To calculate this variable, the explanatory notes of the financial statements along with the board's annual reports were considered, so that the CEO, board members, major shareholders and the related parties could be detected. The tax avoidance measure was calculated by using the absolute value of the difference between accounting profit and the taxable profit. The sample of the current study includes 52 companies for a 5-year period from 2009 to 2014. In order to test the hypothesis a generalized least squares method (GLS) were utilized. The results indicate that there is a negative significant relation between the political relationships and activities within the company with the tax avoidance. In other words, when the level of political relationships and activities increases in the company, the level of tax avoidance will decrease and vice versa.

JEL classification: H20

Keywords: *Political relationships, Tax avoidance, Tax*

1. INTRODUCTION

In most countries, the **government's** major income arises from the received tax. It should be noted that the share of tax income is different in various countries but the main reason of the variance between the received tax and the predicted level is the tax avoidance. Therefore, the tax avoidance is one of the most preferable topics within the academics where they can study the reasons of tax avoidance and its probable impacts. In a theoretical overview, the tax avoidance is the effort of reducing the paid tax (Hanlon et al, 2010). The tax avoidance is a value creating activity from the point of view of investors (Desai and Dharmapala, 2009). The act of tax evasion is a legal violation. In contrast the use of legal gaps for reducing the tax amount is called the tax avoidance. There are no specific regulations for controlling the tax avoidance, since it does not seem to be an illegal operation (Mohammad Jam, 2000). Therefore, on the basis of the above rational, the case of tax avoidance might be common among the companies so that any further reasoning of the affecting items on the tax avoidance.

In most countries, there is a difference between the financial reporting regulations and the tax reporting ones. This allows the managers to report various levels of incomes. The tax planning has been affecting the **firm's financial reporting transparency. The tax avoidance policies lead to the financial reporting** transparency (Frank et al, 2009). Various studies indicate that the accounting standards cannot ensure the financial statements quality. The financial statements might be affected by other items rather than the accounting standards**. One of the key points is the political influence of the firm's shareholders and** managers (Aningsejati, 2009; Faccio, 2006; Chen et al, 2012). The political influence not only has a **significant effect on the firm's financial position but it motivated the managers on the preparation of the**

financial statements. This may result in a striking difference on **the quality of a political influenced firm's** financial statements comparing to a nonpolitical one. Chen et al. (2011) indicate that in the existence of a political influence, the firm will have a new aspect of income. Therefore, the current study is going to find **out whether firm's political relations will lead to the tax avoidance o**r not?

2. THEORETICAL FOUNDATION

2.1. TAX AVOIDANCE

The tax avoidance is a definite abuse of a legal process by finding evasion path through which the firm can reduce the amount of its payable tax (Ziayi and Bigdeli, 2004). Although there is no absolute definition for

the tax avoidance in the accounting literature, but it seems that it is basically a permanent financial **strategy containing legal activities like directing firm's resources in tax free activities like investing in** bond or **bringing firm's tran**saction in a specific period of time to take advantage of tax regulations with

respect to some accounting procedures that can cause tax saving for the firm. The tax avoidance activities will prevent the transfer of cash from shareholders to the government **which increases firm's value in total.**
It should be noted that this value increase may not occur due to the existence of opportunistic managers whom may take advantage of tax avoidance for their vested interests (Rezayi, Ghanay Nejad, 2012).

As may have been mentioned before, there is a substantive difference between tax avoidance and tax evasion. The tax evasion is illegal which is being done deliberately. On the basis of tax law there are predicted claw back provisions, if the tax evasion is established. In contrast there is no ruled or regulations for the prohibition of tax avoidance, since all of the activities being done in vain of tax avoidance are legal and cannot be denounced by the tax jurisdictions.

Firms which their ownership is separated from their management are more likely to be attracted in tax avoidance. In contrast, the individuals are less likely to be attracted in tax avoidance or even tax evasion

since they are more risk averter with more internal motivation for considering their social responsibility (Allingham and Sandmo, 1972). **The firm's shareholders are generally** expecting their managers to fulfill their vested interests and try to avoid tax as long as the additional interests of the probable reduction of the

tax payables are more than its additional expenses. Besides the tax avoidance might be reflecting the **agency problem which may lead to tax decisions in line with the managers' vested interests.** Therefore, the **firm's shareholders main challenge is to provide controlling procedures** in order to reduce the agency costs (Hensen and Meckliny, 1976).

Desai et al. (2007) believe that managers with vested interests **will make the firm's structure more complex.**

They use the firm's resources in line with their vested interests by making transactions which

reduce tax. They also believe that the existence of proper tax assessors will increase the supervision on managers **and also may reduce the misuse of firm's internal resources. The**y also indicate that the level of tax avoidance can be affected **by the firm's corporate governance. The lower level of corporate** governance may increase the level of tax avoidance. Graham (2006) indicates that tax avoidance will reduce the final advantages of the tax shield of interests and might have effects on the capital structures decisions. On the other hand, if the tax avoidance is detected by the tax assessors then the firm should

have to pay extra amount of tax with penalties. This may result in the reduction of the cash inflows and **shareholder's** wealth.

The tax avoidance is a process in which firms try to reduce the amount of their tax payables. Tax payment reduces the annual profit along with the residual cash for other stakeholders like the shareholders. On the

basis of this rational, Dyreng et al. (2007) have defined the tax avoidance as the ability of paying less **amount of income tax comparing to the firm's income before tax. There is a theory that the firm is** preventing its special information to be published by the act of tax avoidance so that the determination of

the tax avoidance could be more difficult for the tax assessors. The findings of Chen et al. (2011) and Kim et al. (2010) indicate that **the tax avoidance has a negative effect on the firm's information environment.**

Besides the in order to avoid from paying tax, the managers have to use a complex structure which **manipulates the firm's performance norms (Desai and Dharmapala, 2009).**

If the firm is suffering from the agency problems, the managers can mislead the firm's resources in long-term period as a result of the negative effects of tax avoidance (Kim et al. 2010). This shows that the tax avoidance might injure the **shareholders'** interests. Desai and Dharmapala (2006) indicate that opportunistic managers can misuse the tax avoidance in line of their vested interests and to cause stress between shareholders and themselves.

Another opinion for the tax avoidance is that apart from separating the firms control from its ownership, if the owners could provide necessary motivations for their managers to take effective tax decisions, they **can increase their firm's value along with their own wealth (Hanlone et al. 2010).**

2.2. POLITICAL RELATIONS

The term relation based capitalism system is used to define the close relationship between government and business units. The business units tend to appoint close relation with the government since it has various advantages like more market access, tax discounts, more credit, more governmental loans, more profitable contracts and lower customs tariffs. Besides these business units may share their interests with the **government. This atmosphere is called a "relation based economy".**

In these kinds of economies, the firms' political relations are one of the most important sources of value. These firms can simply access to the capital sources and as a result their financial reporting quality will reduce (Chen et al. 2012; Aning Sejati, 2009).

Moses (1987) believes that the firms' accountability increase as they get bigger. Besides, bigger firms are more exposed to higher levels of investigations. On the other hand, as these firms are the operators of **government's policies, will be more supp**orted by the government itself. These supports are like taking advantages of tax discounts, more credit, more governmental loans, more profitable contracts and lower customs tariffs. Therefore, these relations are important for these firms as long as they are planning for more development. In addition, appointing these relations with firms can be used as a controlling instrument by the government (Rezaei and Rafiee Nia, 2014).

The political relations have specific effects on both the financial position of the business unit and the **managers' motivation of the financial reporting. This condition may result in a significant difference** between the financial reporting qualities of the firms with political relations comparing to non-political ones. This may occur since the political relation firms will tolerate less expense from the government (Chen et al. 2011). Besides, the persistence of the firm-government relation is generally along with the competitive advantages. The aim of some managers from appointing these relations is to eliminate the financial limitations with low expense (Bobekry et al. 2012).

The firm's management should determine the financing expenses and the effects of financing on the firm's return and risk, in order to determine the appropriate financial sources. Then the investors will take their **decision individually (Rezaie and Veisi Hesar, 2013). Since the firms' with** political relations can simply access to the financial sources, it can be concluded that the investors can be affected.

3. THEORETICAL BACKGROUND AND LITERATURE REVIEW

3.1. FOREIGN LITERATURE

Bobekry et al. (2012) studied the effect of the political relations **on the firm's performance and financing decisions. Their results indicated that firms' with political relations have more access to the financial** sources. These firms were trying to improve their profitability by their political relations. So that, there is a high correlation between political relations with both change in financial leverage and the operational performance.

Chen et al. (2012) found that the quality of reported profit for the firms with political relations is less than those without such relations; but the stock market has a positive response on the firms with political relations since their cost of debt were less than others.

Dhaliwal et al. (2011) conducted a study entitled as the tax avoidance and the level of cash holding. Their results suggest that there is a negative relationship between tax avoidance and the level of cash holdings.

They also found that this negative relationship is weaker for the firms with higher level of corporate governance. Their results also indicate that the investors' cash holdings evaluation was less for the firms with tax avoidance activity.

Atwood et al. (2010) examined the relationship between tax avoidance, profit persistency and its relation with the future cash flows. They used the difference of accounting profit from the taxable profit as the tax avoidance measure. They showed that when the difference of the accounting tax and the taxable profit is high, the profit persistency is less which has a weaker relationship with future cash flows. They also indicate that the tax avoidance reduces the quality of profit.

Kim et al. (2010) were studied the relationship between the tax avoidance and the stock price crash risk. Their findings indicate that there is a positive relationship between tax avoidance and stock price crash risk. They also added that the mentioned relationship is weaker for the firm with higher level of corporate governance.

Bobekry et al. (2010) studied the relationship between the political relations with the cost of capital. Their results indicated that the cost of capital is less for the firms with political relations. Therefore, the investors expect lower cost of capital too. This also showed that the firms with political relations have lower level of risks. Their results indicated that the interests of having a firm with political relation are more than its loss.

Wilson (2009) conducted a study on a prediction model of tax avoidance with respect to the specific characteristic of the firm. They result indicated that the difference of accounting profit from income before tax of the firms with political relations is higher. These firms provided bold financial reporting along with reporting positive and abnormal returns.

Frank et al. (2009) found a positive relation between fraudulent financial reporting with tax avoidance. They have focused on the constant optional differences of tax in order to detect the operations which provides tax shield for the payable tax. They found that the constant differences are positively related to the creation of tax shield for payable tax.

Faccio (2007) have worked on three advantages of political relations as credit sources, tax discounts and market power. His results are as follows:

1. Their level of leverage is higher due to the simple access to the credit sources.

2. Their effective tax rate is less than those firms without political relations due to the tax discounts.

3. Their market share is more than those firms without political relations.

3.2. DOMESTIC LITERATURE

Rezaei and Veysi Hesar (2014) examined the effect of the political relations on the relationship between ownership concentration and the financial reporting quality and the cost of common stock. Their sample includes 95 listed firms for a 10-year period. Their results indicated that the profit quality is higher for the firms with high ownership concentration. In contrast the profit quality of the high ownership concentration firms with political relations was low. Besides the cost of common stock for the firms with higher ownership concentration is low and for the firms with political relation is vice versa.

Rezaei and Rafiee Nia (2014) investigated the relation between the financial leverage with the board composition of firms with political relations. They founded that there is no relation between the financial leverage and the board composition.

Rezaei and Saadati (2014) examined the relation between firm's political relations and the level of cash holdings. Their result indicated that there is a negative relation between the firm's political relations and the level of cash holdings. They also founded that this relationship can be stronger in case of any increase in agency costs.

4. RESEARCH METHOD

4.1. RESEARCH HYPOTHESIS

Based on the theoretical foundation which has been described above the research hypothesis is as follows:

Political relation effects on the tax avoidance.

4.2. SAMPLE

To collect the sample, the systematic elimination method is used. Data used in this article are collected **from Tehran stock listed companies' databases includ**ing financial statement and its notes for a 5 year period from year 2009 to 2013. The sample should have the following terms:

- Their fiscal year should end in March every year

- The Companies did not change their fiscal year end.

- Companies should have had a maximum of three-month trading pause

- Financial institutions, investment firms and banks should be excluded from the sample, due to their different nature

- The information of the main research variables should have been available in the sample companies for the above period.

4.3. DATA GATHERING METHOD

In order to gather all needed information the following 2 methods were used:

- Desk Study Method: for the theoretical foundation, various related books and papers along with the information contents within the websites were collected and all have been studied.

- **Documentary Method: Data used in this article are collected from Tehran stock listed companies'** databases including financial statement and its notes, Stock Exchange Website and a financial software (Named Rahavard Novin).

4.4. DATA ANALYSIS

In order to examine the hypothesis a multivariate regression models are utilized. In order to test the models, both Microsoft Excel and Stata software is used.

4.5. RESEARCH MODEL AND VARIABLES

The following multivariate model is used to test the hypothesis:

$$TA_{it} = \beta_0 + \beta_1 POEV_{it} + \beta_2 ROI_{it} + \beta_3 SIZE_{it} + \beta_4 DEBT_{it} + \varepsilon_{it}$$

Where:

TA_{it}: Tax avoidance for firm i and year t.

$POEV_{it}$: Political relations for firm i and year t.

ROI_{it}**: Firm's profitability for firm i and year t.**

$SIZE_{it}$**: Firm's size for firm i** and year t.

$DEBT_{it}$: Financial leverage for firm i and year t.

ε_{it}**: Model's Error.**

4.5.1. Dependant variable

The dependant variable is the tax avoidance (TA). In this study, the measure of Desai and Dharmapala (2006) is used as follows:

The absolute value of the difference between accounting profit and before tax income which are all scaled **by the beginning of the periods' total assets. The higher the amount of this calculation means that the tax** avoidance was high. It should be noted that t**he taxable income has been calculated by dividing the firm's** tax expenses to the official rate which is 22.5%.

4.5.2. Independent variable

POEV: Political relations:

In order to calculate the political relations, we have focused on 2 separated items: first the board members who have a relationship with the government, parliament or another related organization or second the existence of a major governmental or semi-governmental shareholder whom owns at least ten percent of

the voting shares. To calculate this variable, the explanatory notes of the financial statements along with **the board's annual reports were considered, so that the CEO, board members, major shareholders and the** related parties could be detected. This measure has been used by various researchers like Johnson and Meaton (2003), Faccio (2006), Aning Sejati (2009) and Chen et al. (2012). If the firm has a political manager or shareholder, we put the value of 1 and zero otherwise.

4.5.3. Control variables

ROI: Profitability

We have used the firm**'s return on assets as a measure of its profitability which is calculated by dividing** the before tax income to the total assets.

SIZE:

This is calculated by using the natural logarithms of firm's total assets.

DEBIT:

This is calculated by dividing firm's total liabilities to its total assets.

5. RESULTS

5.1. DESCRIPTIVE STATISTICS

Descriptive statistics are a set of measures that help the researcher to have an overview of the gathered information. The following table shows the descriptive statistics of the research variables:

Table 1. Descriptive statistics of the research variables

Variable	Sym.	Mean	Median	Min.	Max.	Std dev	Skewness	Kurtosis
Tax avoidance	TA	0.223	0.089	0	2.691	0.405	3.589	17.38
Political relations	POEV	0.5	0.5	0	1	0.500	0	1

Variable	Sym.	Mean	Median	Min.	Max.	Std dev	Skewness	Kurtosis
Profitability	ROI	0.375	0.228	-0.141	2.653	0.420	2.36	9.53
Size	Size	13.21	13.14	10.059	17.963	1.29	0.802	4.63
Leverage	DEBIT	0.006	0	0	0.002	0.002	4.75	27.01

Source: Author

The most important central indicator is the mean of variables which shows the balance of the distribution of variables. As it is illustrated from the above table, the mean for the tax avoidance variable is 0.223 which means that most of (TA) data are gathered around this point. Besides the median of the variable SIZE is 13.14 which means that half of (SIZE) data are above this point and the rest are below it. We can understand the normality of our data by comparing the amount of mean and median from the above table. If the amount of mean and median of the data were close to each other, we can conclude that the data gathered for the variables are normal. One of the main measures for determining any dispersion of data is the standard deviation comparing to the mean of data. As it is obvious from the above table, the variables

SIZE and DEBIT have the maximum and minimum of dispersion respectively. The distribution **asymmetry can be found by looking to the amount of data's skewness.** If the skewness amount is zero, then the distribution of data is symmetric. If the coefficient is positive, then the skewness is to the right and vice versa. For instance, the amount of skewness for the variable ROI is 2.36 which means that its skewness is to the right. The Leverage has the most and the political relation has the least deviation from the normal distribution. The kurtosis of the diffusion curve from the standard normal curve is called kurtosis. If the kurtosis is around 0, the diffusion curve is in normal position. If the amount is positive, then the curve is eminence. If the amount is negative, then the curve is dung. Here all the kurtosis amounts are positive and the leverage has to most and the political relation has the least eminence comparing to the normal distribution curve.

5.2. F-LYMER TEST

Lymer's F-test results showed that multivariate regression technique of cross-sectional data (data panel) **should be used to the research model. Since the probability of the Lymer's F**-statistics is less than 0.05, we should use the panel data approach. The results are as follows:

Table 2. F-Lymer test

Test	F-Statistics	Prob.	Result
F-Lymer	5.81	0.00	Panel data

Source: Author

5.3. HAUSMAN TEST

On the other hand, Hausman test is used to choose the methods of random and fixed effect to estimate regression model in using panel data. The results showed that fixed effects panel data methods should be used. The results are as follows:

Table 3. Hausman test

Test	F-Statistics	Prob.	Result
Hausman	20.62	0.00	Fixed effects

Source: Author

5.4. THE LR TEST

Using the OLS (Ordinary least square) method is not effective in most cases. In order to find any autoregressive conditional heteroskedasticity we have conducted the LR test and for the solving the **problem we have used the Generalized Least Squares Method (GLS). If the probability of the LR test's F**-statistic is below the 5% then we can conclude that the autoregressive conditional heteroskedasticity problem exists. The following table shows the result of LR test:

Table 4. LR test

Test	F-Statistics	Prob.	Result
LR	591.01	0.00	The problem exists

Source: Author

5.5. REGRESSION ESTIMATION RESULTS

The Wald test has been utilized for the estimation of the whole model significance. For the significance test of the regression coefficient we have used the t-statistic. The following table shows the result of the model estimation:

Test 5. Regression estimation results

Variables	Sym	Coefficient	Std. Error	t-statistics	Prob.
Constant	β	-0.821	0.232	-3.53	0.000
Political rel	POEV	-0.133	0.039	-3.34	0.001
Profitability	ROI	0.555	0.047	11.73	0.000
SIZE	SIZE	0.066	0.016	3.94	0.000
Leverage	DEBIT	0.447	0.834	5.57	0.000
Wald chi2: 173.17					
Prob chi2: 0.000					

Source: Author

As the probability of the Wald test is below the 5%, it can be concluded that the whole model is significant.

5.6. HYPOTHESIS TEST

Political relation effects on the tax avoidance.

As it is illustrated in the above table the coefficient of the variable POEV is negative and the t-statistic is equal to 3.34. The probability is under 5% and equal to 0.001. This indicates that the H_0 assumption cannot be accepted and the assumption H_1 cannot be rejected. In other words, the results show that there is a significant negative relationship between the political relations and tax avoidance.

6. CONCLUSIONS

The act of planning for tax purposes contains of complex information which may lead to the reduction of financial reporting transparency. Therefore, the information asymmetry will increase due to the decrease in financial reporting quality. This complex operation of tax avoidance might provide proper instruments

to be more opportunistic. Besides it may cause appropriate motivations in managers to take definite and proper tax de**cisions which may increase firm's value. We have defined the political relation as first the**
board members who have a relationship with the government, parliament or another related organization or second the existence of a major governmental or semi-governmental shareholder whom owns at least

ten percent of the voting shares. To calculate this variable, the explanatory notes of the financial **statements along with the board's annual reports were considered, so that the CEO, board members, major**
shareholders and the related parties could be detected. The results indicated that the coefficient of the variable POEV is negative and the t-statistic is equal to 3.34. The probability is under 5% and equal to 0.001. This indicates that the H_0 assumption cannot be accepted and the assumption H_1 cannot be rejected. In other words, the results show that there is a significant negative relationship between the political relations and tax avoidance which means as the political relations increases the tax avoidance operation decreases. The result of the current study is useful for the managers whom have more respect for the tax avoidance strategies. At last it should be clarified that any extension of our results must be acted discretionally, since we have collected a short sample of the TSE listed firms for a limited period.

REFERENCES

Jam, M., (2000), Tax consultant professional behavior, tax avoidance and tax evasion, Auditor Magazine, 6, 41-43.

Rezaei, F., Saadati, K., (2014), An investigation on the effect of firms political relations on the level of cash holdings, M.S.c Thesis, Qazvin Azad University.

Rezaei, F., Veysi Hesar, S., (2014), The effect of political relations on the relation between ownership concentration, quality of financial reporting and the cost of common stock, Accounting and Auditing Review, 21, 4, 449-470.

Rezaei, F., Shahsavar Zadeh, M., (2012), An investigation on the relation between tax avoidance and institutional ownership with firm value, M.S.c Thesis, Qazvin Azad University.

Rezaei, F., Ghanyi Nejad, R., (2013), The effect of the financial reporting transparency on tax avoidance and firm value, M.S.c Thesis, Qazvin Azad University.

Ziayi Bigdeli, F., (2004), Value added tax, a modern tax; Economy affairs school, Tehran.

THE INVESTIGATION OF ONLINE MARKETING ON BRAND LOYALTY OF ONLINE COMPANY OF DIGIKALA

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Abstract

*The purpose of Internet marketing needs and wants satisfied customers, build and maintain customer relationships through real activities (online) with the aim of facilitating the exchange of goods and services. Internet Marketing in order to succeed, must be of different factors that affect the choice of **purchaser's** variety of brand-aware consumers know how about your purchase, according to decide specific brand. Given the importance of this issue, this study examines the impact of online marketing on brand loyalty online- DigiKala business from April to July 1395, is the fifth hypothesis. Among the company's customers, DigiKala for listed online, 385 utilizes Morgan and sampling were selected, and they completed electronic questionnaire for the study. Data analysis software SPSS-21 and descriptive statistics (mean and standard deviation) and inferential statistics (Pearson correlation and multivariate regression model) were analyzed. The findings showed that online marketing that includes 4 aspects of "email marketing", "marketing networks, search", "search engine marketing" and "marketing content". The level of customer loyalty to the brand DigiKala and increase their commitment to repurchase the site affect and with increasing use of online marketing and customer commitment to increase brand DigiKala.*

JEL classification:M31

Keywords: *Internet marketing, Email marketing, Search engine marketing, Content marketing, Social media marketing, Brand, Commitment to brand.*

1. INTRODUCTION

Rapid changes in today's world and the emergence of new communication technologies such as the Internet, organizations have faced with various challenges, the fundamental change in the structure of human interaction and communication. Commercial businesses, especially in introducing products and services produced in institutions and enterprises has played an important role. This leads to the formation of a new type of human interaction, the creation of virtual social networks and online marketing boom is sent as a modern business. Therefore, those customers can virtually no cost to travel around the world and to obtain the necessary information (Akhavanmalayeri et al, 2014; Biglo and Diziche, 2012; El. Gohary, 2011). Therefore, the success of the companies will be able to be qualified customers understand and identify the expectations and perceived values. Order subjective perceptions and buying behavior to review them and respond to them appropriately (Abdolvand and Nikfar; 2011, Javanmard & Soltanzadeh, 2010). Because they attract the attention of potential customers is very effective in creating a competitive advantage and achieve competitive advantage in today's world, only relying on the functional characteristics of products and services cannot be obtained. However, in the present age are the most important factor differentiating a business from competitors (Mira and Karimi Harisi, 2012). Marketing communications and promotional activities and promotions can be enumerated factors that affect the strength of the brand, with a strong brand equity are closely related (Ha HY et al, 2010). The following are some relevant studies research showing the importance of online marketing has been mentioned.

Biglo and Diziche (2012) done a study to examine the impact of online marketing on the performance of tourism travel agencies and tourism province of East Azerbaijan, and found that between promotional activities, trade, tourism performance database and there is a significant positive relationship. Saeedi and et. al (2011) with evaluation and ranking of Internet marketing carpet industry of the country, stated that the variables "situation awareness competitors", "Use of Visitor Information", and "receive comments and

suggestions" are more important than other variables. In addition, use of the Internet activities of clients as the most important criterion was selected. In a study by Abdolvand and Nickfar (2011) entitled "Study of the relationship between intellectual engagement and commitment to the brand product at Azad University in Tehran, also found that the tendency of the product, product features and information resources on product involvement and commitment to the brand also has a direct effect.

From foreign researchers as well, Bianchi and Mathews (2015) study entitled "Internet marketing and development of the export market in Chile" done and found that the capabilities of Internet marketing a positive impact on export data, which in turn network communications business and the export market improves. Also Nabout and Skiera (2012) study in return improve the quality of search engine marketing and stated, promotional proposals that improve the quality of advertising, their lower, will be useful. Yuan (2009) had a study titled "Social Networks in e-commerce" did receive, social networks via e-commerce transformed it into a new direction directed that the method of electronic commerce issues and problems in business and enterprises electronic has overcome.

According to research, investigate and determine the importance of this issue, this study also examines the impact that internet marketing can have a lasting brand, has been discussed. To contact the internet marketing and the shelf life of the brand in the minds of customers and their loyalty to the brand products, the company's profitability and revenue online stores that are offering their products involved, be of great importance.

Methodology

This study is a survey of the target population of all buyers online-store Digikala in the period April to July of 2016 is, according to unlimited size population, 385 of them are using Morgan table and using sampling have been selected. 5-point Likert questionnaire to collect data electronic, containing 36 questions was used along with a description. Moreover, to analyze the resulting data, statistical software spss-21 and descriptive statistics (mean, standard deviation) and inferential statistics (Pearson correlation and multivariate regression model) were used. The validity of the questionnaire, a questionnaire satisfaction service e-Learning students of Payam Noor University of Tehran and the West was assessed, were used. According to the results, the questionnaire correctly measure the desired characteristics, and validity was confirmed. To determine the reliability of Cronbach's alpha was used. To accomplish this questionnaire items is divided into five main sections and alpha coefficient was calculated in all sectors alpha coefficient greater than 0.7 and for all inquiries 0.98, respectively (Table 1). It was clear that in each section of the test is acceptable reliability.

Table 1. Cronbach's alpha questionnaire items

Section on email marketing	0.926
Section on social media marketing	0.924
Section on search engine marketing	0.976
Section on content marketing	0.980
Section on brand loyalty	0.939
The entire questionnaire	0.980

Source: Author

2. RESULTS

2.1. DEMOGRAPHIC CHARACTERISTICS

The questions in the questionnaire in order to meet demographic characteristics of the respondents were designed that results from them in a pie chart breakdown of gender, age, education level, number of shopping Digikala, and the use of the Internet during the day in terms of abundance, figures 1 to 5 are shown. As the figures show, most respondents (51.02 percent) were male (Figure 1) in the age range 35 - 26 years (39.18 percent) have (Figure 2) and less than half (37.11 percent) there has postgraduate studies (Figure 3). Their shopping experience more than 3 times (62.89 percent) from the site Digikala have (Figure 4) and during the day more than 2 hours (72%) of the Internet was used (Figure 5).
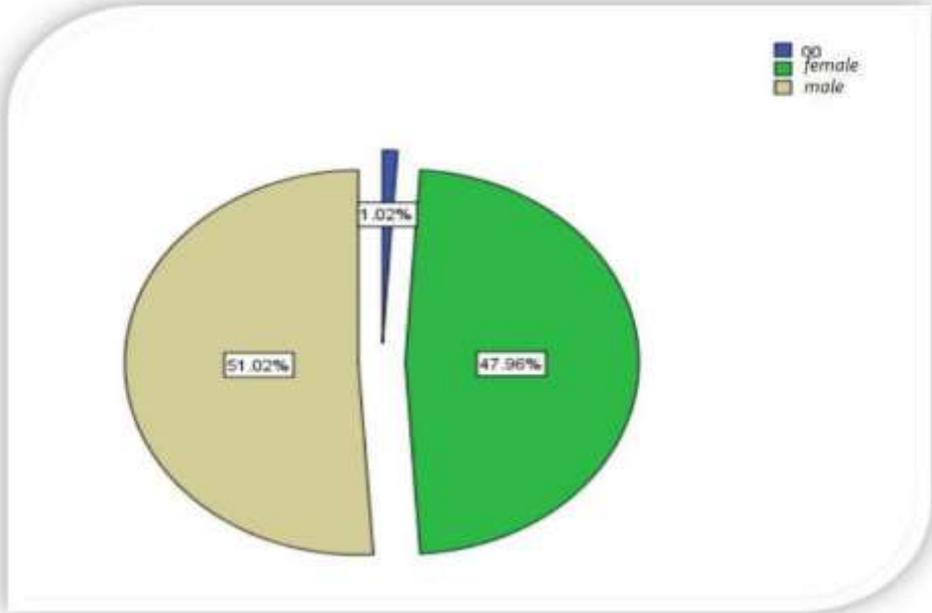
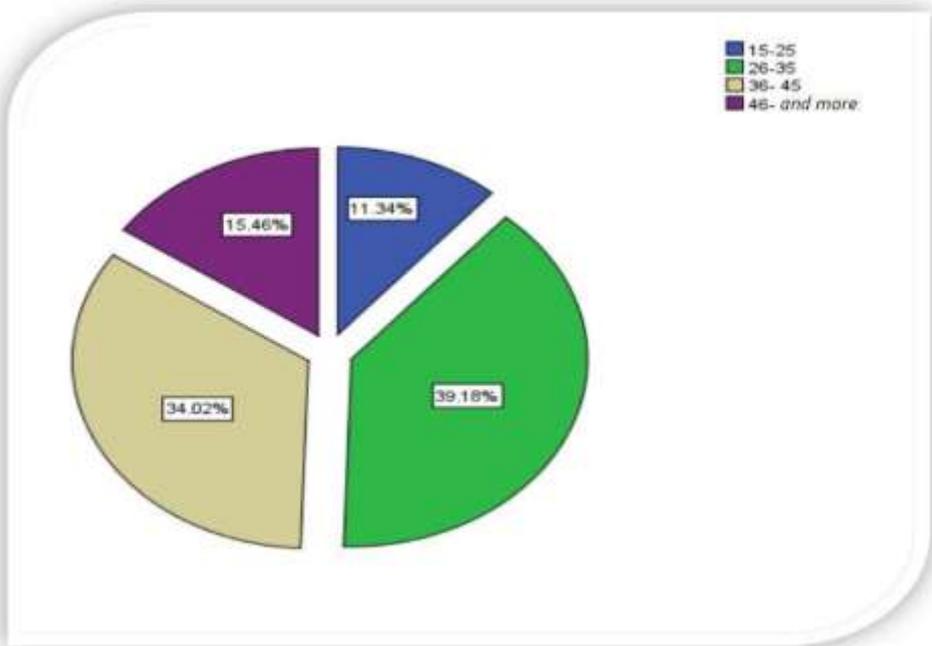**Figure 1: Distribution of the sample by gender**

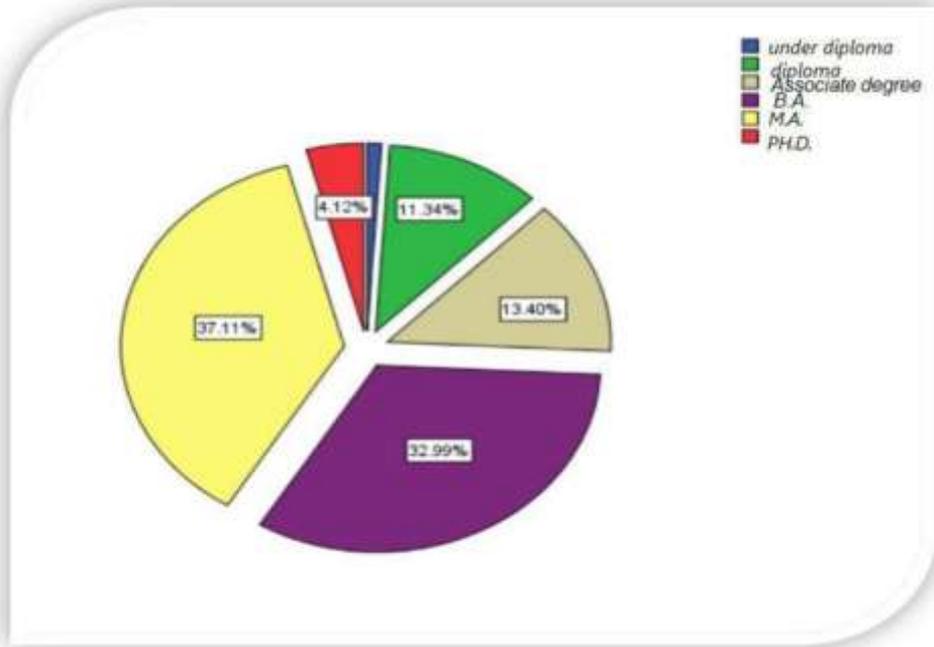**Figure 2: Distribution of the sample by age**

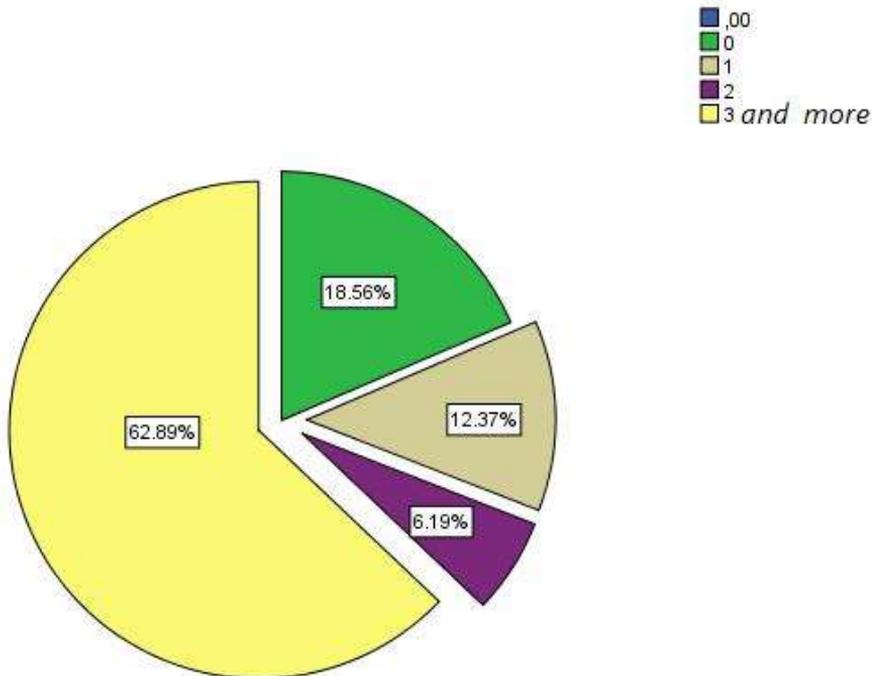**Figure 3: Distribution of sample according to educational status**

Figure 4: Distribution of sample in terms of the number of online shopping sites Digikala
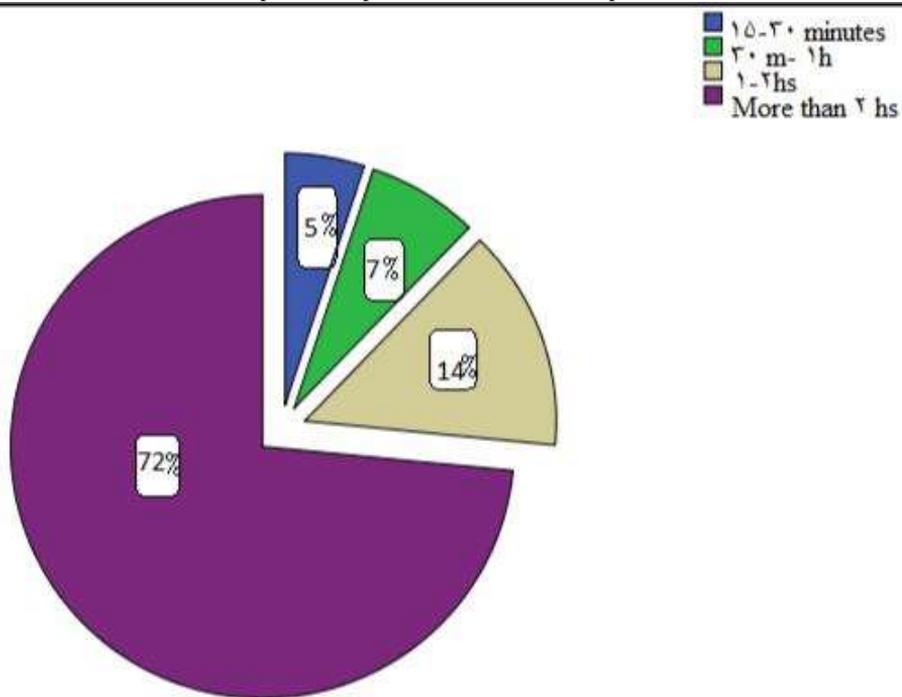
Figure 5: Distribution of the sample by the use of the Internet Day

2.2. STATISTICAL ANALYSIS HYPOTHESIS (TABLE 2 TO 6)

First hypothesis: internet marketing online store Digikala effective brand on the shelf.

Table 2. The relationship between the internet marketing and the shelf life of the brand Digikala

	Brand shelf
P	0.001
Online marketing	0.529

Source: Author

The second hypothesis: the email marketing is effective Digikala lasting brand online store.

Table 3. The relationship between email marketing and sustainability to brand Digikala

	Brand shelf
P	0.001
Mail marketing	0.845

Source: Author

The third hypothesis: marketing with social networks online store Digikala effective brand on the shelf.

Table 4. The relationship between social media marketing and sustainability to brand Digikala

	Brand shelf
P	0.001
Network marketing	0.609

Source: Author

Fourth hypothesis: Search engine marketing is an effective Digikala lasting brand online store.

Table 5. Relationship between search engine marketing and sustainability to brand Digikala

	Brand shelf
P	0.001
Search engine marketing	0.652

Source: Author

Fifth hypothesis: content marketing online store Digikala effective brand on the shelf.

Table 6. Relationship between content marketing and brand retention to Digikala

	Brand shelf
P	0.001
Content Marketing	0.696

Source: Author

2.3. MULTIVARIATE REGRESSION

To examine and clarify the role of the most defining aspects of e-marketing commitment to the brand's customers Digikala, the multivariate regression was used. Table 7 Multivariate regression coefficients between different types of e-mail marketing and brand commitment to product Digikala shows.

Table 7. Multivariate regression coefficients between aspects of e marketing and customer commitment to the brand Digikala

Variable	Nonstandard BETA	Standard BETA	Meaningful level	Results at 95%
Email marketing	0.201	0.414	0.001	Significant relationship
Network marketing	0.297	0.216	0.000	Significant relationship
Search engine marketing	0.064	0.216	0.000	Significant relationship
Search engine marketing	0.443	0.443	0.000	Significant relationship

Source: Author

3. CONCLUSIONS

In order to find a lasting relationship between the components of Internet marketing the brand Digikala, were analyzed by Pearson's test results showed that:

Pearson correlation coefficient between the components of internet marketing and sustainability to brand the product at the level of 0.001 d is equal to 0.529 (Table 2), indicating a correlation between the variables. After speaking, between the internet marketing and brand commitment to Digikala (hypothesis) there is a significant positive relationship. Therefore, in general, the main research hypothesis (hypothesis) is true.

The results of this hypothesis with the results of research and Nikfar and Abdolvand (2011), Mira and Karimi Harris (2011), Yuan (2009) is consistent.

Researcher to infer aspects of email marketing, search engines, content and social networking has made a commitment to increase brand Digikala.

According to Table 3, between email marketing Digikala and commitment to the brand, it is a positive and significant (second hypothesis). Therefore, we can conclude, email marketing on customer loyalty to the

brand is effective; it increases their motivation to repurchase from the site Digikala. However, as far as the researchers scanned the literature related to this issue, research in this area did not.

Researchers to deduce the components fit with customer requirements and the effectiveness of internet marketing site content Digikala desire to buy customers that have made a significant commitment to the brand Digikala. As a result, the company can focus more on the above factors, the self-help shelf brand.

Based on the results presented in Table 4, between social media marketing and brand commitment to a positive and significant relationship with (third hypothesis) that the findings Yuan (2009) is consistent.

Researchers to deduce the components of collectivism affect the willingness of customers to buy customers as well as motivation and confidence builds, by social media marketing Digikala, has made a commitment to increase its brand.

Based on the results presented in Table 5, the Digikala components of search engine marketing and brand commitment to a positive and significant relationship (hypothesis iv) the results of Nabout and Skiera (2012) and Yang et al (2015) is consistent.

Researchers to deduce the components of a site's ranking increases, the relevance of content and ease of access to the site by search engine marketing Digikala has been created, has made a commitment to increase its brand.

Based on the results presented in Table 6, between content marketing GAAP and commitment to brand it a significant positive correlation was observed (hypothesis V) that can be concluded that content marketing on customer loyalty to the brand is effective, it increases their motivation GAAP is to repurchase the site. The results of this study with the results of Bozyigit and Akkan (2014) is consistent.

Researchers to deduce the components to build trust with customers about the site, the attractiveness of the site content and the appropriateness of the content to the needs of customers by marketing content is created Digikala, has made a commitment to increase its brand. As a result, Digikala companies can focus more on the above factors affect the shelf life of commercial advertising to help brand your business.

The results of the regression multivariate analysis showed that 95% of the 4 following e-marketing (email marketing, content marketing, marketing, social media and search engine marketing) marketing content with component reliability, attractive content and tailored to customer requirements. The greatest impact on brand commitment to its Digikala. Then to arrange the elements of collectivism and social media marketing, motivation, confidence and email marketing with content components, fit with customer requirements and impact are the next category. As well as search, engine marketing minimal role in making the commitment to the brand plays Digikala.

Overall, findings showed that Internet marketing that includes 4 after email marketing, marketing networks, search, search engine marketing and content marketing is the level of customer loyalty to the brand Digikala and increase their commitment to repurchase from impact has it. In addition, between these dimensions, the components of trusted content marketing, content attractiveness and relevance to customer requirements, the greatest impact on Digikala commitment to the brand. Hence, the rise of Internet Marketing can increase the commitment of customers to the brand Digikala.

REFERENCES

Abdolvand, MA., and Nikfar, F., (2011). The relationship between intellectual engagement and commitment to the brand product (Case study: Islamic Azad University of Tehran). Journal of Marketing Management, 13, 75-94.

Abounabout, N. & Skiera, B. (2012). Return on Quality Improvements in Search Engine Marketing. Journal of Interactive Marketing, 26, 141-154 **.**

Akhavanmalayeri, F; Noghani, M et al. (1393). Virtual social networks and happiness. Media and Culture, Institute for Humanities and Cultural Studies 4(2): 1-24.

Bianchi, C. & Mathews, SH. (2015). Internet marketing and export market growth in Chile. Journal of Business Research, 1-9

Bozyigit, S. & Akkan, E. (2014). Linking Universities to the Target Market via Web Sites: A Content **Analysis of Turkish Private Universities' Web Sites Procedia** - Social and Behavioral Sciences, 148, 486 – 493

El-Gohary, H. (2011). Factors affecting E-Marketing adoption and implementation in tourism firms: An empirical investigation of Egyptian small tourism organisations. Tourism Management, 1-14 **.**

Garebeigo, H., and Shaadidiziji, B., (2012). Effects of Internet Marketing on the performance of tourism (Case Study: East Azarbaijan travel agencies and tourism). Journal of tourism space, 1 (1), 161-145.

Ha HY, et al. (2010). Development of brand equity: evaluation of four alternative models. The Service Industries Journal 30(6): 911–992.

Javanmard, H & Soltanzadeh, A. (1389). Internet and website brand characteristics and its impact on the trust and loyalty of customers. Quarterly Journal of Commerce 53, 225-256.

Mira, A., and Karimi Harisi, S., (2012). Investigate the influence of advertising and media on brand equity (brand Case Study Staples). Business Management, 4 (4), 107-126.

Saidi, N. Noroznezhad, A. & Zendebad, S. (1390). Assessing and ranking the carpet industry of Internet marketing Country. Journal of Economics and Business New, 25-26, 169-185 **.**

Yuan, J. (2009). The Research of Seven Stages on the Internet Marketing. Proceedings of 2009 International Conference on Management Science and Engineering, 777-781

Yang Zh, et al. (2015). "Search Engine Marketing, Financing Ability and Firm Performance in E-commerce." Information Technology and Quantitative Management (ITQM 2015) 55: 1106-1112.