An Investigation into the Relationship between Strategic Human Capital and Financial Performance Improvement from Incomes Perspective in Fars Province Social Security

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Abstract

Strategic human capital is one of the most important strands of intellectual capitals in financial managers as it is regarded as the main source of creativity. Investigating the relationship between the value of human capital and some indices of the organization performance including financial performance improvement from income perspective, present study, in fact, tries to enhance the capability of managers and other organizational beneficiaries to evaluate the value made by human capital. To do so, the study was conducted in the time period of 2013-2014 in the Social Security Organization and the employed statistical method was multiple regression via panel least squares (with fixed effects). The study finally revealed that there was a significant relationship between the strategic human capital and improved financial performance in terms of incomes. Furthermore, no significant relationship was observed between strategic human capital and profit-making. To put it another way, while the value of human capital is not reflected in the fiscal performance index (profitability), market values these properties. The same relationship was also tested between the direct and indirect work force of production and office and selling employees.

Keywords: Strategic human capital, productivity, profit-making, incomes, panel least squares.

1. Introduction

In the recently made management changes in the country and given the need to reconsider organizational and management strategies and approaches to increase their competition capability in today's world, the importance of strategic human capital has become evident. Human capital sometimes referred to as optimized work force quality, can lead to an increase in production and economic level of countries. Additionally, it is usually taken as a good source for sustained completion. To achieve such a purpose, using strategic concepts in the human capital domain and making appropriate strategies for the employed work force is a basic strategy (Campbell, 2010).

Work force is, in essence, the main capital of modern organizations. The output and improvement of fiscal performance in any organization and institution hinge on the organization behavior and its work force. Human sources are different from other sources of organizations in that human sources can make change in the value of organizations other physical and fiscal sources. Accordingly, human sources accounting is not only regarded as the agent for the recognition of used human sources value, but also the improvement of human sources management to increase the quality of goods and services is considered to be its purpose. Give this point, many of financial managers are trying to find strategies to recognize the value of their invisible properties and improve the performance level of their organizations (Dena Charles Walker, 2001, p. 205).

2- Strategic Human Capital

Strategic human capital is the only production factor that has the capability to create new products and improve production processes. It is, in fact, the basis of innovation and is likely to lead to economic growth in a wide domain. Taking a look at it beyond the economic dimension and looking into it from social perspective caused the strategic human capital to function as the cornerstone of scientific society. Bantis (1998) have mentioned three types of human capital: strategic, structural, and relational. He then revised this taxonomy in 2000 by offering strategic, capital-structural, and individual possession types of human capitals. By the strategic human capital it means the individual knowledge level of the organization employees. By the structural-capital capital it means all non-human properties or organizational capabilities used to meet the market needs and necessities. Finally, by relational capital it refers to the whole knowledge in the organization relations with its environment (including customers, suppliers, scientific groups, and other concerned persons). Additionally, intellectual possession refers to some of invisible properties that are under support and recognition according to law (such as copy right, invention right, and the like) (Haji Karimi, 2014, p. 52).

Strategic human capital might be defined as follow: "knowledge, skill, decency, and other characteristics of a person that facilitate the process of achieving personal, economic, and social successes". Recently, it is considered to be beyond skills and abilities of persons. What is important is that how people work in a group and use their knowledge and skill to achieve the group goals. Researchers have recognized the components of strategic human capital as follows:

capability that refers to the ability of persons to do works and involves both the qualification and obtaining of work opportunity (Mezies, 2003, P. 149).

The strategic human capital matrix can be obtained by putting together the two factors of being unique and strategic. This matrix offers a conceptual framework to categorize different types of strategic human capital in organizations and their management for further profit making (Chitsazian, 2006, P. 31).This framework highlight the point that for management of different types of knowledge and strategic human capitals in organizations, different management systems are required as making use of a single system in the management of human sources would have no consequence but reduction in financial performance improvement.

2-1. Management of Strategic Human Capital

A strategic source is a valuable source that is of great help for an organization to keep its competition advantage. According to Pfeffer (1978) quoted from Barny (1997), the four important features of strategic human capital are: 1) importance 2) behavioral instability 3) company specific limitations and 4) the range of sources in the whole country. It can be said that management of human capital functions as a bridge between human sources and commercial strategy. Kerens (2005) defines the strategic human capital management as the complete development of human potential abilities that are reflected in the form of organizational value. He contends that strategic human capital management is related to value making in humans and what can lead to such a value is the philosophy of human development and not the mere development process (Armstrong, 2008).

The core purposes of strategic human capital management are:
1- Determining the impact of humans on commercial activities and their role in creating value for shareholders.
2- Highlighting the point that human sources activities can lead to monetary value and it might be, for example, in the form of capital returning.
3- Making some policies to guide and monitor the prospective human sources nd commercial strategies.
4- Providing diagnostic and predicting data that can provide us with information concerning designed activities and strategies to improve human management effect in organizations (Armstrong, 2006).

2-2. Measuring Strategic Human Capital

Different standards have been offered to measure dimensions and features of strategic human capital:
- Fiscal standards such as sale and financial performance
- Standards of output or produced goods and services, offered services to customers, number of errors, customers' satisfaction, quality of goods and services
- Standards of time delays, absence, etc. (Guest, 1997).
A set of standards for measuring strategic human capital are shown in Table 1.

Table 1. Standards for measuring strategic human capital

Possible measures	Strategic human capital activities
Cost, time, quantity, quality, correspondence with strategic standards	**Employing new work force**
Reasons for quitting the job	**Transfer/Dismissal**
Payments level, differences, evaluation of justice, satisfaction of customers, satisfaction of employees, variety	**Reward/Compensation**
Measuring the level of qualifications, skills, Difference of qualifications and investment in education	**Qualifications/Trainings**
Age, rate of cooperation improvement in knowledge management activities, variety	**Human force diagram**
Per capita income, individual operational cost, real added value	**Standards of fiscal performance improvement**

Source :(Stiles & Kulvisaechana, 2004)

The measurement methods of human sources value are as follow: (Dehghan pour, 2007, p. 169)
1) Economic value 2) Substitution value 3) Value index 4) Value making pattern for accidental rewards 5) Total patterns 6) Auction theory 7) Finished price

2. Financial Performance Improvement

Assessing and measuring of performance in decision making process is among the most important fiscal and economic domain issues. Therefore, the performance of economic and fiscal performance is necessary to evaluate the performance of institutions and organizations. One of the most important purposes of economic institutions is profit-making in short periods of time and increasing the wealth of owners in long term. Such a purpose is possible only by taking logical measures. Taking logical measures is directly related to the evaluation of the economic performance of fiscal and economic institutions. Studies have revealed that there are systematic and cross-sectional differences between the performance of investment organizations and it is due to the difference in management features of human capital (Loren Switzer &Yanfen Huang, 2007). Evaluation of the economic institutions' performance requires the recognition of standards and indices that are categorized in two financial and non-financial sets. The performance evaluation approaches from a fiscal dimension are divided into the four sets (AnvariRostami, et al., 2004, p. 158):
A) Approaches in which accounting information is used for evaluation of performance (Such as ROA and ROE).

B) Approaches that make use of a combination of accounting data and market information (such as different versions of tubin's Q or ration of P/E).
C) Ratios that are used via financial management data (such as efficiency of portions and extra efficiency of each portion).
D) Ratios that although use accounting data, they are economic standards (Such as EVA, REVA, MVA).

Financial performance improvement is the result of a fraction obtained from dividing the value or amount of product to the value or amount of one of production factors. Accordingly, it might be talked about improvement of capital fiscal performance, primary materials, and work force. Rosemond Boohene (2011) maintains that human sources management skills affect the performance improvement. This improvement has different levels and all persons have a role meaning that persons can influence the economic, national, and global sections by their thoughts, innovations, and inventions (Abtahi&Kazemi, 2004, p. 58).

3. Profit Making (Profitability)

Profit making is one of the main goals in every economic and production activity. If there is no profit, doing the activity is not logical. Production and economic activities are usually done with the purpose of meeting the needs of people and some money, time, and work force are invested for them. The quality and trend of profitability in a financial institution is tightly related to the management of properties and debts. Income gaining in a financial institution should be profitable in a way that support the growth of properties and enhance the saving capability of the institution so that the share holders' wealth increases. Today's economy is the economy of invisible products. Accordingly, properties that products such products are referred to invisible properties. The findings from 2000 American organizations show that physical properties form only one third of incomes. This difference was reflected at the time of combining and purchasing of financial managers and since the common accounting methods do not take into consideration these properties in the whole evaluation of organizations, this difference becomes more and more. This difference is more in technology-based organizations and also knowledge-based ones (Fakharian, 2001, p. 3).

4. Research Hypotheses

5-1) there is a significant difference between the strategic human capital value and financial performance improvement of fiscal managers
5-2) there is a significant difference between the strategic human capital value and profit making of fiscal managers
5-3) there is a significant difference between the strategic human capital value and the income level of fiscal managers
6. Method
The employed research method in the current study is correlation method and the indices that were used to measure the strategic human capital value were: the mean of employees' end of service benefits, cost of salary and payment of employees separated into employees of the direct and indirect production sectors, and also office clerks. To gather the required data, two

questionnaires (one related to strategic human capital and one related to impact of strategic human capital impact on incomes) were used. The two questionnaires' reliability was measured by Cronbach Alpha and they turned out to be 87/1 and 83/4 respectively. The intended financial data were also extracted from the social security organization. Furthermore, the hypotheses were tested via time series and cross section data by offering a multiple regression pattern through panel least squares (fixed effects). To analyze the data, SPSS and Eviews 6 were run.

6- Results

6-1) To use the regression model, first the correlation between the study variables were examined. Table 1 represents the related results

Table 1. Correlation matrix test between the variables

	Financial performance improvement	Profitability	From incomes perspective	Employees' end of service benefits	Cost of direct salary and payment	Cost of indirect salary and payment	Cost of salary and payment of office and sale sector
Financial performance improvement	1						
Profitability	**0.287	1					
From incomes perspective	-0.054	**0.289	1				
Employees' end of service benefits	-0.025	0.040	-0.070	1			
Cost of direct salary and payment	-0.062	0.043	-0.070	**0.479	1		
Cost of indirect salary and payment	-0.067	0.027	-0.063	**0.504	**0.430	1	
Cost of salary and payment of office and sale sector	-0.006	0.061	-0.060	**0.354	**0.339	**0.284	1

**α =0 /05

6.2) The first hypothesis: There is a significant difference between strategic human capital value and financial performance improvement of fiscal managers

The present study model for the first hypothesis is as follow:

$$Y_1 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

Table 2: Regression model indices (PLS) for the first hypothesis

Sig.	t	Standard error	Beta indices	Variables' Symbol	Variables
0.00	68.49016	0.094947	6.502951	C	Intercept
0.0503	-7.967907	1.7811	-3.5011	Employees' termination benefits	Employees' end of service benefits
0.1104	1.602465	2.1211	3.4011	Direct payroll cost	Cost of direct salary and payment
0.0347	-2.124329	1.3511	-2.8811	Indirect payroll cost	Cost of indirect salary and payment
0.0766	-1.778448	5.2112	-9.2612	Selling and administrative employees' payroll cost	Cost of salary and payment of office and sale sector

Table 3: Significance test of the whole model for the first hypothesis

Hausman test	f lymr	Watson-Durbin statistic	Sig.	F	$(R)^2$	Adjusted index
0/0025	0/00	2/26	0.00	2/62	0/25	0.420381

Table 2 represents the results of ($Y_1 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$) for all the financial managers from 2013-2014. Since the analyzed data were of combinational data, first the type of estimation model should be determined via f lymr test and Hausman test. Given the point that p-value obtained from the f lymr test is 0.000, the null hypothesis that supports the use of pool data is rejected. However, the hypothesis in which panel data is used has been approved (P-value

smaller than 0.05). Since p-value obtained from Hausman test is 0.0025, the null hypothesis stating that the model uses random effects is rejected and the opposite hypothesis supporting the use of fixed effects method is approved (p-value less than ./05). Table 1 also reveals that the cost of indirect salary and payment, type of industry, and intercept variables are significant in 95 percent level. Besides, the end of service benefits and the cost of sale and office employees' salary and payment are also significant in 90 percent. Furthermore, the obtained *t*, confirms their indices and direction of impact meaning that the relationship between the end of service benefits, the cost of indirect salary and payment, the cost of sale and office employees' salary and payment, and financial performance improvement is negative (reversed). The results of table 3 also shows about 42 percent of the changes related to the financial performance improvement by related fiscal variables. The *t* of Durbin-Watson also indicates a lack of variance correlation of unstated independent variables.

6-3) the second hypothesis: There is a significant relationship between the strategic human capital value and profit making of fiscal managers. The present study model for the second hypothesis is:

$$Y_2 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

Table 4: Regression model indices (PLS) for the second hypothesis

Sig.	t	Standard Error	Beta	Components
0.00	-97.59535	0.019735	-1.926079	Intercept
0.5798	-0.554401	5.7812	-3.2112	Employees' end of service benefits
0.0201	1.229699	5.9712	7.3412	Cost of direct salary and payment
0.6155	2.502937	3.9612	1.9912	Cost of indirect salary and payment
0.3037	1.030811	1.2812	1.3212	Cost of salary and payment of office and sale sector

Table 5: Significance test of the whole model for the second hypothesis

Hausman test	f lymr	Watson-Durbin statistic	Sig.	F	$(R)^2$	Adjusted index
0/00	0/00	1.905505	0.00	57.89571	.0/925057	0/941316

Table 4 represents the results of ($Y_2 = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4$) for all the financial managers from 2013-2014. Since the analyzed data were of combinational data, first the type of estimation model should be determined via f lymr test and Hausman test. Given the point that p-value obtained from the f lymr test is 0.000, the null hypothesis that supports the use of pool data is rejected. However, the hypothesis in which panel data is used has been approved (P-value smaller than 0.05). Since p-value obtained from Hausman test is 0.00, the null hypothesis stating that the model uses random effects is rejected and the opposite hypothesis supporting the use of fixed effects method is approved (p-value less than ./05). Table 4 also reveals that the cost of direct salary and payment, and intercept variables are significant in 95 percent level. Besides, type of industry is also significant in 90 percent. Furthermore, the obtained *t*, confirms their indices and direction of impact meaning that the relationship between the cost of direct salary and payment and profitability is positive (direct). The results of table 5 also shows about 94 percent of the profitability related to the under-studied fiscal variables. The *t* of Durbin-Watson also indicates a lack of variance correlation of unstated independent variables.

6-4) the third hypothesis: There is a significant relationship between the strategic human capital value and from incomes perspective of fiscal managers. The present study model for the third hypothesis is:

$$Y_3 = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4$$

Table 6: Regression model (PLS) for the third hypothesis

Sig.	t	Standard error	Beta	Components
0.0000	67.47083	0.211404	14.26360	Intercept
0.0050	2.832671	4.1211	1.1710	Employees' end of service benefits
0.0001	3.860897	6.7911	2.6210	Cost of direct salary and payment
0.0000	-4.919691	4.2811	-2.1110	Cost of indirect salary and payment
0.3288	-0.978674	1.0011	-9.8212	Cost of salary and payment of office and sale sector

Table 7: The significance test of the model for the third hypothesis

Hausman Test	f Lymr	Watson-Durbin statistic	Sig.	F	$(R)^2$	Adjusted index
0.0034	0.0000	1.834131	0.000000	240.8928	0.981148	0.985238

Table 6 represents the results of ($Y_3 = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4$) for all the financial managers from 2013-2014. Since the analyzed data were of combinational data, first the type of estimation model should be determined via f lymr test and Hausman test. Given the point that p-value obtained from the f lymr test is 0.000, the null hypothesis that supports the use of pool data is rejected. However, the hypothesis in which panel data is used has been approved (P-value smaller than 0.05). Since p-value obtained from Hausman test is 0.00, the null hypothesis stating that the model uses random effects is rejected and the opposite hypothesis supporting the use of fixed effects method is approved (p-value less than ./05).Table 6 also reveals that the end of service benefits, cost of direct salary and payment, cost of indirect salary and payment, type of industry, and intercept variables are significant in 95 percent level. Furthermore, the obtained *t*, confirms their indices and direction of impact meaning that the relationship between the end of service benefits, cost of direct salary and payment, cost of indirect salary and payment variables and from incomes perspective is positive, positive, and negative (reversed) respectively. The results of table 7 also shows about 98 percent of the changes related to from incomes perspective and the under-studied fiscal variables. The *t* of Durbin-Watson also indicates a lack of variance correlation of unstated independent variables.

Discussion and Conclusion

Regarding the first hypothesis that investigated the relationship between the strategic human capital value and the fiscal managers' financial performance improvement, it was understood that there is a negative significant relationship between the two variables. However, the cost variables in this study are positively related to the number of employees in the denominator of financial performance improvement variable. Therefore, a negative relationship was expected. As with the second relationship that was about the relationship of strategic human capital value and the fiscal managers' profitability, the study found no significant relationship. To put it another way, employees had no role in short-term profitability. In the third hypothesis, the relationship between the strategic human capital value and from income perspective of the fiscal managers was investigated and the related results uncovered that there was a positive and significant relationship between them. Furthermore, the study revealed that strategic human capital in the social security organization has a more effect on the performance in all the studied variables.

Given these findings, it might be concluded that work force is one of the most important factors to create value in organizations. Additionally, work force, as a strategic capital, can be a great help in the profit making of organizations. Of course, it might be pointed out that its role is not achieved in short-term.