

Effect of Organizational Learning on Firm Value in the Tehran Stock Exchange (TSE)

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ABSTRACT: In this research, relationship between organizational learning and value of companies accepted in Tehran Stock exchange has been evaluated. This evaluation has been made by studying relationship between some important criteria of organizational learning and using Huber's model (1991) including knowledge acquisition, information distribution, information interpretation and organizational memory and value of company. To test research hypotheses, information of companies accepted in Tehran Stock Exchange in 2011 has been used. To analyze data statistically and test research hypotheses, Multivariate regression has been used using panel data. Research results indicate the presence of significant and positive relationship between all considered criteria of organizational learning and value of companies accepted in Tehran Stock exchange.

Keywords: organizational learning, Firm Value, Haber's model, panel data.

INTRODUCTION

In the present era which different societies see growing development of markets and is globalizing complex technologies, learning is one of the competitive principles for today's organizations. Due to performance level and rapid progress in the present world, learning is required by organizations (Moghaddam and Beheshti Far, 2007). Although no direction has been specified for it in most organizations, learning in organizations can be done by publishing attitudes, knowledge and mental models of members of the organization and based on the past knowledge and experience and this important case depends on structure of each organization. Although organizational learning is formed through people and groups, learning process is affected by broader set of variables. The word organizational learning was first applied by Sayeret and March in their pilot studies on behavioral aspects of organizational decision making in 1963 but organizational learning issue didn't attract much attention until late 70s apart from commencement date. At the same time, some theorists focused their activities on organizational learning like Argeris and Schon, (1985) but subject of organizational learning is one of the issues known in different majors of management field such as production strategy and management in 90s. Since that date, issue of organizational learning was overshadowed by new management issues such as subject of learning organizations.

Theoretical Framework

Learning and acquisition of knowledge are long-term activity which covert conditions into competitive useful conditions. What our employees learn affects future of our organization. Argeris and Schon, (1985) defined organizational learning as discovery and correction of mistakes (Argeris and Schon, 1985). Foil and Lyles, (1985) define organizational learning as process of improving activities for better recognition and understanding. Dodgson, (1993) also describes organizational learning as: way of stabilizing organization, completing and organizing knowledge and common cases of activities and culture of organization. On the other hand, Huber, (1991) says that learning is done in an organization when potential behavior of organizations is interpreted through information processing. Organizational learning mostly includes personal training sections. An organization doesn't lose their learning abilities when members of organization leave it. Organizational learning participates in

organizational memory. In this regard, learning system not only affects limited people but also many people as result of collection of experiences, norms and stories (Dodgson, 1993).

Today, organizations face varying environments and different challenges. Organizations should learn to show reaction to actions of market and competitors rapidly and this important case is made possible with organizational learning. Learning is product and result of experience in many organizational fields and application of these experiences practically should be faster than competitors so that organizations can keep their advantage against competitors (Foil et al., 1985). Learning in all aspects and organizational levels is important. In other words, it is vital to have sustainable competitive advantage in the present condition that all organizations face intensive competition and continual changes in needs of market and the most sustainable competitive advantage is to have valuable manpower (Abbasi and Saadat, 2010). Organizational learning is factor of manpower empowerment in organization. Today, all industries experience rapid changes. Root of these changes can be change in needs of customer, competitors, suppliers or technology changes. These changes apply high pressure on organization to make it flexible against these changes to create value added for its customers and distinguish between it and its competitors because no organization will have sustainable competitive advantage. Therefore, fast learning power compared with competitors is a kind of sustainable competitive advantage for organizations. In this research, attempt has been made to study relationship between organizational learning and value of commercial unit (Allameh and Moghadami, 2010). This subject is a relatively new issue in the field of organizational learning and learning organizations which has not been performed in companies accepted in Tehran Stock Exchange and is regarded as a new issue. None of the previous researches have studied relationship between two components of organizational learning and value of company. In some of the previous researches, issues of organizational learning and value of company have been independently studied. To respond to the present weakness of current researches, this research tries to study relationship between organizational learning and value of commercial unit as a quantitative evaluation. Market value of companies can be affected by different factors some of which have been discussed and studied in different researches and texts. In this research, this question arises: is organizational learning effective on value of commercial unit? This research seeks to specify effect of organizational learning (knowledge acquisition, information distribution, information interpretation and organizational memory) on value of the companies accepted in Tehran Stock Exchange and tries to show relationship between each one of the organizational learning indices on market value of the company.

Literature Review

Kong-Shang, (2012) in a research on effect of intellectual capital and organizational learning on organizational performance in Taiwan sought to find effect of learning on organizational performance. His research which was conducted on 300 Taiwanese companies showed positive and significant relationship between organizational learning and organizational performance. In addition, other results of his research showed that there was positive and significant relationship between organizational learning and intellectual capital (Keng-Sheng, 2012).

Herrera, (2007) concluded in a research which he conducted in industrial companies of America that working tasks of people could be designed so that control of tasks and work results could improve such that understanding of learning results and empowerment of organization could increase. In addition, results of this research show that continual learning has the highest effect on organizational performance of the studied employees (Herrera, 2007). Results of research by Shimizu and Hit, (2004) showed that organizational learning would be difficult with increase of organization size due to increase of institute inflexibility (Shimizu and Hit, 2004). On the other hand, researches by Yang et al., (2004) mention that organizational learning reinforces performance of groups and people and transfer of knowledge to system reinforces organizational performance (Yang et al., 2004). Allameh and Moghaddami (2010) studied relationship between learning and performance of organization. In this research, four components of knowledge acquisition, information distribution, knowledge interpretation and memory taken from Huber's model, (1999) have been selected as measurement index of organizational learning governance and indices of organizational performance have been regarded as power of competition and innovation of organization and financial economic results. Results obtained from research hypotheses test showed that organizational learning had significant relationship with performance of organization but the reason for effect of organizational learning on performance of organization is the only effect on power of competition and innovation in organization. There is no significant relationship between organizational learning and financial economic results of organization. Abbasi and Saadat (2010) in their research sought to find relationship between organizational learning components and output variables (performance) of organization and to answer what actions should be taken for more learning and improvement of organizational performance. In this research, Watkins, and Marsick's Standard Model has been used according to which seven components of organizational learning (dimensions of learning organization) are related to each other and two components of organizational performance (knowledge performance and

financial performance). Data were collected with help of Dimensions of the learning organization questionnaire and results indicated the presence of positive and significant relationship between learning components and organizational performance in companies accepted in Tehran Stock Exchange. Considering the above-mentioned result, improvement of condition of learning components in organizations led to competitive advantage and achievement of better performance for organization. Asadi et al., (2009) studied relationship between organizational learning and performance in experts of Physical Education Organization. In this regard, Organizational Learning and Performance Questionnaire of Yang et al., (2004) has been used. Research showed that there was positive and significant relationship between continual learning in personal level and organizational performance of experts. There is also positive and significant relationship between other dimensions of learning (team learning, empowerment, communication in system and strategic leadership) and organizational performance of experts. The findings emphasize on importance of organizational learning and its levels (personal learning, team learning and organizational learning) as one of the factors affecting increase of performance level of experts of Physical Education Organization.

Methodology Research

The present research intends to study this question: what is effect of organizational learning (knowledge acquisition, information distribution, information interpretation and organizational memory) on value of companies accepted in Tehran Stock Exchange? The discussed issue is to see if such activity practically leads to increase in value of commercial unit? To test research hypothesis, multivariate regression has been applied using panel data (Aflatooni and Nikbakht, 2010).

Research Hypotheses

Main hypothesis: there is significant relationship between organizational learning and value of companies accepted in Tehran Stock Exchange.

In order to achieve goal of research, sub hypotheses are as follows:

- There is significant relationship between knowledge acquisition and value of companies accepted in Tehran Stock Exchange.
- There is significant relationship between information distribution and value of companies accepted in Tehran Stock Exchange.
- There is significant relationship between information interpretation and value of companies accepted in Tehran Stock Exchange.
- There is significant relationship between organizational memory and value of companies accepted in Tehran Stock Exchange.
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Time and Space Domain of Research

Time domain of this research is based on information collected from Tehran Stock Exchange in 2011. Space domain of this research also includes all companies accepted in Tehran Stock Exchange.

Sample and Data Collection

Research sample includes all companies which have been extracted from the mentioned statistical population based on conditions and specifications:

- In terms of increase of comparability, end of their financial year is 20 March of that year.
- During financial year 2011, they have been active in Tehran Stock Exchange and they have not changed activity or financial year during the mentioned year.
- They are not part of banks and financial institutes (investment companies, financial intermediation, holding and leasing companies).
- They have provided complete financial information required for performance of this research.

Among the companies accepted in Tehran Stock Exchange, the companies for which at least one of the above cases didn't hold true were excluded from the sample. Considering the above limitations and the mentioned criteria, a sample with 83 companies was selected. In addition, 76 out of 83 sample companies completed and delivered their questionnaires. For this reason, return rate of the questionnaire is 92%. To collect information relating to literature, library method such as books and journals was used and for financial data, the audited financial statements and explanatory notes along with them inserted in site of research management, Islamic development and studies of Tehran Stock Exchange and Tadbir Pardaz and Rahavard Novin Software have been used.

Research Instruments

Considering goals of the research, questionnaire instruments were used to collect information relating to organizational learning. Among the available questionnaires, Dimensions of the learning organization questionnaire (DLOQ) was used. This questionnaire was designed by Marsick and Watkins in 2003 based on 5 sections and 7 dimensions. 4 sections of the questionnaire relate to personal learning, group learning, organizational learning and measurement of financial performance of organization and in the last section, information about organization and role of respondents in that organization was collected. Its seven axes also include cases such as creation of continual opportunities, research and dialogue, team and participatory learning encouragement, establishment of systems for receiving and publishing learning, empowering personnel based on common vision, relation of organization with environment, leadership and support of learning (Jyothibabu, 2010).

Validity of a research means accuracy of indices and criteria which have been prepared to test the desired phenomenon. Reliability means having characteristics of repeatability and stability in measurement instruments. Reliability specifies to what extent measurement instruments measure the concept definitely at any time. Since the questionnaire is standard, its validity has been confirmed in different foreign and local studies. In this research, Cronbach's alpha has been calculated with help of SPSS software for testing reliability and this value has been equal to 84% for the questionnaire (Verbeek, 2004).

The empirical model

The collected data have been calculated using Excel Software and analyzed with Eviews Software. To test relationship between variables and significance of the presented model for explaining dependent variable, the following multiple regression model has been fit. This model which has been taken from researches by Wiley, (2006) and Graham King, (2011) which is shown as follows:

$$Tobin'sq_{it} = \beta_0 + \beta_1 KONOACQ_{it} + \beta_2 INFDIS_{it} + \beta_3 INFINT_{it} + \beta_4 ORGMEM + e_{it} \quad (1)$$

Dependent variable

Dependent variable in this research is value of company. To calculate value of company, Q-Tobin distribution index, suitable criteria for measuring and valuating companies have been used. To calculate Q-Tobin with information available in the financial statements of the companies, the following relation is used: Tobin's Q = (MVE + BVL) / (TA)

Where MVE is market value, BVL is book value of liabilities and TA is total assets of company.

Independent variable

Knowledge Acquisition: according to Huber's definition, (1991), organizational learning occurs when a basis of organizational knowledge is created. Bases of knowledge are created by acquiring, storing and interpreting information inside and outside organization. Strategic applications of information systems are in two forms for using knowledge; ability to simulate knowledge out of organization and ability to create new knowledge by interpreting, reconstructing and the newly obtained information. Learning doesn't occur as result of using information out of organization but occurs as result of readjusting information, correcting information structures and correcting and creating theories (Abbasi and Saadat, 2010).

Information Distribution: according to Haber's definition, (1991), distribution and publication of information refer to a process with which an organization divides information among units and members and develops training and creates new knowledge or understanding. Knowledge is collected and distributed as information, letters, notes, informal conversations and reports.

Information Interpretation: Information interpretation is a process which is presented as distributed information with one or more understandable meanings. Haber mentions that person or group has the previous intellectual structure of which constructions form information. This intellectual structure is such that an input to mind is applied for each model and forms a significant knowledge which can be stored (Allameh and Moghadami, 2010).

Organizational Memory: organizational memory refers to a storage in which information is stored for the subsequent uses. Deciders store not only data and information but also negligible information. This negligible information can be in the form of experiences, skills, communication etc. organizational memory plays very vital role in organizational learning. Both aspects of usability and practicability of learning depend on effectiveness of organizational memory and the main challenge for organizations in interpretation of information is creation of organizational memory which is easily accessible (Aflatooni and Nikbakht, 2010).

Hypotheses Testing

Considering Table (1), correlation between knowledge acquisition, information distribution, information interpretation and organizational memory and company’s value measurement index is positive and statistically significant. This issue shows that organizational learning will benefit companies.

Table 1. correlation between variable

Name of variable	Firm Value	Knowledge acquisition	Information distribution	Information interpretation	Organizational memory
Firm Value	1	0.358(0.004)	0.274(0.027)	0.235(0.044)	0.198(0.000)
Knowledge acquisition		1	0.259(0.124)	0.768(0.821)	0.213(0.624)
Information distribution			1	0.274(0.423)	0.479(0.652)
Information interpretation				1	0.772(0.458)
Organizational memory					1

As observed in Table 2, the model estimation coefficients indicate significance of coefficients of knowledge acquisition, information distribution; information interpretation and organizational memory have been calculated. In other words, there is significant relationship between variables of knowledge acquisition, information distribution; information interpretation and organizational memory and value of company. Coefficient of determination shows that the performed regression of 86% of changes in value of company has been explained by exogenous variables (model’s variables). In terms of signs of the estimated parameters, sign of all variables is positive, therefore, increase of these variables in the studied companies increases value of the company. The obtained coefficient for knowledge acquisition is 0.0025 which indicates that value of company increases by 0.0025% with increase of this variable by 1%. In addition, the coefficients obtained from information distribution, information interpretation and organizational memory also indicate that value of company increases by 0.0018, 0.0038 and 0.0017% with increase by 1%.

Table 2. Test of Hypotheses

Variable	Coeff	Std Error	T- Stat	Signif
KNOACQ	0.002521407	0.09682446	-3.94598	0.0255454
INFDIS	0.001854619	0.05778538	-1.66501	0.0245671
INFINT	0.003865213	0.03584562	3.78294	0.0178945
ORGMEM	0.001755455	0.02545506	2.58654	0.0045518
Centered R**2 = 0.860986		R Bar **2 = 0.860150		D -W = 1/713

CONCLUSION AND DISCUSSION

Today, many managers have been persuaded to improve and progress learning in their organizations. It is evident that organizations learn, vary and their performance changes over time. On the other hand, success of each society depends on ability of learners who are involved in permanent learning process. Due to effect of training on behavior of people, learning occurs. Anyway, these learnt things change behavior and insight of learners during their life. In this research, relationship between organizational learning and value of companies accepted in Tehran Stock Exchange was studied. Considering results obtained from this research hypothesis test, significant and positive relationship was found between them. This result is in line with results of research by Yang et al. (2004) and Allameh and Moghadami (2010). Organizational learning is a process and set of actions which leads to learning of personnel and includes specified organizational behavior which is applied in learning organization. Managers of the organizations which have paid enough attention to learning and reinforcement of learning transfer, proper communication, and encouragement of problem solving methods and experimental methods and regard learning expenses as a kind of investment not as expense can enhance market value of companies and add to wealth of their shareholders. Managers are suggested to develop and improve ways of acquiring information and suitable communication inside companies and provide conditions and opportunities for organizational learning by forming working groups and reinforcing spirit of group cooperation in personnel and other managers to exchange knowledge , experiences and skills and improve personal and group skills . It is recommended to study effect of other mechanisms of organizational learning on value of company in the future researches. It is recommended to study effect of organizational learning in financial institutes (banks, insurance companies etc), investment companies and financial companies on value of companies.

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