

Investigate the relationship between Intellectual Capital and Return on Assets and Return on Equity of the companies accepted in the Tabriz stock exchange

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Abstract: The lack of reflection of the value of intellectual financial reports is one of the most traditional accounting systems failing. In today's knowledge based industry while the role of intellectual capital in creating value for the business units more effective than financial capital. This study was conducted to investigate the relationship between Intellectual Capital and Return on Assets and Return on Equity of the companies accepted in the Tabriz stock exchange. The statistical community this research all Tabriz stock exchanges a researcher with the systematic removal of number 38 item is selected. Research time zone between 1389-1390 and the territory of the place where the Tabriz stock exchange. In order to measure intellectual capital coefficient value of intellectual capital (VAIC), which is the most widely used method for measuring intellectual capital that Palik auditor it. The results of this study showed a significant relationship between intellectual capital (Added value of physical capital, value added human capital, structural capital value added) with Return on Assets (ROA). But between the intellectual capital with Return on Equity (ROE) meaning full relationship is not established.

Keywords: intellectual capital, Added value of physical capital, value added human capital, structural capital value added, Return On Assets, Return on Equity.

INTERODUCTION

According to the research and the efforts of the past decade and the current decade done, investment and financial markets are heavily focused on the intellectual of the company along with the financial report said. Today the sphere of the intellectual capital global competition to global competition has a become a kind of element. Nowadays in the global economy of knowledge as the most financial and physical capital investment alternative [1]. Intellectual Capital is a new issues that theoretically in the recent few years globally. But since rewarding resource for countries and international organization, taking into account the amount of growth and development that is rapidly becoming a measure of intellectual development in countries on the other hand, the intangible resource as one of the most company resources and enter preneurial growth in funds progress of technology in the last decade an enormous transformation in all aspects of life and human activits have created and makes a move towards the knowledge-based economy and lead to change paradioum governing the industrial economy in such a way that can be seen today, knowledge-based economy and centered on intangiabile assets and intellectual capital in such an atmosphere of intellectual

capital of organization than before as a competitive advantage is taken into consideration in fact agricultural and industrial revolution after the word in which the earth the main sources of capital and labor came to witness a revolution in which the main sources of information on the basis of knowledge and information.

Expression Issue

In recent years for measuring intellectual capital, several approaches and templates intellectual capital measurement of two important aspects one with in the enterprise for the purpose of better allocation of it resources in line with the efficiency and minimize the cost of on other organization, that organization has the goal of it make available investment information and potential future growth projections for the organization as when as long-term planning for a comprehensive picture of the operational performance and to estimate the value of the organization, should be examined all aspects of the organizations common measurement practice that based on the traditional accounting alone are not able to do it. Nowadays in the global economy of knowledge as the most financial and physical capital investment alternative[1].

The important and necessity of doing research

Increase the gap between the actual value and the Book value of the company to researcher to explain the invisible value of the deleted between the financial basis. Intellectual capital, value and more important for enterprises and corporations that physical capital and intellectual capital into a meaningless as the real capital and strategic component of the capitals most especially for the research centers and foundations of knowledge organizations are discussed in the age of information and communication technology and knowledge as a vital source of operating enterprises in the sphere of competition should achieve sustainable competitive ornate. along with the rotation economy companies also have it on your own with the relies on knowledge and information and use it in your business process can increase the competitive importance. one of the most traditional accounting systems problems in disability measurement of intellectual capital is the reason why companies tend has to be real values in the actual value of intangible and intellectual assets in financial statement in form of corporate sponsorships has increased more than before.

Research hypothesis

- Between added value of intellectual capital and return on assets (ROA), there is a significant relationship.
- Between the added value of intellectual capital and returns on equity (ROE), there is a significant relationship.

METHODOLOGY OF RESEARCH

Descriptive study of correlation methods and in terms of hypothesis testing of single regression is used. Method of data collection in a library and information research literature section of books and magazine in English and Persian and article extracted from the internet to collect and some of the information needed for hypothesis testing study for the extraction of financial companies. Other information section of the exchange databases and bring software turns and device a processor and www.rdis.ir and in this research to refine the data from excel and wide for the analysis of data from spss 18 is used.

The community, sample and sampling method

Statistical society of non-financial companies are all accepted in the Tabriz stock exchange by the end of the year 1389 from the beginning of the year 1390. The study sample included 38 case using systematic sampling methods were removed.

Measuring the value added

Palyk Measuring the value added to the following expression:

$$Va = I + DP + D + T + M + R$$

- (I) Interest expense
- (DP) Depreciation expense
- (D) Dividend
- (T) Taxes
- (M) Equity
- (R) Retained Earnings

Palyk on intellectual capital measurement criteria three criteria the companies Added value of physical capital, value added human capital, structural capital value added factor.

Physical capital: represents a potential intangible factors is due to its outer[1].

Physical capital = Total assets - Intangible assets

The added value of physical capital (VACA) : this coefficient represents the added value created is the result of applying the physical assests that is the physical asset to az a few evident real value added.

$$(VACA) = \frac{\text{value added (VA)}}{\text{Physical capital (CA)}}$$

Human capital, represent the inventory of knowledge is a people organization [2].

Value added human capital (VAHU): direct labor+ indirect labor + right sales marketing and administration.

The value added human capital (VAHU): This coefficient represents the value added created by the staff of the and salaries to employees and comes to it and means that for a few Payroll costs more Rial value added can be achieved.

$$VAHU = \frac{\text{value added (VA)}}{\text{Human capital (CA)}}$$

Structural capital: is whatever remains after company employs during the night to go home[3].

Structural capital (ST) = value added (VA) - human capital (CA)

The structural capital value (STVA): this coefficient the process and the existing structures in the company. This means that a few percent of the added value of the company arising from the structural funds.

$$STVA = \frac{\text{structural capital (ST)}}{\text{Value added (VA)}}$$

Intellectual capital value added coefficient (VAIC): the ratio of the sum of coefficients previously calculated, according to the companies intellectual capital and is a coefficient that measuring the intellectual capital as the public model to work.

$$VAIC = VACA + VAHAV + STVA$$

The first hypothesis = There is a significant relationship between intellectual capital and asset ROA.

Table-1: influence of the independence variable on the dependent for the first hypothesis research

Y = a + (b ₁ X ₁)					
Significant level	t	beta	standard error	B	variable
0.00	13.01		0.6	10.03	Fixed Amount
0.00	1.21	0.102	0.002	0.015	Intellectual Capital
F : 8.1 (0.003)					
R ² = 0.03					
The correlation coefficient = 0.124					
Amount D.W = 1.61					
Department variable : return on asset					

Table-1 influence of the independence variable on the dependent for the first hypothesis research. To verify the independence of errors from each to help test the D.W view can be taken Dorbin Watson to be the value obtained by 1.61 D.W and because this value is between 1.5 and 2.5 is placed hypothesis of independence can be accepted for errors on the other had 0.102 obtained a correlation coefficient, which indicate the independence variables and dependent variable between correlation and coefficient of determination was equal to 3% standard so the amount of explaining independent variable by the model is estimated to be equal to 0.03% change in the dependent variable there for arising from changes in the independent variable.

Return on assets (ROA) = 10.03 + 0.015 (intellectual capital)

According to the above equation become dependent on the variable view impressive so according

to this study, the relationship between the intellectual capital and asset returns.

According to the results of the above table that the required defaults for the conclusion of the Regression equation has been accepted (the rate of the camera are placed between 1.5 and 2.5 D.W the correlation between two variable have been established and clarified by the independent model as well as the linear relationship between two variable is created)

So the conclusion is possible from the regression equation in table 1 will see significant + test level that was to intellectual capital variable is less than 1% so this affect this theory then it can be said that there is significant relationship between intellectual capital and a ROA.

The second hypothesis: there is a significant relationship between intellectual capital and returns on equity (ROE).

Table-2: Results of second hypothesis

Y = a + (b ₁ X ₁)					
Significant level	t	beta	standard error	B	variable
0.00	12.201		1.8	31.21	Fixed Amount
0.00	-0.310	0.013	0.02	-0.004	Intellectual Capital
F : 0.078 (0.659)					
R ² = -0.004					
The correlation coefficient = 0.014					
Amount D.W = 1.70					
Department variable : ROE					

To verify the independence of errors from each other to help test the D.W that the value obtained by 1.70 and it view can be taken is between 1.5 and 2.5 is placed so the hypothesis of independence can be accepted for errors, but the correlation coefficient obtained 0.013 which suggests a very insignificant correlation between two variable is on the one hand between the independent variables explaining the equal by model. According to the above results that the assumptions necessary for the conclusion of the regression equation, which is not acceptable. (The correlation between the two variables was very low and the independent variable is zero and the linear relationship is not explained by the model). Therefore not possible to draw conclusions from the regression equation. It can be said that a significant relationship between intellectual capital and return on equity (ROE) did not exist.

CONCLUSIONS

As a result of the accounting system regarding the proper intellectual capital evaluation solutions find special role is responsible. It appears to be in the final years of this decade and the next decades early years to the fall of the various countries and to organizations in the sphere of the intellectual capital management. because the concepts of intellectual capital the first stages of the research laboratory and now it's no longer passed and ought in the management of enterprises and the wider strategic development level of countries. In the age category or the impotence of knowledge and power in the third millennium b.c with the intellectual movement of the more valuable than muscle strength, mechanical power or even the technical power[4]. In this study, there is a significant correlation between among all aspects of intellectual capital (Added value of physical capital, value added human capital, structural capital value added) and Return On Assets (ROA). That there is Between the explanatory model of physical capital over other aspects of intellectual capital exists, that Between them, explain the model of physical capital, is greater than the other dimensions intellectual capital. But did not existing a significant relationship between intellectual capital and return on equity (ROE).

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