THE IMPACT OF INTELLECTUAL CAPITAL ON THE RISK OF BANKRUPTCY OF THE LISTED COMPANIES IN TEHRAN STOCK EXCHANGE

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ABSTRACT

The purpose of the study is "Impact of intellectual capital on firm's bankruptcy risk is accepted in Tehran Stock Exchange". In general, it can be concluded that this study is based on research and practical method based on the method of data collection, descriptive, correlational, and after the event. The population in this study, listed companies is enhancing the Tehran Stock Exchange. That total of 120 listed companies in Tehran Stock Exchange, in a five-year period based on the Bank's financial statements for the years 2008 and 2013 were chosen as the case study. In this research, data and financial reports Tehran Stock Exchange, the Securities and Exchange Organization can be obtained from libraries and databases used. In general, the results indicate that among all the variables, the intellectual capital, human capital, customer capital / relational capital and structural / organizational inversely related to the risk of bankruptcy of the listed companies in Tehran Stock Exchange.

KEYWORDS: Intellectual Capital, Structural Capital, Customer Capital, Human Capital, Risk of Bankruptcy

Complexity of the environment in the areas of business competition, rising customer expectations of corporate performance, the need to be aware of the strengths and weaknesses of the organization and key performance indicators to continuous improvement is more evident. One of the major concerns of today's organizations to achieve a way of promoting financial performance, reliable and flexible to use it, accurate information about their current status and earned enough money to provide performance improvement (Anvari Rostami, 2005). Scientific evaluation of traditional models for performance evaluation organizations in the world, indicate the need for effective and efficient performance of the functions and effects of the financial sector (Ghaem Maghami, 2012).

Effectiveness of external criteria [an organization's] organizational performance encompasses three general areas:

1. Financial performance (profitability, return on assets, return on investment, etc.), 2. Market performance (sales, market share, etc.) and 3. Return equity (return on total equity, economic value added, etc.) in organizational performance measurement, analysis of the fundamental differences between market-based indicators of financial performance indicators are attached. However, in most cases the market share (one of the most important indicators of market performance) and profitability (one of the most important financial performance indicators) there is a significant relationship, but in some cases, such influence market conditions, this relationship is not necessarily positive was not significant. Therefore, unlike many researchers often do not consider the distinction between these two categories of the most important measures of organizational performance assessment should be done, separate indicators of financial performance indicators are based on market performance. Finally, some indicators of organizational performance, financial indices are used to measure financial performance. According to the definition and practice of organizational effectiveness, organizational and operational objectives that should be considered as financial performance, financial performance will be as follow: Degree or extent of the company's financial goal is to achieve equity in order to increase their wealth. CEO operational objectives towards achieving the goal of increasing shareholder wealth follows includes the indicators and criteria that could be based on a business's financial performance measure (Saghafi, 2012). Many factors affect the risk of corporate bankruptcy. The present study has attempted to influence the risk of bankruptcy of intellectual capital in companies listed in Tehran Stock Exchange are examined. One of the main limitations and weaknesses in the financial sector, public companies, is not to measure it in terms of intellectual capital and financial statements for companies. Intellectual property represents a set of features and capabilities of an organization that serves as a source of sustainable competitive advantage and financial development are used. The accurate measurement of these

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DEFINITION OF CONCEPTS AND VARIABLES

Intellectual Capital: Intellectual Capital is an independent variable in this study. Pulin proposed measurement model of intellectual capital in 1997 and in 1998 it developed and in 2000 completed his index value of intellectual capital can be used to measure intellectual capital companies Australian Stock Exchange, the added value of the difference between the model output and the data has been obtained. (Sadeghi, 2009).

Risk of bankruptcy

Bankruptcy risk in this study, the dependent variable is the variable that is measured by two Falmer and zimes. Falmer with a review of 40 financial ratios, 9 than select their model established in this way. Falmer research indicates that 98 percent of the model is able to predict success for a year before bankruptcy. However, the success of this model is adapted more than one year prior to bankruptcy, insolvency projected at about 88 percent. zimes and financial ratios of liquidity, yield and leveraged in our model can be used to fit the model of your system. zimes model based on a sample of 40 bankrupt and 800 non-bankrupt company that produced the model was able to achieve an overall accuracy of 78%. (Pulin, 2004) Financial Leverage: Financial leverage is a control variable in this study. To measure this variable is defined as the total debt to total assets. (Sadeghi, 2009) The lever has an impact on the business risks and overall risk management as a tool for risk management on the effectiveness and performance impact can be identified. Financial leverage, which could be affected by the particular circumstances of different industries on the business environment, is affecting the company's business risk. Size of company: As a control variable in this study. To measure this variable in the present study follows the research done in the literature can be used as a measure of firm size variables help. Derashid and Zhang (2003) the natural logarithm of the total assets and Zimmerman (1983) as a proxy for firm size using the log of sales revenue has been collected. Sales revenue has direct structural effect on profits. With increasing global competition and advances in technology, traditional accounting systems are faced with problems. One of the underlying problems and the inadequacy of its inability is to measure and consider the company's intellectual capital in the financial statements. (Anvari Rostami, 2005). In the new era, only relying on physical capital and tangible assets cannot be reached efficiency and staff productivity, but the most cynical, intellectual capital can be considered a means to the competitive advantage of companies said. Real capital and intellectual capital as a strategic component of the capital of contemporary organizations, especially the Organization for Research and knowledge bases, is introduced. Since the foundation of knowledge for sustainable competitive advantage requires an informed and systematic identification and management of intellectual capital themselves. In a knowledge-based organizations, in which knowledge is a big part of the value of a product and the organization also represents wealth, the traditional method of accounting, which is based on tangible assets as well as information regarding the operations of the organization, the value of intellectual capital, which is the largest and most valuable asset for them, are inadequate. So the approach of intellectual capital for organizations that want to be aware of the value of a good performance is more comprehensive. So considering the above factors in order to be thriving and improving financial performance and reducing the risk of bankruptcy is right to be identified. Accordingly, the present study examined the impact of intellectual capital on the risk of bankruptcy of the listed companies in Tehran Stock Exchange is the importance and necessity.

EXPLANATION OF THE RESEARCH HYPOTHESES

Main hypothesis

1. Intellectual capital has an effect on the bankruptcy risk of listed companies in Tehran Stock Exchange.
Minor premise
1. Human capital has an effect on the bankruptcy risk of listed companies in Tehran Stock Exchange.
2. Investment structure / organization have an effect on the risk of bankruptcy of the listed companies in Tehran Stock Exchange.
3. Investor / client relationship has an effect on the bankruptcy risk of listed companies in Tehran Stock Exchange.

Theoretical Basics
In two of the past three decades, many researchers, a major source of intellectual capital as a competitive advantage, resulting from an organization's intangible resources is discussed in the management and capital markets much empirical research has been conducted to examine the relationship between intellectual capital and financial performance and efficiency around the world and considerable effort to identify, measure, and its reporting is done. Review of the literature confirms the considerable intellectual capital to measure, it is valuation and reporting. (Sadeghi, 2009). Strategies for sustaining competitive advantage as companies need to consider and where markets, products, technologies, competitors and regulations are rapidly changing society, improve knowledge and continuous innovation; it will be able to maintain a sustainable competitive advantage. Hence, today's managers, knowledge and ability create and use knowledge as their most important source of sustainable competitive advantage. Because knowledge is seen as an asset and an attempt to manage knowledge and use of intellectual property in order to successfully steer organizations has been remarkable. In the present era of knowledge-based or knowledge-based economy, intangible assets and intellectual capital firms that are key to achieving sustainable competitive advantage. And that's why a lot of attention in the field of intangible items such as economics, accounting and strategic management has grown rapidly. (Cheng and, etal, 1996). Knowledge is a strategic competitive advantage is rapidly growing. Knowledge is a competitive advantage in the corporate business strategy is considered. The goal is to create knowledge and lead to continuous innovation and continuous innovation will lead to a competitive advantage. Today organizations to improve business performance and ensure the success and sustainability inevitably have to consider knowledge management. This requires strengthening and human resource potentials and capacities of the organizations able to show to achieve competitive advantage through continuous improvement of performance and respond quickly to changes in the business environment and economic conditions. One of the fundamental challenges of principals, the potential application of knowledge and intellectual capital of the company is to create value and in this sense, managers can design tasks that must force their knowledge to create value. (SSI Mozaffari, 2010).

CONCEPTS AND DEFINITIONS RELATED TO INTELLECTUAL CAPITAL
Before we identify intellectual capital, management and measurement, we need to understand that concept. The concept of intellectual capital has always been unclear, and different definitions have been used for the interpretation of this concept. Many tend terms like assets, resources or motivation to use performance rather than the word capital and intellectual terms with words like intangible assets, based on their knowledge of alternative or non-financial. Some professions (financial accounting and legal professions) are also quite different definitions, such as non-financial fixed assets that do not physically exist objectively, have been presented. According to what was said, several definitions of intellectual capital is said some of them refer to the following views:
1. Stewart believes the intellectual capital of a set of knowledge, information, experience, intellectual property, competition and organizational learning that can be used to create wealth. The intellectual capital of its staff, organizational knowledge and skills it takes to create added value and lead to sustained competitive advantage.
2. Bontis intellectual capital as a set of intangible assets (resources, capabilities, competitive) defines organizational performance and value creation are achieved.
3. Advynsvn and Malone, Intellectual Capital "of information and knowledge applied to work to create value" defined.
4. Bontis and the Netherlands, in his article in 2002, the intellectual capital it define intellectual capital reserve of knowledge in a certain point of time in an organization are linked. It defines the relationship
between intellectual capital and organizational learning has not been studied.

5. Intellectual capital assets that an organization's ability to create wealth is measured. The objective nature of the asset and an intangible asset that is not physical assets related to the deployment of human resources and organizational performance relationship is obtained from outside the organization. All these features make the value obtained is due to the fact that a purely local phenomenon, not merchantability.

Despite the similarity of the characteristics of intellectual capital, intellectual capital, tangible assets, the potential to affect future cash flows. But the intellectual capital of the features that differentiate these assets, including the intellectual property assets are non-competitive. For example, the system can support customer, you can provide support to thousands of customers at a time. This ability is one of the most important measures of intellectual assets into physical assets. Relational capital and human capital, do not have the ability to become personal property, but must be shared between employees and customers, and suppliers. Therefore, the development of this type of property is in need of care and attention.

Important of intellectual capital

Global economic shift from manufacturing to service-based economy, intangible resources, increased attention to knowledge and intellectual capital and corporate performance is its ability and the relationship between financial performance and firm performance in emerging and developing economies are highly regarded. The relationship between intellectual capital and corporate performance experimentally in many countries including America, Canada, China, Malaysia, Germany, etc. have been studied. Terms of intangible assets and intellectual capital of the vast literature on accounting, economics and management are used. However, the potential value of future benefits to be reliable measurement is not. In general, productivity in companies dependent on intellectual capital and organizational capabilities, use it as an asset. Stewart points out that in the era of information and knowledge-based economy is a fundamental revolution has occurred, so that alternative information assets, intellectual capital and physical assets are replaced. In fact, the physical and material benefits greatly by the knowledge and communication as the main sources of value and wealth have been replaced. (Afjeh, 2010). New era of new economy is emerging in the form of intangible economy and wisdom. In the strategic management literature, much research has been done on the company's resources and sustained competitive advantage. Intellectual capital includes non-physical resources, the value associated with the staffing, resources, processes and operations in connection with the stakeholders. In organizational terms today, according to the knowledge and skills of manpower, communications and corporate culture and corporate performance is the most important factor for competitive advantage. Efficient and effective management of the company is constantly requires appropriate tools and techniques for understanding contemporary management issues. During today's economy and standard of value creation has changed intangible and intellectual capital leverage new resources to deal with environmental changes and the structure. Business performance increasingly requires active management of intellectual capital and intangible resources to achieve sustainable shareholder returns. Although the knowledge based economy features considerable investment in human capital and information technology but the reporting system for investors to understand and have an accurate picture of the true value of the company and its future. Losses into capital market in case of non-disclosure of information in this kind of investment, suggesting the importance of intellectual capital. Examples of these losses are:

1. Shareholders wisdom may access information related to intangible assets in private meetings with large shareholders may be held, are denied.
2. If the directors of the data from domestic decision in relation to intangible assets without informing other investors can use to increase the likelihood of trading based on confidential information.
3. Three. Risk of improper valuation of companies will rise, and this makes the bankers and investors more risk level for organizations to consider.
4. The cost of capital increases. If disclosure of such information due to the uncertainty regarding the future outlook, a more accurate assessment of the company is to operate and the cost of capital is reduced (Afjeh, 2010).

Principle and foundation of intellectual capital

For the first time in 1969 by John Kenneth Galbraith, economist term intellectual capital to describe
and explain the gap between book value and market institutions used. After his Swedish Accountant Carl Erik Asvyby not reflected in the balance sheet of the traditional intellectual property considered. And perhaps one of the magazines in the early sixties in knowledge about the concepts related to intellectual capital necessary to bring the theoretical considerations. But the creation of intellectual capital statement is an interesting story. In the late sixties, the economist JK Galbraith called the correspondence with his economist friend of his religion Kalsky and others Kalsky due to intellectual capital which he created in the sixties, but also creates. So that today the creation of intellectual capital statement is attributed to Galbraith. In the seventies, the incidence of new approaches in the field of economics devoted considerable resources to create value in organizations is seen as the first material, over time, all have their place to the attention of both: Physical and nonphysical resources and the financial resources and human capital because they felt that managers in organizations with the acquisition of knowledge through innovation and attention to human capital can achieve greater added value. But on a brighter note the intellectual capital can be attributed to the efforts of theorists and researchers in the eighties. The first theoretical work in the field of intangible assets in the early eighties by the Orphans released in Japan but it is interesting to notice that this work has not been translated into other languages. But the second half of the eighties due to intangible assets and intellectual capital took a dramatic turn. Given the knowledge capital, intellectual capital components classification scheme, the commercialization of innovation, according to the value of intellectual capital and brand value and trademarks, the most important field of work and the creation of intellectual capital counts. In the early nineties can be extended to take into account the preamble according to the concept of intellectual capital. In this decade, the field of intellectual capital by developing theories, attention was attracted to organizations. Design issues for knowledge management and intellectual capital, customer capital, as defined by the new elements introduced measurement models and focus on topics such as: intellectual property rights, intellectual monopolies, privileges, intellectual property, brands, and other trademarks are the properties of the decade leave. Finance and Accounting attention to the value of intellectual capital in this decade was highly regarded. In the early nineties, national attention to local frameworks for reporting on intellectual capital and intellectual capital plan was adopted in some countries.

**Components of intellectual capital**

Therefore, to understand the concept of intellectual capital has parts and components that need to be addressed. Broking believes that intellectual capital is comprised of four main components: market assets, human assets, assets and intellectual characteristics of the underlying assets. While Asvyby intellectual capital consists of three categories of intangible assets as: internal structure, external structure of the human part of the company. (Zimmerman, 1983). In sum, several definitions of intellectual capital and its components can be stated that intellectual capital into three categories: human capital, structural capital and customer capital is divided. (Cheng and, etal, 1996).

**Human Capital**

Human capital of an organization's is most important asset and source of creativity and innovation. A tacit knowledge asset of an organization of employees that is among the most vital components of the organization has a considerable impact on performance. However, only the existence of tacit knowledge in an organization is not sufficient for good performance. The goal, converting tacit knowledge into explicit knowledge of employees at all levels of the organization. Thus it will be possible to create value in organizations. Human capital is the sum of the employee's professional knowledge, leadership skills, risk taking, problem solving abilities. (Pulic, 2004). The human capital mix of knowledge, skills, innovation and the ability of participants to perform their duties and powers include the values, culture and philosophy of the company. (Bontis, 1998). In other words, the competence of staff, is their attitude and business acumen to create intellectual capital in the company. Competencies, skills and education, while behavioral components of attitudes of staff job descriptions to enables individual and business acumen to transform everyday activities and solve problems through creative thinking. (Bontis, 1998). Human capital, intellectual capital accounts. In other words, a primary component of intellectual capital is considered for the implementation of activities. Human capital includes factors such as knowledge, skills, abilities and attitude, the result of these factors, encourage employee performance, customers are willing to pay for it and profit from it the way can be achieved.
Human capital includes: Workforce skills and competencies, knowledge areas that are essential for the success of the organization and conduct of them are talented. Customer capital and structural capital to human capital are related. In other words, human capital can be converted to market value of the company and makes it do to become a two-capital others (client structural). In other words, human capital, intellectual capital is operational the other two parts. However, the human capital can be irrelevant and trivial information and knowledge to become useful output and profits and thus gives an overall turnover. (Ali, 1994).

Customer capital

Customer capital as a bridge or catalytic activity is intellectual capital, the main requirements for determining the market value of intellectual capital and thus become the business performance of the company. No capital client, market or business performance can be achieved and not achieved. Customer capital is directly linked to business performance. Customer capital is a major component and essential and valuable intellectual capital that is embedded in the marketing channels and communications company with industry and business leaders. Compared with human capital and structural capital, customer capital more directly affect the realization of value for the Company and its importance is growing and becoming increasingly becomes a critical factor. Research conducted at the University of Michigan has shown that customers are able to maintain trade relations and reduce price volatility and enhance the prestige of the company. (Cheng and, et al, 1996). According to what was said at the World Conference in 2000, the capital value of customer relationships with organizations who they traded with ties to the organization or the organization whose members are established. For example, the customer funds of a trade union relationship with its members. Customer capital represents the potential rather than an organization that has as intangible assets on the outside. Some scholars have raised investment for the customer under the Investment Community. The capital is expressed by the following definitions: (Russian, 1997) Investor relations firm representing relationships with internal and external stakeholders. Elsewhere in the capital, communication is defined as: Investment Community, which includes knowledge of the relationships with customers, suppliers, raw materials, shareholders, partners with similar strategies and so on. (Bontis, 1998). The most important measure of investor communications, are customer relations, relationships with customers, but not the only criterion. Visual communication is the capital of the Company. What is the measure of investor communications, the image of the company depends on. Investor communications is including brand standards, customer loyalty and corporate image in the community and feedback information from the customer and supplier. (Bontis, 1998).

Structural capital

Advynsvn and Malone (1997) Capital structure as hardware, software, databases, organizational structure, organizational patents, trademarks, and all the capabilities that support employee productivity is defined. Capital structure is that when employees go home at night will remain with the company. (Saghafi, 2012). In other words, capital structure, including all non-human accumulated knowledge in an organization. (Sytaraman, 2004) Capital structure is divided into several categories: corporate culture, organizational structure, organizational learning, operational processes and information systems. Organizational culture consists of values, beliefs and norms of behavior that multiplexing has been adopted by all employees. To see what value the business, customers and employees of major corporations and companies should consider them to be. Belief, attitude towards its employees, the organization and the customers are not written rules and standards of behavior are, by Vagheyei the company as an employee working with other approved is emphasized. One of the scholars of intellectual capital, capital structure of the main pillars of learning organizations knows. In his opinion, if the employees with high potential, but is poorly systems, this will prevent the organization from achieving high levels of performance (Saghafi, 2012).

CONVENTIONAL CLASSIFICATION BANKRUPTCY

In general, two groups of bankruptcy, bankruptcy accounting and legal opinion is divided on each of the sections are as follows:

Bankruptcy of Accountants

In terms of accounting, bankruptcy is possible in two ways:

A) Bankruptcy action: If the value of a company’s assets less the liabilities of the company, but the company
sustains activity, bankruptcy activity has occurred, a clear indication of its non-profitable operations of the company, but the company continues to operate in any way.

B) Bankruptcy liquidation: When will corporate debt maturity and liquidity of the bankrupt company is not able to pay it happened that this type of failure occurs.

Bankruptcy in Legal opinion

This type of bankruptcy is possible in two ways:

A) Bankruptcy forced this kind, at least three creditors who demands a certain amount to be allowed to fight the plan.

B) Voluntary Bankruptcy: this type of bankruptcy court in a dispute with your plan will apply.

TYPES OF BANKRUPTCY

Bankruptcy can be generally divided into three categories: normal, fault, and the fraud division.

Normal bankruptcy

According to 412 and 413 of the Commercial Code, the ordinary person is bankrupt material, the merchant or business and who is responsible to stop the payments and pay the loan within three days of interruption or other cash commitments to stop her is obtained from your local office of the General Court stated and treasury bills and commercial offices to submit to the Court. Account must be signed, dated and businessman, reached number and calendar of all movable and immovable property, interrupt merchant all debts and claims in detail as well as harm and personal expenses should be included in it. So if the trader or trading company owes dues within the prescribed stopping the payment of the required documents declared itself competent court is an ordinary bankruptcy (Ghaem Maghami, 2012).

Reasons for Bankruptcy

Determine the reason for bankruptcy and financial problems in any particular case are not easy. In most cases there are several reasons that led to the collapse phenomenon (Sadeghi, 2009). But generally the main reason for the failure of "financial problems" knows. In some cases, the cause of the failure is determined by examining financial statements and accounting records of the analysis of the financial situation of companies have the experience of declining can easily identify and determine causes of bankruptcy. But sometimes some turnover issues in a business unit in a relatively short period of bankruptcy protection and hides the eyes of Accountants (Newton, 1998). The reasons for the failure of organizational and other divides are into two categories.

METHOD

In general it can be concluded that this study is based on research and practical method based on the method of data collection, descriptive, correlational, and after the occurrence.

Statistical Society: The population in this study are listed companies in Tehran Stock Exchange., And 120 companies among the listed companies in Tehran Stock Exchange, were selected.

Measurements and data collection: In this research, data and financial reports Stock Exchange, the Securities and Exchange extracted from libraries and databases used.

Method of data analysis: In this study to extract and analyze data from SPSS program was used.

RESEARCH DOMAIN

This study consists of three domains:

A: Thematic area: The effect of intellectual capital is the risk of bankruptcy.

B: spatial and temporal scope: Financial statements of listed companies in Tehran Stock Exchange are between years of 2008 to 2013.

RESULTS

Table 1 - Results of Kolmogorov-Smirnov test for normality of the dependent variable for determining bankruptcy risk of listed companies in Tehran Stock Exchange

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Corporate insolvency risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Society number</td>
<td>120</td>
</tr>
<tr>
<td>SD</td>
<td>15.78</td>
</tr>
<tr>
<td>The Kolmogorov-Smirnov Z</td>
<td>3.73</td>
</tr>
<tr>
<td>Significant level</td>
<td>0.524</td>
</tr>
</tbody>
</table>

The results in Table 1 and given that the value of the Kolmogorov - Smirnov 0.95 More than 0.05. (P-value
≥ 0.05), so we can conclude the distribution of the dependent variable (bankruptcy risk) in the population normal. Therefore, to assess the assumptions of parametric tests should be used. In this section, each of the research hypotheses were analyzed using appropriate tests. To analyze four main hypotheses and subsidiary of Pearson's correlation coefficient was used.

**Main hypotheses**

Intellectual capital has an effect on the bankruptcy risk of listed companies in Tehran Stock Exchange.

**Table 2: Pearson correlation coefficient to determine the relation between intellectual capital and risk bankruptcy**

<table>
<thead>
<tr>
<th>Intellectual Capital</th>
<th>Statistics</th>
<th>Corporate insolvency risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson</td>
<td>-0.682</td>
<td></td>
</tr>
<tr>
<td>Significant level</td>
<td>0.003</td>
<td></td>
</tr>
<tr>
<td>Number of samples</td>
<td>120</td>
<td></td>
</tr>
</tbody>
</table>

The results are given in Table 2 and the significance level of the test error for a confidence level of 0.95 is less than 0.05, so we can say that the main hypothesis is confirmed and agreed between the intellectual capital and risk bankruptcy in Tehran Stock Exchange has a significant relationship. The relationship between the two variables is negative due to the negative correlation coefficient and its value is equal to -0.68.

**First sub-hypothesis:** Human capital has an effect on the bankruptcy risk of listed companies in Tehran Stock Exchange.

**Table 3: Results of Pearson’s correlation to determine the relationship between human capital and corporate insolvency risk**

<table>
<thead>
<tr>
<th>Human Capital</th>
<th>Statistics</th>
<th>Corporate insolvency risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson</td>
<td>-0.556</td>
<td></td>
</tr>
<tr>
<td>Significant level</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Number of samples</td>
<td>120</td>
<td></td>
</tr>
</tbody>
</table>

The results are given in Table 3 and the significance level for the test error at 0.95 is less than 0.05, so we can say that the first hypothesis is confirmed and significant relationship exists between the sub-human capital and risk bankruptcy listed companies in Tehran Stock Exchange. Also, due to the negative relationship between two variables, Pearson correlation coefficients were negative, and its value is equal to -0.556.

**Second sub-hypothesis:** Capital organizational structure affects the risk of bankruptcy of the listed companies in Tehran Stock Exchange.

**Table 4: Pearson correlation coefficient to determine the relation between capital structure and corporate bankruptcy risk firms**

<table>
<thead>
<tr>
<th>Capital organizational structure</th>
<th>Statistics</th>
<th>Corporate insolvency risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson</td>
<td>-0.742</td>
<td></td>
</tr>
<tr>
<td>Significant level</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Number of samples</td>
<td>120</td>
<td></td>
</tr>
</tbody>
</table>

The results are given in Table 4 and the significance level for the test error at 0.95 is less than 0.05, so we can say that the second sub-hypothesis is confirmed and there is no significant relationship between capital structure and corporate insolvency risk of listed companies in Tehran Stock Exchange. Also, due to the negative relationship between two variables, Pearson correlation coefficients were negative, and its value is equal to -0.742.

**Third sub-hypothesis**

Investor / client relationship has an effect on the bankruptcy risk of listed companies in Tehran Stock Exchange.

**Table 5: Results of Pearson's correlation to determine the relationship between organizational structure and venture capital firms bankruptcy**

<table>
<thead>
<tr>
<th>Investor / client relationship</th>
<th>Statistics</th>
<th>Corporate insolvency risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson</td>
<td>-0.551</td>
<td></td>
</tr>
<tr>
<td>Significant level</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Number of samples</td>
<td>120</td>
<td></td>
</tr>
</tbody>
</table>

The results are given in Table 5 and the significance level for the test error at 0.95 is less than 0.05, so we can say that the third sub-hypothesis is confirmed and there is no significant relationship between the investor / client relationship and the risk of bankruptcy of the listed companies in Tehran Stock Exchange. Also, due to the negative relationship between two variables, Pearson correlation coefficients were negative, and its value is equal to -0.551.

**DISCUSSION AND CONCLUSION**

The research findings showed that the results in Table (1) and given that the value of Kolmogorov - Smirnov 95/0 More than 05/0,. (P-value ≥ 0/05), so the
result. Let the distribution of the dependent variable (bankruptcy risk) in the normal population. Therefore, parametric tests were used to assess the hypotheses that: The results of the main hypothesis, the results in Table 2, and considering the significant level for the test error at 95/0 less than 05/0, so the original hypothesis was confirmed by the intellectual capital of the listed company's bankruptcy risk. There was a significant relationship between the Tehran Stock Exchange as well as the relationship between two variables, was reversed. The hypothesis of the research results, Bontis (1998), Palyk (2000) and Alavi and colleagues (2007) is consistent. The first sub-hypothesis, the results in Table 3 and considering the significant level for the test error at 95/0 less than 05/0, so we can say that the first hypothesis was confirmed between human capital and risk bankruptcy subsidiary companies accepted in Tehran Stock Exchange, there was a significant relationship between the two variables as well as the relationship was reversed. This hypothesis Tano Research (2005), Khani et al (2010), Gale and Verchya (2007) is consistent. The second hypothesis is minor, given that the results in Table 4, the significance level for the test error at 95/0 less than 05/0, thus, the second hypothesis is supported by the subsidiary and the capital of the organizational structure and bankruptcy risk of listed companies in Tehran Stock Exchange, there was a significant relationship between the two variables was reversed and the results of the thesis research results, Tano et al (2005), Anvari et al (2005), Bontis (1998), Palyk (2000) is consistent. The results of the third sub-hypothesis, the results are given in Table 5 and the significance level for the test error at 95/0 less than 05/0, thus, the fourth hypothesis was confirmed by the investor / client relationship and the risk of bankruptcy of the listed companies in Tehran Stock Exchange, there was a significant relationship and the inverse relationship between the two variables and the results of this hypothesis, the results Palyk (2000) and Alavi and colleagues (2007) and Zhygal and Malone (2010) is consistent.

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