

**THE MEDIATING EFFECT OF CORPORATE PERFORMANCE  
ON THE INFLUENCE OF INTELLECTUAL CAPITAL AND  
PERCEIVED ENVIRONMENTAL UNCERTAINTY ON  
CAPITAL STRUCTURE**

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*To my Father “Reza” and my Mother “Zarrin”*

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## ABSTRACT

Understanding and determining capital structure are important for developing countries because firms in the countries are faced with highly competitive and dynamic environment. Financial accounting literatures have highlighted the important role of non-financial factors such as intellectual capital (IC) as a main value added factor for companies, and perceived environmental uncertainty (PEU) as unpredictable contingency factor from a dynamic environment on corporate performance. Therefore, it is important for organizations rely more on non-financial than financial factors to achieve higher competitive advantage. Moreover, the relationship between corporate performance and capital structure is strong. Due to the influence of non-financial factors of IC and PEU on corporate performance, capital structure decision making will be difficult. Identifying the most important non-financial factors affecting corporate performance from these environments and their relationship with capital structure is the main issue in today's dynamic conditions. This research examined the relationship between non-financial factors of IC and PEU and evaluated their influence on capital structure directly or indirectly by considering corporate performance as mediator. Questionnaires were distributed to 339 public listed Iranian manufacturing companies selected by census. Data were analyzed using structural equation modeling. The main findings of this study are IC can enhance corporate performance, PEU is positively linked to corporate performance, and corporate performance is positively linked to capital structure. The results also indicated a full mediating role of corporate performance in the relationship between PEU and capital structure. This study contributes to determining capital structure decision making, by considering IC and PEU in the context of companies in Iran. Further in-depth research is needed to examine the links between non-financial factors with different measurement perspectives and capital structure to develop a deeper understanding of their effect on capital structure.

## ABSTRAK

Memahami dan menentukan struktur modal adalah penting bagi negara-negara membangun kerana organisasi di negara-negara tersebut berhadapan dengan persekitaran yang kompetitif dan dinamik. Literatur perakaunan kewangan telah menekankan tentang kepentingan peranan faktor-faktor bukan kewangan seperti modal intelek (IC) sebagai faktor nilai tambah utama bagi organisasi, dan tanggapan persekitaran tidak menentu (PEU) sebagai faktor luar jangkaan yang tidak dapat diramalkan dari persekitaran yang dinamik ke atas prestasi korporat. Oleh itu, adalah penting bagi organisasi untuk bergantung kepada faktor-faktor bukan kewangan daripada faktor kewangan untuk mencapai kelebihan daya saing yang lebih tinggi. Selain itu, hubungan antara prestasi korporat dan struktur modal adalah kuat. Disebabkan pengaruh faktor bukan kewangan IC dan PEU ke atas prestasi korporat, pembuatan keputusan struktur modal akan menjadi sukar. Pengenalpastian faktor bukan kewangan yang paling penting yang mempengaruhi prestasi korporat daripada persekitaran ini dan hubungan mereka dengan struktur modal merupakan isu utama dalam keadaan yang dinamik pada hari ini. Kajian ini mengkaji hubungan antara faktor bukan kewangan IC dan PEU dan menilai pengaruh mereka ke atas struktur modal secara langsung atau tidak langsung dengan mempertimbangkan prestasi korporat sebagai perantara. Borang soal selidik telah diedarkan kepada 339 syarikat pembuatan tersenarai awam Iran yang dipilih secara banci. Data telah dianalisis dengan menggunakan pemodelan persamaan berstruktur. Penemuan utama kajian ini adalah IC boleh meningkatkan prestasi korporat, PEU mempunyai hubungan positif dengan prestasi korporat dan prestasi korporat mempunyai hubungan positif dengan struktur modal. Dapatan kajian juga menunjukkan peranan perantara penuh prestasi korporat dalam hubungan antara PEU dan struktur modal. Kajian ini menyumbang kepada penentuan pembuatan keputusan struktur modal, dengan mempertimbangkan IC dan PEU dalam konteks syarikat di Iran. Kajian yang lebih mendalam adalah diperlukan untuk mengkaji hubungan antara faktor bukan kewangan dengan perspektif pengukuran yang berbeza dan struktur modal untuk membangunkan pemahaman yang lebih mendalam tentang kesannya pada struktur modal.

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**LIST OF ABBREVIATIONS**

<i>BP</i>	-	Business Perspective
<i>BSC</i>	-	Balanced Scorecard
<i>Cus.P</i>	-	Customer Perspective
<i>CP</i>	-	Corporate performance
<i>CS</i>	-	Capital Structure
<i>FP</i>	-	Financial Perspective
<i>HC</i>	-	Human Capital
<i>IC</i>	-	Intellectual Capital
<i>LP</i>	-	Learning and Growth Perspective
<i>PEU</i>	-	Perceived Environmental Uncertainty
<i>PLS</i>	-	Partial Least Squares
<i>RBV</i>	-	Resource-based View
<i>RC</i>	-	Relational Capital
<i>R&amp;D</i>	-	Research and Development
<i>SC</i>	-	Structural Capital
<i>SEM</i>	-	Structural Equation Modelling
<i>SG&amp;A</i>	-	Selling, General and Administrative Expenses
<i>SpC</i>	-	Spiritual Capital
<i>SPSS</i>	-	Statistical Package for Social Sciences



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## CHAPTER 1

### INTRODUCTION

#### 1.1 Overview of the Study

In recent decades, the choice between debt and equity is aimed to find the right capital structure to maximize stockholder wealth (Messbacher, 2004; Worthington and West, 2001; Saeedi and Mahmoodi, 2012). Companies try to select an appropriate mix of financing sources and securities (Shah and Hijazi, 2004; Afza and Hussain, 2011; Myers, 2001; Saeedi and Mahmoodi, 2012; Attar, 2014). On the other hand, all capital structure researchers seek to understand and determine all the possible factors that have influence on financing decisions (Mat Nawi, 2015; Attar, 2014; Chen, 2004) because according to Booth *et al.* (2001), industry structure, market structure, location, tax regulation and the nature of debt and equity markets in which a company operates have effected on the capital structure decisions.

According to stakeholder theorists, non-financial stakeholders have relationship with capital structure decisions (Hillier *et al.*, 2008), and companies can also create and improve value by disclosing non-financial information (Edvinsson and Malone, 1997; Stewart, 1997; Welch, 2004; Huang and Ritter, 2009; Attar, 2014). As argued by Kaplan and Norton (1996b), the application of non-financial variables to measure "intangible" assets in predicting future financial performance is better than using historical accounting measures. According to Ittner and Larcker (2001, 2003), examples of non-financial factors are customers, suppliers, competitors and employees. The authors suggested these factors as non-financial stakeholders and believed that companies should determine their

impacts in order to improve their business processes. Similarly, Myers and Saretto (2010) added new entrants, governments, and regulators into the categories of non-financial stakeholders. Titman (1984) was the first to claim that stakeholders are positively related to the companies' products or assets. This means that by paying more attention to improving its stockholders' value even with increasing cost, can help the company to maximize its value. Therefore, companies which have unique products or assets have strong incentives to maintain lower leverage in financing decisions. However, there is a growing literature which examines the impact of non-financial stakeholders on capital structure.

In recent years, there has been an increasing amount of literature to find the signals conveyed by non-financial stakeholders to capital structure decisions. Furthermore, it is good to consider a companies' ability to adjust its capital structure (Kale and Shahrur; 2007; Perotti and Spier, 1993; Sarig, 1998), higher employees wage demands (Hillier, *et al.*, 2008) and concerns of customers (Titman, 1984) because these factors are non-financial stakeholders. Up to now, a number of studies highlighted the significance of government's support for certain industries and its influence on competitive advantage and their financing decisions (Schwartz and Clements, 1999; Mitra and Webster; 2008).

The strategic management model suggests that intended strategy is an outcome of certain actions taken by companies'. In contrast to this idea, Hill and Jones (1995) argued that the companies' external analysis and internal analysis can be considered as the companies' product. The understanding of the companies' external environment to identify opportunities and threats is the external analysis. Conversely, internal analysis will be understanding the strengths and weaknesses of the company to identify the resources available to create value and competitive advantage for the organization (Hill and Jones,1995).

By reason of the revolution in thinking about the source of value, many countries and even companies have repositioned their strategies. In this century, with the emergence of knowledge-based economy, many business owners or managers

attempt to create shareholder value by using knowledge through recognition of intangible assets which are known as intellectual capital (IC) (Gan and Saleh, 2008; Bontis, 1999; Dumay, 2011).

In this study, IC performance is generally defined as the efficiency of investments in intangible resources in the process of value creation (Survilaite *et al.*, 2015; Cricelli *et al.*, 2014; Chang, 2007). IC is also defined as knowledge assets that can be converted into value (Edvinsson and Sullivan, 1996). Human capital, relational capital, structural capital and spiritual capital are defined as four component of IC (Ismail, 2005). Therefore, it is vital to measure its performance to estimate the effectiveness of value creation in companies as they are not reflected in the financial statements. Likewise, Mosavi *et al.* (2012) suggested that there is a statistically significant relationship between human capital efficiency and financial performance in Iran. The result indicated that Iranian companies have succeeded in fully utilizing IC.

Today, IC is an indispensable resource for corporate success in knowledge economy (Cabrita and Vaz, 2006). Several successful companies recognize that investment in IC is very essential to their business because it can create high value of products and services (Chang, 2007) with better use of the company's physical assets (Wang, 2006). Additionally, in the knowledge based economy, business resources are 80% intangible and 20% tangible (Roos *et al.*, 2005). The existing corporate performance measurement system requires relevant information about IC in order to analyze its performance and efficiency (Ahmad and Mushraf, 2011).

Bornemann (1999), Emadzadeh *et al.* (2013) and Pulic (1998) noted that IC measurement is vital in corporate performance measurement. The purpose of measuring, analyzing and creating IC in today's knowledge economy is to gain competitive advantage (Barney, 1991; Yitmen, 2011; Abadi, 2013). This competitive advantage and value creation efficiency are from human capital creativity, operational structure, customer and supplier relations and spiritual capital.

Several strategic management researchers such as Dill (1958), Lawrence and Lorsch (1967); Miles and Snow (1978), Porter (1980); Bourgeois (1980); Hambrick (1981); Dess and Davis (1984); Dess and Beard (1984); Mintzberg (1988); Hamel (1991); Kotha and Valdamani (1995); Mat Nawi (2015); Attar (2014); Aftab *et al.* (2012) and others have directly or indirectly tried to theorize and analyze the effects of single or multiple constructs of company structure, environment and strategy on corporate performance.

On the other hand, traditionally, performance measurement systems are based on financial indicators which focus on short term view strategy. These ways of evaluating corporate performance are insufficient ways for managers to run business effectively since financial indicators are measuring past and historical performance (McCuun, 1998). This one dimensional method causes inconsistencies and various errors such as providing deficiency and bias data of any statistical analysis (Bitici *et al.*, 1998). In order to have multidimensional view and solve these problems, the balance score card (BSC) approach developed measurement indicators which consider both financial and nonfinancial measures.

Parallel to the above discussion, the global economy is becoming increasingly uncertain, with rapid technological advances, constantly changing customer demands, varying deregulation and globalization and the dismantling of trade barriers (Mia and Clarke, 1999; Schulz *et al.*, 2010). Hence, it is important that management's effectiveness by improved understanding how much these factors affect corporate performance. This is because these uncertain factors can significantly influence companies' chances of survival and success (Kaplan and Norton, 2001; Chenhall, 2003).

Likewise, management can reduce their environmental impact by increasing awareness of environmental change which include social demands on companies' economic activity and political events (Galdeano-Gómez and Céspedes-Lorente, 2008). Some authors have suggested that companies can improve their competitiveness by considering environmental circumstance and managing them (Trung and Kumar, 2005). Environmental uncertainty was also used as one of the

variables in Rumelt (1991) and Boccia and Alfred (2009) studies who examined its influence on corporate performance.

Based on the previous discussion, financial accounting and strategic management researchers such as Simerly and Li, (2000); Child, (1972); Dess and Beard, (1984); Emadzadeh *et al.* (2013); Pulic, (1998); Kochhar, (1997); Robb and Coleman (2010), accepted that both IC performance and organization's environment action play important roles in achieving sustainable competitive advantage and protection of success position in the market. Indeed, there is a close relationship between organizations' perceived environmental uncertainty and IC with corporate performance.

Moreover, examining the relationship between contingency factors related to the companies value and their capital structure is a relatively new and important area of strategic research (Balakrishnan and Fox, 1993; Barton and Gordon, 1988; Bromiley, 1990; Kochhar, 1996; Kochhar and Hitt, 1998; Porter, 1992). Capital structure has long been an important issue from a financial economics standpoint since it is linked with a companies' ability to meet the demands of various stakeholders (e.g., Modigliani and Miller, 1958, 1963). In terms of strategic research, it is known that external factors may influence the development of a companies' capital structure, and the choice of capital structure will have a direct effect on competitive capabilities (Balakrishnan and Fox, 1993; De Long and Summers, 1992; Kester and Luehrman, 1992; Kochhar and Hitt, 1998; Porter, 1992; Scherer and Ross, 1990). Abzari *et al.* (2012) suggested that capital structure of Iranian companies is systematically different across industry classes. The authors highlighted that it may be because of the differences in external fund requirement based on technology differences that play a leading role in determining the inter-industry variation in capital structure.

## 1.2 An Overview on Iranian Economy

By the end of the 20th century, the Iran economy faced many obstacles, such as market forces, global financial crisis, war and international sanctions (Gheissari, 2009). The international sanctions have limited iranians export and import scope. In spite of the international sanctions, in recent decades, Iran has experienced a wide range of changes. The important changes included shifts in the relationship between urban and rural economies, ensuing social mobility, the nationwide growth of the middle class and a higher literacy rate, establishment of high-tech companies, development of internet network all within the context of the country's evolving domestic and international politics (Esfahani *et al.*, 2013).

Notwithstanding the international sanctions relating to the nuclear program of the Iranian government as well as the global financial crisis in 2008, the value of Iranian companies kept growing (Fassihi, 2010; Rhoads and Fassihi, 2011) at a moderate stage. According to International Monetary Fund 2010 report and World Bank 2011 statistics, Iran's economy was the eighteenth largest economy in the world with regard to purchasing power parity. This economy is changing from a centrally planned to a free market economy with a large public sector accounting for an estimated 50 percent of the economy. According to the Economic report of 2009, Iranian companies ranked 39<sup>th</sup> in 2008 in terms of annual growth rate of industrial production. This growth rate has shot up in the ranking to 28<sup>th</sup> of 69 places from 2008 to 2009 (Times, 2012).

According to Esfahani *et al.* (2013) the growth and development of Iranian firms are strongly related to their organizational sector, economic state and governmental system. In addition, capital structure of Iranian companies is also determined by the sectors and their financial factors or financial decisions to invest. The non-financial factors such as the economic sanctions by European countries and United states (Torbat, 2010) are likely to be additional determinant factors of the capital structure of Iranian companies. The financial factors, such as growth, profit, and tax rates (Bagherzadeh, 2003) made differences in a data set of capital structure decision in comparison with developed countries.

At the same time, oil revenues have helped the government to shield the population from some of the adverse consequences of the sanctions. Due to the sanctions, there is no foreign investment in Iranian manufacturing and energy sectors. The government adjusted different policies and has used a portion of the country's oil revenues to provide investment loans to domestic private investors to increase investment by public enterprises. According to a review of the economy (2014), growth in the Islamic Republic of Iran is anticipated to improve significantly from -1.7 percent in 2013 to 1.5 percent in 2014. The inflation rate for the Islamic Republic of Iran is expected to decline from 23.2 percent in 2013 to a still significantly elevated 35.0 percent in 2014.

Iran is one of the developing countries and it is faced with many of the same problems as other countries have. The economy of Iran is closed to foreign funds due to political problems such as US sanctions. The economic conditions are unstable in Iran and that makes the market risk, and the number of participating companies in the capital market is small. So there is not enough competition which can make more efficient. In addition, there are other problems involved in Iran's economic and capital market such as: lack of functionality of the equity market, Tehran Stock Exchange and not having the new and various capital market instruments, such as bonds (Times, 2012).

Iran was selected for this study because, from an institutional perspective, it differs substantially from the other developing countries (Mashayekhi and Bazaz, 2008). Iran, located in the Middle East, a politically troubled and unstable region of the world, have unique environmental characteristics. Searching through different databases, no related study on the mentioned variables among the surrounding countries, such as Saudi Arabia, Kuwait, Jordan, Egypt, or Syria could be found. Moreover, Iran is a strict Islamic country. As a result, its social and business activities are based on fundamental religious laws and regulations. Unlike countries with more developed economies, the main objective of Iranian trades does not appear to be creating value for the shareholders. In Iran, there is a more objective based on the Islamic Shariah Law. The limited information on the capital structure of Iranian companies gives rise to inadequacy in describing the country's capital structure; it



only attempts to determine a set of explanatory factors (i.e. liquidity, effective tax rate, payout ratio, non debt tax shield and uniqueness) affecting the choice of capital structure. Studies in the country context, such as Shahjahanpour *et al.* (2010), Kordestani and Najafiomran (2008) and Bagherzadeh (2003), used secondary data obtained from the financial statements of Tehran stock exchange listed corporations. These studies showed that decision on capital structure of Iranian companies were likely tending to the content of the pecking order theory as compared to the trade-off theory.

All the above-mentioned sectors in Iran rely more on debt financing, as 60% of the overall market assets are debt. Companies are not issuing debt instruments in Iran, and thus they rely more on banks. More than 80% of companies' debt is short term like other developing countries (Times, 2012).

### **1.3 Problem Statement**

Making high-quality strategic decisions are a critical factor in establishing long term success of a company. Since there are a lot of complex and often contradictory factors influencing the capital structure decision-making, the future prediction will then be difficult. Therefore, the ability to make high-quality strategic decisions pose a major challenge to managers.

According to Balakrishnan and Fox (1993); Bromiley (1990); Kochhar (1997); Kochhar and Hitt (1998) and Kole *et al.*(2010), examining the relationship between the competitive factors related to the ability of companies and their capital structure has been an important area in financial accounting and strategic management research. Since the capital structure has a link with a company's ability to meet the demands of various stakeholders, companies that can potentially impose high costs on their customers, workers, and suppliers in the event of liquidation tend to choose lower debt ratios (Titman, 1984; Nguyen and Ramachandran, 2006; Mat Nawi, 2015). Thus has long been an important issue from a financial perspective (Modigliani and Miller, 1958, 1963). Furthermore,

the role of non-financial factors will appear in global competition (Malgharni *et al.*, 2010; Zuriekat *et al.*, 2011; Mat Nawi, 2015). Today, companies should increase their power in competitive markets.

While there are broad literature (Wiwattanakantang (1999); Pandey (2004); Bhaduri (2002); Chen (2004); Huang and Song (2005); Buferna *et al.* (2005); Shah and Khan (2007); Boodhoo *et al.* (2008); Salehi (2009); Karadeniz *et al.* (2009); Liu and Zhuang (2009); Chakraborty (2010); Chen and Chen (2011); Afza and Hussain (2011); Saeedi and Mahmoodi (2011); Abzari *et al.* (2012)) exploring the use of financial performance to determine capital structure, there is little empirical evidence regarding the use of non-financial performance to determine capital structure (Mat Nawi (2015); Attar (2014)).

Second, in order to recognize non-financial factors that contribute to the success of the company, IC and PEU with many different factors that have an influence on performance and shareholder value creation process. Porter (2004) argued that strategy variations and strategy selection depend on how the business is harmonized with the environment. The environmental circumstances lead firms to change their strategy and their objectives (Garengo *et al.*, 2005). Generally, management should be able to respond to those uncertain changes such as improvement of technology and economic growth (Hill and Jones, 2013). In line with the above, previous studies such as Firer and Williams (2003) and Chen *et al.*, (2005) showed that there is a positive and significant relationship between IC and corporate performance. In addition, researchers such as Ittner and Larcker (1997), Elbanna and Alhwarai (2012), Watson *et al.* (2004), Wagner (2005) and Link and Naveh (2006) have reported that environmental uncertainty has an influence on corporate performance and is a driver for sustainable competitive advantage.

Of the above mentioned reasons, this study also supported the suggestion that managers should focus on a firm's long-term success factors such as employee satisfaction, customer satisfaction, innovation and internal business process efficiency by using non-financial performance. When they are using the relevant

measurement, they will get accurate information and then they will be able to improve their performance in an unsustainable competitive environment.

Although there has been few empirical research investigations into IC and corporate performance in Iran a recent study by Sajedi and Talebian (2015) indicated that IC had a positive and significant effect on staff organizational performance and also, the relationship between sub-components of IC with organizational performance was positive and significant in a similar study by Fathi *et al.* (2013) found that value added of structural capital has positive significant and human capital has significant positive impact on financial performance among 49 Iranian listed companies. The above mentioned researchers did not consider spiritual capital as the fourth component of IC in their research. Beshkooch *et al.* (2013) and Ahangar (2011) have also conducted research on IC and performance in Iran, but their research did not include spiritual capital as the fourth component of IC. Further, Emadzadeh *et al.* (2013) also examined IC and corporate performance among automobile manufacturing plants in Iran and also did not include spiritual capital. In fact, there is no clear definition concept of spiritual capital that is generally accepted by academics and economists (Ismail, 2005; Gillett, 2002). This indicated that spiritual capital is relatively new.

Therefore, it has been suggested that all companies should recognize the relationship between IC and corporate performance. Parallel to the above, there is a lack of information and scientific resources (literature) on spiritual capital specially in Iran, are the reasons to use spiritual capital as the fourth component of IC in this study. Although, it is clear that manufacturing company operating in uncertain environment and more need to improve their competitive advantage (Duncan (1972), there has been no detailed investigation on IC and corporate performance that encompass all manufacturing listed company in Iran by using Balanced scorecard.

In relation to the above discussion, this study contributes to the body of knowledge on capital structure in several ways. First, there is no sufficient published studies which examine the capital structure decision, considering financial and non

financial factors. Thus, this study will offer a theoretical rationale and empirical assessment for the argument that decisions concerning the choice of capital structure need to be linked with a firm's financial and non financial performance. In relation to the above, Hoque (2005) believed that the non-financial measurement is more useful to improve organizational performance. Lynch and Cross (1991), Kaplan and Norton, (1996b) and Otley (2003) noted that when the management uses traditional financial performance measurement, they will be unable to reflect the influence of today's changing business environments on the company performance. Previous researches such as Salehi (2009), Saeedi and Mahmoodi (2011) and Roden and Lewellen (1995) suggested the relationship between firm performance and capital structure is significant. Therefore, this study has filled the gap in knowledge by clarifying the effect of financial and non financial factors on determining capital structure.

In addition to the theoretical contribution, this study contributed to the previous literature practically since there has been limited study which discussed spiritual capital within the IC framework. Thus, this study has filled the gap by providing an additional insight into the role of spiritual capital on corporate performance. Spiritual capital is much more important in Islamic developing countries, specially in Iran because social and business activities are based on fundamentalist religious laws and regulations and has a positive impact on the performance of organizations (Ismail, 2005).

Therefore, examining the influence of non-financial factors on corporate performance from internal and external environments and their relationship with capital structure is the main issue in today's dynamic conditions. By considering the above mentioned issues and according to previous studies which used corporate performance to determine capital structure, this study investigated the mediating role of corporate performance on the impact of IC and PEU on capital structure. Therefore, examining the relationship between non-financial factors from internal (IC) and external (PEU) and evaluating their influence on capital structure directly or indirectly by considering corporate performance as mediator are the main objectives of this study. Thus, the finding of this study has filled the gap regarding the effect of

IC and PEU on capital structure by using corporate performance as a mediator in Iran.

Cultivating from the above discussion, it is obvious that managers should know what structural changes for capital structure are required in order to sustain a high level of competitive advantage in an unsustainable environment (Bagherzadeh, 2004). They also must be able to choose the right fit between internal structure and external environment. Therefore, based on this, this study examined whether there is a significant relationship between firms performance and capital structure among manufacturing companies in Iran.

Consequently, based on the related literature, there is no empirical study about the relationship between IC's fourth component of spiritual capital, PEU and corporate performance on capital structure in manufacturing sector companies of Iran as an Islamic and developing country. Therefore, the main goal of this study was to examine firm performance as a mediator to identify the influence of IC and PEU on capital structure.

The finding of this study presented a scheme for further and better understanding about IC and PEU and their influence on corporate performance and used them to find optimal capital structure in Iran. This study may motivate Iranian manufacturing firms to better understand the role of their IC and their unstable environment in determining their optimal capital structure.

#### **1.4 Purpose of the Study**

Previous studies have reported that IC, perceived environmental uncertainty, corporate performance and capital structure are important factors in financial accounting and strategic management area. Thus, this study aimed to address the importance of their relationships. This study was designed specifically to identify the mediating effect of corporate performance on the relationship between IC and PEU and capital structure decision making among the manufacturing companies in Iran.

## **1.5 Objectives of the Study**

The purpose of this study was to obtain quantitative results from a sample of primary data to achieve the following research objectives:

1. To examine the influence of IC on corporate performance among manufacturing companies in Iran.
2. To investigate the relation between PEU and corporate performance among manufacturing companies in Iran.
3. To evaluate the relationship between PEU and IC among manufacturing companies in Iran.
4. To evaluate the relationship between PEU and capital structure among manufacturing companies in Iran.
5. To evaluate the relationship between IC and capital structure among manufacturing companies in Iran.
6. To evaluate the relationship between corporate performance and capital structure among manufacturing companies in Iran.
7. To investigate the mediating role of corporate performance on the effect of association between IC and PEU on capital structure among manufacturing companies in Iran.

## **1.6 Research Questions**

Based on the problem statement, the research questions of the study are as follows:

1. Is there a positive and significant influence of IC on the corporate performance among manufacturing companies in Iran?
2. Is there any relation between PEU and corporate performance among manufacturing companies in Iran?

3. Is there any relation between PEU and IC among manufacturing companies in Iran?
4. Is there any relation between PEU and capital structure among manufacturing companies in Iran?
5. Is there any relation between IC and capital structure among manufacturing companies in Iran?
6. Do corporate performances have a relation with the capital structure among manufacturing companies in Iran?
7. Does corporate performance mediate the effect of the relationship between IC and PEU on capital structure among manufacturing companies in Iran?

### **1.7 Scope of the Study**

Investigating the mediating effect of corporate performance on the influence of IC and PEU on capital structure is the focus of this study. It included four components of IC i.e. Human capital, Structural capital, Relational capital and Spiritual capital (as a new component). This study also used suppliers' actions, customer demands, market activities of competitors, deregulation and globalization, government regulations policies, economic environment, industrial relations, production and financial market conditions as components of PEU as the independent variable. Corporate performance was used as the mediator variable. Corporate performance was divided into financial and non-financial perspective. Capital structure was intended as the dependent variable.

The target population of this study was Iranian manufacturing companies listed under Tehran Stock Exchange which consists of a total of 40 types of industries of which 339 were manufacturing companies (Asiaei and Jusoh, 2015). Due to the recent existence of several factors influencing manufacturing industries such as environmental progress, the use of new production processes and current trends in performance measurement, manufacturing companies were chosen as the

subject of this study. The primary data were gathered from manufacturing companies via questionnaire. Top managers of the firms were selected as respondents to represent the companies.

## **1.8 Significance of Study**

Unlike previous studies which mainly focus on the firm financial variables, this study develops a model of capital structure determinants by integrating related non-financial factors with internal and external environment.

A performance metric is important to understand whether the performance is improving or worsening and whether corrective action is needed urgently (Roussel and Cohen, 2005). Firm performance is an indicator to measure how well market orientation and financial goals are fulfilled by an organisation (Li and Lin, 2006). Different researchers have attempted to assess firm performance in different ways, but most performance metrics up to now are the combination of operational and financial dimensions. According to Venkatraman and Ramanujam (1986), financial dimensions should include profit, return on investment, growth of sales, business effectiveness and performance. While Min and Mentzer (2004) measured business performance in terms of availability, variety of product/service offering, timeliness, profitability and growth. In addition, Tracey *et al.* (2005) used perceived product value, customer loyalty, market performance and financial performance to measure business performance. Furthermore, Li *et al.* (2006) applied market share, return on investment, the growth of market share and sales, growth in return on investment, profit margin on sales and overall competitive position to measure organisational performance. Further, Cook *et al.* (2011) combined operational and financial dimensions to define the construct of firm performance.

Moreover, firms strive to sustain and improve current performance by considering and managing all internal and external factors that have significant influence on their decisions (Bagherzadeh, 2004). If a manager knows which factor has influenced on the company's performance, he can suggest that the



company invest more on this important factor. This study is the first study in Iran that investigates the determinant of capital structure by considering different groups of non-financial factors.

As mentioned before, there is a relationship between IC and PEU and firm performance, but there is very number limited research has been conducted on how changes in IC and perceived environmental uncertainty have caused firm performance to change. This change in performance is transformed into capital structure decision making. Finding the optimal capital structure is very important for a firm because the structure aids managers sustain the firm's survival in the market. Choosing optimal capital structure, capturing and controlling intangible factors from internal structure and external environment can create competitive advantage for long run activities. In line with the above, Abzari *et al.* (2012) conducted a research on capital structure in Iran and concluded that the industry effect appears to be an important factor which determines the firm's capital structure decision, and affect industrial products market competition. According to the resercher knowledge, this study is the first study that investigates the direct association between IC, PEU, corporate performance and capital structure and the mediating role of the corporate performance.

IC in the last decade has been recognized as a decisive resource for firms to perform and acquire competitive advantage (Bontis, 2002a; Kong and Thomson, 2009; Stewart, 1997b; Sullivan, 1998). Several scholars have evaluated the role of IC in connection with firm performance and value creation capabilities of the firm (Edvinsson and Malone, 1997b; Roos *et al.*, 1998b; Sullivan, 1998; Sveiby, 1997), and the phenomenon of IC has now been recognized a worthy idiom in both theoretical and empirical research (Maditinos *et al.*, 2010) even in the presence of conflicting findings. Therefore, this study provides meaningful insight into the strategic management literature by providing relevant information to academics and business practitioners and advisors (e.g. financial providers or policymakers). Spiritual Capital (Gillett, 2002; Ismail, 2005) was added as the fourth component of the IC as an independent variable (IV). Corporate performance was broken into financial and non-financial dimensions as mediator variable (MV).

## **1.9 Definitions of Key Terms**

In this section, synoptic definitions of key terms of the study are provided. This study focused on IC and its components, perceived environmental uncertainty and its dimensions, corporate performance and capital structure. The explanations of these terms are given in the following sentences:

### **1.9.1 Capital Structure**

In corporate finance area capital structure is one of the main factor. All firms are willing to maximize their performance, and minimize their financing cost, by maintaining the appropriate capital structure or the optimal capital structure (Sanusi and Taha, 2015), determination of the capital structure is very useful for company managers. According to this important role, this study seeks to determine capital structure among manufacturing sector in Iran.

### **1.9.2 Perceived Environmental Uncertainty**

According to Duncan (1972) and Milliken (1987), environmental uncertainty in organizations is the lack of availability and predictability of the relevant information about the environmental factors associated with a given decision-making situation. Many previous researches (e.g., Baines and Langfield-Smith, 2003; Fisher, 1995; Buchko, 1994; Gul and Chia, 1994; Jusoh, 2008) have used environmental uncertainty as “perceived environmental uncertainty”. Hoque (2004, 2005) and Jusoh (2008) divided perceived environmental uncertainty to eight groups as below:

- Customer demands, tastes, and preferences to measure client preferences and requirements for design quality.
- Deregulation and globalization to measure global market maturity, global design demands.

- Financial market and condition to measure interest rate changes, availability of credit and change in financial instruments available.
- Economic environment to measure change in manufacturing technology, scientific discoveries, economic and policy.
- Government regulation and policies to measure pricing policy, design regulations, laws related to labor and capital.
- Market activities of competitors to measure competitor prices, competitor quality, competitor technology, competitor speed, competitor marketing activities.
- Supplier actions to measure supplier support, supplier quality.
- Industrial relation to measure managerial perception of the value of budget-related activities.

### **1.9.3 Corporate Performance (Financial, Non-Financial)**

Banker *et al.* (2000) has shown that the main reasons for the use of non-financial performance measures indicators is that they present better indicators of future financial performance and financial measures. Non-financial performance measurements are more valuable and suitable than financial performance measures in motivating management performance. In this regard, it can be concluded that the issue of non-financial performance indicators and measures increasing emphasis in manufacturing and services. Kaplan and Norton (2010) offered four perspectives in BSC method for performance measurement. This method includes the perspectives of customer, financial, internal business and growth, and learning.

### **1.9.4 Intellectual Capital**

Intellectual capital (IC) is intangible assets that can improve firm value and whose components can create competitive advantage. It is the combination of human capital, structural, relational and spiritual capital within the organization ((Bontis

1999); Edvinsson, 1997; Ismail, 2005; Maditinos *et al.*, 2011; Cricelli *et al.*, 2014). This study examined the four components of IC; human capital, structural capital, relational capital and spiritual capital.

- Human capital: is described as the components possessed by individuals in a company who attract customers. The individual components include skill, talent, knowledge and expertise of employees (Beshkooch *et al.*, 2013).
- Structural capital: described as the market requirements that companies need to fulfill including patents, copyrights, trade markets, software and general knowledge of the company (Beshkooch *et al.*, 2013).
- Relational capital: relational capital is the capability of products and services of a company to attain satisfaction of customers and to obtain their loyalty (Beshkooch *et al.*, 2013).
- Spiritual capital: spiritual capital is implicit knowledge, beliefs and emotions rooted in people's minds and in the hearts of the organization (Ismail, 2005).

### **1.10 Organization of the Thesis**

Chapter 1 discusses the study introduction, background of the study, and problem statement together with the objectives of the study, research questions, scope and significance of the study. Chapter 2 reviews the literature on capital structure, intellectual capital, perceived environmental uncertainty and corporate performance. Previous studies on the concept, the relationship between them, theoretical and conceptual frameworks with hypothesis development are also detailed in this chapter. A review of the empirical studies related to the dependent, mediator, and independent variables are included. Chapter 3 explains the research philosophies, research framework, research hypotheses and the methodology which were employed in the testing of the study hypotheses.

Chapter 4 presents the data analysis, which contains the description of the results. In this chapter, the discussions on the findings, which have been gathered from the different types of testing, were presented. The research questions were answered in Chapter 5. It also provides the discussions on the findings, conclusion and recommendations. It also presents some suggestions for further research.

## REFERENCES

- Abdel-Kader, M., & Luther, R. (2008). The impact of firm characteristics on management accounting practices: A UK-based empirical analysis, *British Accounting Review*, 40( 1), 2-27.
- Abdullah, D. F., & Sofian, S. (2012). The Relationship between Intellectual Capital and Corporate Performance. *Procedia - Social and Behavioral Sciences*, 40, 537-541. doi: <http://dx.doi.org/10.1016/j.sbspro.2012.03.227>
- Abdullateef, A. O. (2011). *The Impact of Customer Relationship Management on Caller Satisfactions in Customer Contact Centers: Evidence from Malaysia* (Doctoral dissertation, Universiti Utara Malaysia).
- Abhayawansa, S., & Guthrie, J. (2014). Importance of Intellectual Capital Information: A Study of Australian Analyst Reports. *Australian Accounting Review*, 24(1), 66-83.
- Abor, J., & Biekpe, N. (2007). Corporate governance, ownership structure and performance of SMEs in Ghana: implications for financing opportunities. *Corporate Governance: The international journal of business in society*, 7(3), 288-300.
- Abzari, M, Fathi, S , & Torosian, A (2012). Inter-Industry differences in capital structure and product market competition: Evidence from Iranian companies. *Interdisciplinary Journal of contemporary research in business*, 3(9).
- Aftab, M., Ehsan, R., Naseer, S., & Awan, T. (2012). The Effect of Corporate Strategy and Capital Structure on Performance of Banking Sector of Pakistan. *Global Journal of Management and Business Research*,12 (17).
- Afza, T, & Hussain, A. (2011). Determinants of Capital Structure across Selected Manufacturing Sectors of Pakistan. *International Journal of Humanities and Social Science*, 1(12), 254-262.

- Agarwal, P, & O'Hara, M. (2006). Information Risk and Capital Structure. *Available at SSRN 939663*.
- Ahangar, G. R, Alimardani. K, Jahanian. KH, Faridnia. A, & M, Mardi. (2012). Evaluation of domestic partner relationships and environmental uncertainty on degree of localization and performance of enterprises: The case of Iranian small and medium enterprises. *African Journal of Business Management*, 6(15), 5234-5242.
- Ahangar, G. R. (2011). The relationship between intellectual capital and financial performance: An empirical investigation in an Iranian company. *African Journal of Business Management*, 5(1), 88-95.
- Ahmad, S, & Mushraf, A. (2011). The Relationship between Intellectual capital and Business Performance: An empirical study in Iraqi industry. *International Conference on Management and Artificial Intelligence*. IPEDR (6) , IACSIT Press, Bali, Indonesia
- Ahmadi, AA, Ahmadi, A, & Shakeri, S. (2013). The survey of relationship between Intellectual capital (IC) and Organizational performance (OP) within the National Iranian South Oil Company International. *International Journal of Social Sciences and Entrepreneurship*, 1(3), 46-56.
- Ak, R., & Öztayşi, B. . (2009). Performance Measurement of Insurance Companies by Using Balanced Scorecard and ANP. *Paper presented at the The 10th International Symposium on the Analytic Hierarchy Process Multi-criteria Decision Making*. Retrieved 13/7/2012, from <http://www.isahp.org/2009/Proceedings/index.htm>
- Akyol, A. C., & Verwijmeren, P. (2013). Human capital costs, firm leverage, and unemployment rates. *Journal of Financial Intermediation*, 22(3), 464-481.
- Al-Ajmi, J., Abo Hussain, H., & Al-Saleh, N. (2009). Decisions on capital structure in a Zakat environment with prohibition of riba: the case of Saudi Arabia. *The journal of risk finance*, 10(5), 460-476.
- Aliaga, O. A. (2005). *A study of Innovative Human Resource Development practices in Minnesota companies*. Unpublished Ph.D Thesis, University of Minnesota, United States - Minnesota.
- Alipour, M. (2012). The effect of intellectual capital on firm performance: An investigation of Iran insurance companies. *Measuring Business Excellence*, 16(1), 53-66.

- Allen, D.E. (1991). The Determinants of the Capital Structure of Listed Australian Companies: The Financial Manager's Perspective. *Australian Journal of Management*, 16(2), 103-28.
- Amiri, N.A., Majid, R., & A. Omrani. (2010). Studying the Impacts of Organizational Organic Structure on Knowledge Productivity Effective Factors Case Study: Manufacturing Units in a Domestic Large Industrial Group. *European Journal of Scientific Research*, 40(1), 91-101.
- An, Y., Davey, H., & Eggleton, I. R. (2011). Towards a comprehensive theoretical framework for voluntary IC disclosure. *Journal of Intellectual Capital*, 12(4), 571-585.
- Anderson, E.W., Fornell, C., & Lehman, D.R. (1994). Customer satisfaction, market share and profitability: findings from Sweden. *The Journal of Marketing*, (58), 53-66.
- Andrews, K.A. (1971). The Concept of Corporate Strategy. *Burr Ridge, IL: Dow-Jones- Irwin*.
- Andriessen, D. (2004). Intellectual capital valuation and measurement: classifying the state-of-the-art. *Journal of Intellectual Capital*, 5 (2), 230-42.
- Ansoff, H. I. (1979). *Societal strategy for the business firm*. European Inst. for Advanced Studies in Management.
- Aragon, -Correa, J.A., & Lopez , Rubio-, E.A., . (2007). Proactive corporate environmental strategies: myths and misunderstandings. *Long Range Planning*, 40, 357-381.
- Arbuckle, J. L. (2011). IBM® SPSS® Amos™ 20 Users Guide. *Chicago, IL: AMOS Development Corporation*.
- Ary, D., Jacobs, L.C., & Razavieh, A. (2002). Introduction to research in education. (Sixth Edition). *Belmont, CA: Wadsworth/Thomson Learning*.
- Asiaei, K., & Jusoh, R. (2015). A multidimensional view of intellectual capital: the impact on organizational performance. *Management Decision*, 53 (3), 668-697.
- Assaf, A. (2005). Automation, Stock Market Volatility and Risk-Return Relationship: Evidence from. CATS, *Investment Management & Financial Innovations*, 2(3), 136-145.



- Attar, A. (2014). Corporate Strategy and Capital Structure: An Empirical Study of Listed Manufacturing Firms in Saudi Arabia. *A thesis submitted for the degree of Doctor of Philosophy*. Brunel Business School Brunel University.
- Badri, M. A., Davis, D., & Davis, D. (2000). Operations strategy, environmental uncertainty and performance: a path analytic model of industries in developing countries. *Omega*, 28(2), 155-173.
- Bagherzadeh, S. (2003). Explanation of capital structure model of listed companies in Tehran Stock Exchange. *Financial Research*, 16 (1)23-47.
- Bahari, S. F. (2012). Qualitative versus quantitative research strategies: contrasting epistemological and ontological assumptions. *Jurnal Teknologi*, 52(1), 17-28.
- Baines, A., & Langfield-Smith, K. (2003). Antecedents to Management Accounting Change: A Structural Equation Approach. *Accounting, Organizations and Society*, 28(7-8), 675-698.
- Balakrishnan, S. , & Fox, I. (1993). Asset Specificity, Firm Heterogeneity and Capital Structure. *Strategic Management Journal*, 14, 3-16.
- Banimahd, B., Mohammadrezaei, F., & Mohammadrezaei, M. (2012). The Impact of Intellectual Capital On Profitability, Productivity And Market Valuation: Evidence From Iranian High Knowledge-Based Industries. *Journal of Basic and Applied Scientific Research*, 2(5), 4477-4484.
- Banker, R.D, Gordon, P, & Dhinu, S. (2000). An Empirical Investigation of an Incentive Plan that Includes Nonfinancial Performance Measures. *The Accounting Review - Federation of American Health Systems*, 75(1), 65-92.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17 (1), 99-120.
- Barney, J. B. (2000). Firm resources and sustained competitive advantage. *Advances in Strategic Management*, 17(2000), 203-227.
- Baron, R.M. , & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Bartlett, C.A. , & Ghoshal, S. (2000). Transnational Management. *3rd edition*. New York: McGraw Hill.
- Bates, T. (1997). Financing small business creation: The case of Chinese and Korean immigrant entrepreneurs. *Journal of Business Venturing*, 12(2), 109-124.

- Bechor, T., Neumann, S., Zviran, M., & Glezer, C. (2010). A contingency model for estimating success of strategic information systems planning. *Information & Management*, 47(1), 17-29.
- Berger, A.N. , & Patti, B, E. (2002). Capital structure and firm performance: a new approach to testing agency theory and an application to the banking industry. *Journal of Banking & Finance*, 30(4), 1065-102.
- Berk, J.B, Stanton, R., & Zechner, J. (2010). Human capital, bankruptcy, and capital structure. *The Journal of Finance*, 65(3), 891-926.
- Berkovitch, E., Israel, R., & Spiegel, Y. (2000). Managerial compensation and capital structure. *Journal of Economics & Management Strategy*, 9(4), 549-584.
- Berman, S. L., Wicks, A. C., Kotha, S., & Jones, T. M. (1999). Does stakeholder orientation matter? The relationship between stakeholder management models and firm financial performance. *Academy of Management journal*, 42(5), 488-506.
- Beshkooch, M, Maham, K, & Heidarzadeh, Sh. (2013). Effects of Intellectual Capital on Financial Performance with Regard to Life Cycle and the Company Size. *Journal of Basic and Applied Scientific Research*, 3(2), 209-217.
- Bettis, R.A. (1983). Modern financial theory, corporate strategy and public policy: Three conundrums. *Academy of Management Review*, 8(3), 406-415.
- Bevan, A.A, & Danbolt, J. (2002). Capital Structure and Its Determinants in The United kingdom a Decompositional Analysis. *Applied Financial Economics*, 12(2), 159-170.
- Bhaduri, S.N. (2002). Determinants of corporate borrowing: Some evidence from the Indian corporate structure. *Journal of Economics and Finance*, 26(2), 200-215. doi: 10.1007/bf02755986
- Blackmon, V. Y. (2008). Strategic Planning and Organizational Performance: An Investigation Using the Balanced Scorecard in Non-Profit Organizations. *Doctor of Philosophy*. Capella University.
- Bloom, N., & Van Reenen, J. (2002). Patents, real options and firm performance. *The Economic Journal*, 112(478), 97-116.
- Boccia, J, & Alfred, M. (2009). An Empirical Analysis of Environmental Uncertainty, Reoptions Decision Patterns and Firm Performance. *Open Access Dissertations*. Paper 93.

- Boeker, W. (1989). Strategic change: The effects of founding and history. *Academy of Management Journal*, 32(3), 489-515.
- Bohn, V., & Richter, M. (2011). [Type of School, Social Capital and Subjective Health in Adolescence.]. *Gesundheitswesen. (Bundesverband der Ärzte des Öffentlichen Gesundheitsdienstes (Germany))*, 74(11), 691-701.
- Bojorquez-Chapela, I., Manrique-Espinoza, B. S., Mejia-Arango, S., Tellez-Rojo Solis, M. M., & Salinas-Rodriguez, A. (2012). Effect of social capital and personal autonomy on the incidence of depressive symptoms in the elderly: Evidence from a longitudinal study in Mexico. *Aging Ment Health*, 16(4), 462-471.
- Bollen, K. A. (1989). Structural Equations with Latent Variables. *Structural Equations with Latent Variables*.
- Bontis, N. (1998). Intellectual Capital: An Exploratory Study that Develops Measures and Models. *Management Decision*, 36(2), 63-76.
- Bontis, N., Chua Chong, K., & Richardson, S. (2000). Intellectual Capital and Business Performance in Malaysian Industries. *Journal of Intellectual Capital*, 1 (1), 85-100.
- Bontis, N. (1999). Managing organizational knowledge by diagnosing intellectual capital: framing and advancing the state of the field. *International Journal of Technology Management*, 18(5), 433-462.
- Bontis, N. (2003). Intellectual capital disclosure in Canadian corporations. *Journal of Human Resource Costing and Accounting*, 7, 9–20.
- Bontis, N. (1996). There is a Price on Your Head: Managing Intellectual Capital Strategically. *Business Quarterly*, 60 (4), 40.
- Bontis, N. (2001). “Assessing knowledge assets: a review of model used to measure intellectual capital”. *International Journal of Management Review*, 3(1), 41-60.
- Bontis, N. (1999). Managing organizational knowledge by diagnosing intellectual capital: framing and advancing the state of the field. *Intellectual Capital Journal of Technology Management*, 18 (5/6/7/8), 433-462.
- Bontis, N. (2002). “Managing organizational knowledge by diagnosing intellectual capital: framing and advancing the state of the field”, in Choo, C.W. and Bontis, N. (Eds),. *The Strategic Management of Intellectual Capital and Organizational Knowledge*, Oxford University Press, Oxford, 621-42.

- Bontis, N., Crossan, M. M., & Hulland, J. (2002). Managing An Organizational Learning System By Aligning Stocks and Flows. *Journal of Management Studies*, 39(4), 437-469.
- Bontis, N. (1998). Intellectual capital: an exploratory study that develops measures and models. *Management Decision*, 36(2), 63.
- Bontis, N., Seleim, A., & Ashour, A. (2007). Human capital and organizational performance: a study of Egyptian software companies. *Management Decision*, 45(4), 789-801.
- Boodhoo.R, Odit. M.P, Nowbutsing. B., & Dokhan.K. (2008). Capital structure and corporate performance: a panel data analysis based on the companies listed on the stock exchange of mauririus. *6th International Conference on Development* 15 - 18 July 2008, Mauritius.
- Booth, L , Aivazian, V, Demirguc-Kunt, A, & Maksimovic, V (2001). Capital Structure In Developing Countries. *Journal of Finance*, 56, 87-130.
- Bornemann, M. (1999). Potential of Value Systems According to the VAICTM Method. *International Journal Technology Management*, 18(5/6/78), 463-475.
- Bose, S, & Thomas, K. (2007). Applying the balanced scorecard for better performance of intellectual capital. *Journal of Intellectual Capital*, 8(4), 653-665
- Bounfour, A. . (2003). The IC-dVAL approach. *Journal of Intellectual Capital*, 4(3), 396 - 413.
- Bourgeois, LJ. (1980). Strategy and environment: a conceptual integration. *Academy of Management Review*, 5(1), 25-39.
- Bourgeois, LJ. (1985). Strategic goals, perceived uncertainty and economic performance in volatile environments. *Academy of Management Journal* 26(2): 548-573.
- Bradley, K.(1997) Intellectual capital and the new wealth of nations. *II Business Strategy Review*, 8(4), 33-44.
- Bradley, M., Jarrell, G. A., & Kim, E. (1984). On the existence of an optimal capital structure: Theory and evidence. *The journal of Finance*, 39(3), 857-878.
- Brander, J. A., & Spencer, B. J. (1985). Export subsidies and international market share rivalry. *Journal of international Economics*, 18(1), 83-100.
- Brennan, N., & Connell, B. (2000). Intellectual capital: current issue and policy implications. *Journal of Intellectual Capital* 1 (3): 206-240.

- Bronars, S. G., & Deere, D. R. (1991). The threat of unionization, the use of debt, and the preservation of shareholder wealth. *The Quarterly Journal of Economics*, 231-254.
- Brooking, A. (1996). Intellectual capital. Core Asset for the Third Millennium Enterprise. London: International Thomson Business Press. *New York*.
- Brownell, Peter. (1987). The role of accounting information, environment and management control in multi-national organizations. *Accounting & Finance*, 27(1), 1-16.
- Bruns, W. J., & Waterhouse, J. H. (1975). Budgetary control and organization structure. *Journal of Accounting Research*, 13(2),177-203.
- Buchko, A. (1994). Conceptualization and measurement of environmental uncertainty: an assesment of the Miles and Snow perceived environmental uncertainty scale. *Academy of Management Journal*, 37(2),410-425.
- Bueno, E., Paz Salmador, M., & Rodríguez, Ó. (2004). The role of social capital in today's economy: Empirical evidence and proposal of a new model of intellectual capital. *Journal of Intellectual Capital*, 5(4), 556-574.
- Buferna, F , Bangassa, K , & Hodgkinson, L (2005). Determinants of Capital Structure , Evidence from Libya. *Research Paper Series*. ISSN 1744-0718.
- Bukh, P. N., Larsen, H. T., & Mouritsen, J. (2001). Constructing intellectual capital statements. *Scandinavian Journal of Management*, 17(1), 87-108.
- Burns, T., & Stalker, G. (1961). *The Management of Innovation*. Travistock: London, UK.
- Byrne, Barbara M. (2013). *Structural equation modeling with Mplus: Basic concepts, applications, and programming*: Routledge.
- Cabrita, M. D. R., & Bontis, N. (2008). Intellectual capital and business performance in the Portuguese banking industry. *International Journal of Technology management*, 43(1-3), 212-237.
- Cabrita, M , & Vaz, J (2006). Intellectual Capital and Value Creation: Evidence from the Portuguese Banking Industry. *The Electronic Journal of Knowledge Management*, 4 (1), 11-20.
- Capobianco, H. M. P., & Fernandes, E. (2004). Capital structure in the world airline industry. *Transportation Research Part A: Policy and Practice*, 38(6), 421-434.

- Carleton, W.T, & Silberman, I. H. (1977). Joint determination of rate of return and capital structure: An econometric analysis. *The Journal of Finance*, 32(3), 811-821.
- Cassar, G., & Holmes, S. (2003). Capital structure and financing of SMEs: Australian evidence. *Accounting and Finance*, 43(2), 123-147.
- Castanias, Richard. (1983). Bankruptcy risk and optimal capital structure. *The Journal of Finance*, 38(5), 1617-1635.
- Cavana, R. Y., Delahaye, B. L., & Sekaran, U. (2001). *Applied business research: Qualitative and quantitative methods*. John Wiley & Sons Australia.
- Chaffee, E. E. (1985). Three models of strategy. *Academy of management review*, 10(1), 89-98.
- Chaganti, R , & Damanpour, F. (1991). Institutional Ownership, Capital Structure, and Firm Performance. *Strategic Management Journal*, 12(7), 479-491.
- Chakraborty, I. (2010). Capital structure in an emerging stock market: The case of India. *Research in International Business and Finance*, 24(3), 295-314.
- Chan, K. H. (2009). Impact of intellectual capital on organisational performance (Part 2). *The Learning Organization*, 16(1).
- Chang, S. J., & Singh, H. (2000). Corporate and industry effects on business unit competitive position. *Strategic Management Journal*, 21(7), 739-752.
- Chang, S. L. (2007). *Valuing intellectual capital and firms' performance: Modifying Value Added Intellectual Coefficient(VAIC (TM)) in Taiwan IT industry(China)*, 68(7).
- Chemmanur, Thomas J, Cheng, Yingmei, & Zhang, Tianming. (2013). Human capital, capital structure, and employee pay: An empirical analysis. *Journal of Financial Economics*, 110(2), 478-502.
- Chen, J.J. (2004). Determinants of capital structure of Chinese-listed companies. *Journal of Business Research* 57, 1341- 1351.
- Chen, L., & Zhao, X. S. (2005). Profitability, mean reversion of leverage ratios, and capital structure choices. *Mean Reversion of Leverage Ratios, and Capital Structure Choices (February 2005)*.
- Chen, S , & Chen, L. (2011). Capital structure determinants: An empirical study in Taiwan. *African Journal of Business Management*, 5(27), 10974-10983.

- Chen, S., Shevlin, T., Tong, Y. H., & (2005). Does the Pricing for Financial Reporting Change Around the Dividend Changes? *Journal of Accounting Research* 45 (1), 1-40.
- Chenhall, R.H. (2003). Management Control Systems Design Within its Organizational Context: Findings from Contingency-based Research and Directions for the Future. *Accounting, Organizations and Society* 28(2/3), 127-168.
- Chenhall, R.H., & Morris, D. (1986). The impact of Structure, Environment, and Interdependence on the Perceived Usefulness of Management Accounting Systems. *The Accounting Review*, 61, 16-35.
- Chi, C. G., & Gursoy, D. (2009). Employee satisfaction, customer satisfaction, and financial performance: An empirical examination. *International Journal of Hospitality Management*, 28(2), 245-253.
- Chien, Y.C. (2013). The Effects of Capital Structure on the Corporate Performance of Taiwan-listed Photovoltaic Companies: A Moderator of Corporate Innovation Activities. *Journal of Global Business Management*, 9(1), 93.
- Chiesa, V. (1999). Technology development control styles in multinational corporations: A case study. *Journal of Engineering & Technology Management*, 162, 191-206.
- Child, J. (1972). Organizational structure, environment and performance: the role of strategic choice. *Sociology* 6(1), 1-22.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, 295(2), 295-336.
- Choi, J., & Wang, H. (2009). Stakeholder relations and the persistence of corporate financial performance. *Strategic Management Journal*, 30(8), 895-907.
- Choudhury, V., & Sampler, J. L. (1997). Information specificity and environmental scanning: An economic perspective. *MIS quarterly*, 25-53.
- Chung, K.H. (1993). Asset characteristics and corporate debt policy: An empirical test. *Journal of Business Finance & Accounting*, 20(1), 83-98.
- Churchill, Gilbert A, & Peter, J Paul. (1998). Marketing: Creating value for customers: *Irwin/McGraw Hill*.
- Claycomb, C., Droge, C., & Germain, R. (2001). Applied process knowledge and market performance: the moderating effect of environmental uncertainty”, *Journal of Knowledge Management*, 5(3), 264-277.

- Cohen, S., & Kaimenakis, N. (2007). Intellectual capital and corporate performance in knowledge-intensive SMEs. *The Learning Organization*, 14(3), 241-262.
- Coombes, Susan M.T. (2008). Boards of directors and nonprofit entrepreneurial orientation: catalyst, inhibitor, or inconsequential? (*Dissertation*), *The Graduate School of Syracuse University*. ProQuest Ilc database.
- Cornell, B., & Shapiro, A. C. (1987). Corporate Stakeholders and Corporate Finance. *Financial Management*, 5-14.
- Creswell, J. W. (2003). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. *Thousand Oaks*: Sage Publications.
- Cricelli, L., Greco, M. , & Grimaldi , M. (2014). An overall index of intellectual capital", *Management Research Review*, 37 (10), 880 - 901.
- Crutchley, C. E, & Hansen, R. S. (1989). A test of the agency theory of managerial ownership, corporate leverage, and corporate dividends. *Financial Management*, 36-46.
- Daft, R.L. (2004). *Organisational theory and design. 8th edition*. Thompson South Western.
- Darby, M. R., Liu, Q., & Zucker, L. G. (2004). High Stakes in High Technology: High-Tech Market Values as Options. *Economic Inquiry*, 42(3), 351-369.
- Dasgupta, S., & Sengupta, K. (1993). Sunk investment, bargaining and choice of capital structure. *International Economic Review*, 203-220.
- Daskalakis, N., & Psillaki, M. (2009). Do Country or Firm Factors Explain Capital Structure? Evidence from SMEs in France and Greece. *Applied Financial Economics*, 18(2), 87-97.
- De Jong, A., Kabir, R., & Nguyen, T. T. (2008). Capital structure around the world: The roles of firm-and country-specific determinants. *Journal of Banking & Finance*, 32(9), 1954-1969.
- Deesomsak, R., Paudyal, K., & Pescetto, G. (2004). The determinants of capital structure:evidence from the Asia Pacific region. *Journal of multinational financial management*, 14, 387-405.
- Delcoure, N. (2007). The determinants of capital structure in transitional economies. *International Review of Economics & Finance*, 16(3), 400-415.
- Desarbo, W. S., Benedetto, C. A. D., Song, M., & Sinha, I., & (2005). Revisiting the Miles and Snow strategic framework: Uncovering interrelationships between



- strategic types, capabilities, environmental uncertainty, and firm performance. *Strategic Management Journal*, 26, 47-74.
- Dess, G.G. , & Beard, D. W. (1984). Dimensions of Organizational Task Environments *Administrative Science Quarterly* , 29(1),52-73.
- Dill, W. (1958). Environment as an Influence on Managerial Autonomy. *Administrative Science Quarterly* 2(4), 409-444.
- Dillon, W.R., Madden, T.J., & Firtle, N.H. (1993). *Essentials of Marketing Research*: Irwin /mcgraw-Hill.
- Donaldson, T., & Preston, Lee E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of management Review*, 20(1), 65-91.
- Dooley, Emer. (2000). Intellectual capital in the software industry: An empirical test. (Ph.D. 9964250), *University of Washington*, United States - Washington.
- Downey, HK, & Slocum, JW. (1975). Uncertainty: measures, research, and sources of variation. *Academy of Management Journal*, 18(3), 562-578.
- Drucker, P. F. (1985). *Innovation and Entrepreneurship*. New York: Harper and Row.
- Dumay, J., & Cuganesan, S. (2011). Making sense of intellectual capital complexity: measuring through narrative. *Journal of Human Resource Costing & Accounting*, 15 (1), 24-49.
- Dumay, John C, & Tull, John A. (2007). Intellectual capital disclosure and price-sensitive Australian Stock Exchange announcements. *Journal of Intellectual Capital*, 8(2), 236-255.
- Duncan, RB (1972). Characteristics of organizational environments and perceived environmental uncertainty. *Administrative Science Quarterly*, 17(3), 313-327.
- Easterby-Smith, M., Thorpe, R., & Jackson, P. R. (2012). *Management research*. Sage.
- Edvinsson, L, & Sullivan, P. (1996). Developing a model for managing intellectual capital. *European Management Journal*, 14, 356-364.
- Edvinsson, L. (1997). Developing intellectual capital at Skandia. *Long Range Planning*, 30( 3), 366-373.
- Edvinsson, L. & Malone, M. (1997). *Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brain-power*(1st ed.). New York: Harper Collins, NY.

- Efron, Bradley. (1979). Bootstrap methods: another look at the jackknife. *The annals of Statistics*, 7(1), 1-26.
- Elbanna, S., & Alhwarai, M. (2012). The Influence Of Environmental Uncertainty And Hostility On Organization Performance. *UAEU-FBE-Working Paper Series ISSN 2079-7141*.
- Emadzadeh, N., Afzali, N., bagheri, A., Rahimpour, M., Ezadi, F., & Rahmani, M. (2013). Effect of Intellectual Capital on Firm Performance. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(2), 98–103.
- Emmanuel, C., Otley, D., & Merchant, K. (1990). *Accounting for management control*.(pp. 357-384), SpringerUS.
- Esfahani, H. S., Mohaddes, K., & Pesaran, M. H. (2013). Oil exports and the Iranian economy. *The Quarterly Review of Economics and Finance*, 53(3), 221-237.
- Esperança, J. P., Gama, A. P. M., & Gulamhussen, M. A. (2003). Corporate debt policy of small firms: An empirical (re) examination. *Journal of Small Business and Enterprise Development*, 10(1), 62-80.
- Ezzamel, M. (1990). The impact of environmental uncertainty, managerial autonomy and size on budget characteristics. *Management Accounting Research*, 1, 181- 197.
- F-Jardón, C. M., & Susana Martos, M. (2009). Intellectual capital and performance in wood industries of Argentina. *Journal of Intellectual Capital*, 10(4), 600-616.
- Fan, J. P., Titman, S., & Twite, G. (2012). An international comparison of capital structure and debt maturity choices. *Journal of Financial and Quantitative Analysis*, 47(1), 23.
- Fassihi, F. (2010). *Iran's economy feels sting of sanctions*. Wall Street Journal, 12.
- Faucheux, S., & Froger, G. (1995). Decision-making under environmental uncertainty, Methodological and Ideological Options. *Ecological Economics* 15, 29-42.
- Ferri, M.G., & Jones, W.H. (1979). Determinants of financial structure: A new methodological approach. *The Journal of Finance*, 34(3), 631-644.
- Firer, S., & Williams, S.M. (2003). “Intellectual capital and traditional measures of corporate performance”. *Journal of Intellectual Capital*,4(3), 348-60.

- Fisher, I. (1995). Use of non-financial performance measures. In: Young, S.M. (Ed.), *Readings in Management Accounting*. Prentice Hall, Englewood Cliffs, NJ, 329-335.
- Fitz-enz, J. (2000). ROI of Human Capital: Measuring the Economic Value of Employees Performance. *New York: American Management Association*.
- Flath, David, & Knoeber, Charles R. (1980). Taxes, failure costs, and optimal industry capital structure: An empirical test. *The Journal of Finance*, 35(1), 99-117.
- Fontaine, C., Haarman, A., & Schmid, S. (2006). The Stakeholders theory. *Edlays education*, 1, 1-33.
- Foray, D. (2004). *Economics of Knowledge*. The MIT Press, Cambridge.
- Fornell, C., & Cha, J. (1994). *Partial least squares*. Cambridge, MA: Blackwell.
- Franck, T., & Huyghebaert, N. (2004). On the Interactions between Capital Structure and Product Markets: A Survey Of The Literature. *Tijdschrift voor Economie en Management*, 49(4), 727-87.
- Frank, M., & Goyal., V. (2003). Testing the Pecking Order Theory of Capital Structure. *Journal of Financial Economics* 67,217-48.
- Frank, Murray Z, & Goyal, Vidhan K. (2007). Trade-off and pecking order theories of debt. *Available at SSRN* 670543.
- Freeman, R. E., Harrison, J. S., & Wicks, A. C. (2007). *Managing for stakeholders: Survival, reputation, and success*. Yale University Press.
- Freeman, R E., Wicks, A.C., & Parmar, B. (2004). Stakeholder theory and “the corporate objective revisited”. *Organization science*, 15(3), 364-369.
- Freeman, R. E., & McVea, J. (2001). A Stakeholder Approach to Strategic Management. *SSRN eLibrary*.
- Freeman, R. Edward. (1984). *Strategic Management: A Stakeholder Approach*: Cambridge : Cambridge University Press.
- Friedman, A.L, & Miles, S. (2002). Developing stakeholder theory. *Journal of management studies*, 39(1), 1-21.
- Galbraith, J.R. (1973). *Designing complex organizations: Addison-Wesley Longman Publishing Co., Inc.*
- Galbraith, J.R. (1977). Organization design: An information processing view. *Organizational Effectiveness Center and School*, 21, 21-26.

- Galdeano-Gómez, E., Céspedes-Lorente, J., & Martínez-del-Río, J. (2008). Environmental performance and spillover effects on productivity: evidence from horticultural firms. *Journal of environmental management*, 88(4), 1552-1561.
- Galdeano-Gómez, E., & Céspedes-Lorente, J. (2008). Environmental spillover effects on firm productivity and efficiency: An analysis of agri-food business in Southeast Spain. *Ecological Economics*, 67(1), 131-139
- Gan, K., & Saleh, Z. (2008). Intellectual capital and corporate performance of technology intensive companies: Malaysia evidence. *Asian Journal of Business and Accounting*, 1 (1), 113-30.
- Gardner, John C, & Trzcinka, Charles A. (1992). All-Equity Firms and the balancing Theory of Capital Structure. *Journal of Financial Research*, 15(1), 77-90.
- Gaud, Ph , Hoesli, M , & Bender, A. (2007 ). Debt-equity choice in Europe. *International Review of Financial Analysis* 16 , 201–222.
- Gefen, D., Straub, D., & Boudreau, M. C. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the association for information systems*, 4(1), 7.
- Gellatly, G, Riding, A, & Thornhill, S (2004). Growth history, knowledge intensity and capital structure in small firms. *Venture Capital*, 6(1), 73-89.
- Gemmill, G. (2001). Capital Structure and Firm ValueA Study of Split-Capital Closed-End Funds in the UK. *JEL classification: G32, G23, G13.*
- Gheissari, A. (2009). Contemporary Iran. Economy, society politics, 42-43.
- Ghosh, A., Cai, F., & Li, W. (2000). The determinants of capital structure. *American Business Review*, 18(2), 129-132.
- Giesen D, Meertens V, R, Vis-Visschers, & D, Beukenhorst. (2012). *Questionnaire Development*. The Hague, Heerlen, Netherlands.
- Gil-Garcia, J. R. (2008). Using partial least squares in digital government research. *Handbook of research on public information technology*. Idea Group, Hershey, 239-253.
- Gillett, D. (2002). *Spiritual Capital: Building Vibrant Business that Serve Shareholders & Humanity*.
- Gleason, K. C., Mathur, L. K., & Mathur, I. (2000). The interrelationship between culture, capital structure, and performance: Evidence from European retailers. *Journal of Business Research*, 50(2), 185-191.

- Glover, J. (1968). Outline of a system of concepts for environmental analysis and corporate planning'.Teaching Note (EA-R 463R), *Graduate School of Business, Harvard University*, Boston, MA.
- Goaill, M. M. M. (2014). *Economic and social satisfaction: The antecedents and consequence, and the moderating effect of brand strength in the context of retailer-manufacturer relationship in Yemen* (Doctoral dissertation, Universiti Utara Malaysia).
- Gold, A.H, Malhotra, A, & Segars, A. (2001). Knowledge management: An organizational capabilities perspective. *Journal of MIS*, 18(1), 185-214.
- Goldman, S., & Preiss, K. (1995). *Agile Competitors and Virtual Organisation: Strategies for enriching the customer*. Von Nostrans Reinhold Company.
- Golshahi, A., Kazemnejad Estahbanati, F., Haghparast, A, Rashki Ghaleh Nou, Z., & Firoziani, E. (2015). Identifying and ranking indicators of intellectual capital in higher educational institutions from perspective of faculty members: a case study University of S and B. *Journal of Scientific Research and Development* 2(3): 169-176,ISSN 1115-7569.
- Gordon, L., & Miller, D. (1976). A contingency framework for the design of accounting information systems. *Accounting, Organizations, and Society*, 1, 59-69.
- Gordon, L.A., & Narayanan, V.K. (1984). Management accounting systems, Perceived Environmental uncertainty and organization structure: An Empirical investigation. *Accounting, Organizations and Society*, 9(1), 33- 47.
- Gosselin, D.P, & Bauwen, G.A. (2006). Strategic account management: customer value creation through customer alignment. *Journal of Business & Industrial Marketing*, 21(6) 376–385.
- Götz, Oliver, Liehr-Gobbers, Kerstin, & Krafft, Manfred. (2010). *Evaluation of structural equation models using the partial least squares (PLS) approach Handbook of partial least squares* (691-711). New York: Springer.
- Govindarajan, V. (1984). Appropriateness of accounting data in performance evaluation: An empirical examination of environmental uncertainty as an intervening variable. *Accounting, Organizations and Society*, 9(2), 125-135.
- Govindarajan, Vijay, & Gupta, Anil K. (1985). Linking control systems to business unit strategy: impact on performance. *Accounting, Organizations and Society*, 10(1), 51-66.

- Graham, J. R., & Harvey, C. R. (2001). The theory and practice of corporate finance: Evidence from the field. *Journal of financial economics*, 60(2), 187-243.
- Grant, R. M. (1991). The resource-based theory of competitive advantage: implications for strategy formulation. *California management review*, 33(3), 114-135.
- Griliches, Z. (1990). *Patent statistics as economic indicators: a survey*. No. w3301. National Bureau of Economic Research.
- Gruian, Claudiu-Marian. (2011). The Influence of Intellectual Capital on Romanian Companies' Financial Performance. *Annales Universitatis Apulensis : Series Oeconomica*, 13(2), 260.
- Gul, F. A., & Chia, Y. M. (1994). The effects of management accounting systems, perceived environmental uncertainty and decentralization on managerial performance: a test of three-way interaction. *Accounting, Organizations and Society*, 19(4-5), 413-426.
- Gul, F.A. (1991). The Effects of Management Accounting Systems and Environmental Uncertainty on Small Business Managers' Performance. *Accounting and Business Research*, 22(85), 57-61.
- Guthrie, J. (2001). The management, measurement and the reporting of intellectual capital. *Journal of Intellectual capital*, 2(1), 27-41.
- Hair, Sarstedt, Ringle, & Mena. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414-433.
- Hair, J. F., Anderson, R., Tatham, R., & Black, W. (2010). *Multivariate Data Analysis: Pearson Prentice Hall*.
- Hair, J.F., Ringle, C.M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *The Journal of Marketing Theory and Practice*, 19(2), 139-152.
- Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (1995). *Multivariate Data Analysis: With Readings: Prentice Hall*.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2013). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Hall, B. H., Jaffe, A., & Trajtenberg, M. (2005). Market value and patent citations. *RAND Journal of economics*, 16-38.

- Hambrick, D.C. (1981). Environment, strategy, and power within top management teams. *Administrative science quarterly*, 253-275.
- Hambrick, D.C. (1983). High profit strategies in mature capital goods industries: A contingency approach. *Academy of Management journal*, 26(4), 687-707.
- Hamel, Gary. (1991). Competition for competence and interpartner learning within international strategic alliances. *Strategic management journal*, 12(S1), 83-103.
- Hamoudi, H.A. (2007). Jurisprudential Schizophrenia: On form and function in Islamic finance. *Chicago Journal of International Law*, 7(2).
- Hannan, M.T, & Freeman, J. (1984). Structural inertia and organizational change. *American sociological review*, 149-164.
- Harris, M., & Raviv, A. (1991). The theory of capital structure. *The Journal of Finance*, 46(1), 297-355.
- Harrison, J.S., Bosse, D.A., & Phillips, R.A. (2010). Managing for stakeholders, stakeholder utility functions, and competitive advantage. *Strategic Management Journal*, 31(1), 58-74.
- Hatzinikolaou, D., Katsimbris, G.M., & Noulas, A.G. (2002). Inflation uncertainty and capital structure: Evidence from a pooled sample of the Dow-Jones industrial firms. *International Review of Economics and Finance*, 11(1), 45-55.
- Hayes, A.F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408-420.
- Hayes, A.F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*: Guilford Press.
- Henisz, W. J., & Delios, A. (2004). Information or influence? The benefits of experience for managing political uncertainty. *Strategic Organization*, 2(4), 389-421.
- Henri, J. F. (2006). Management control systems and strategy: A resource-based perspective. *Accounting, organizations and society*, 31(6), 529-558.
- Henseler, J., Ringle, C.M., & Sarstedt, M. (2012). Using partial least squares path modeling in international advertising research: basic concepts and recent issues. In S. Okazaki (Ed.), *Handbook of Research in International Advertising* (pp. 252-276). Cheltenham: Edward Elgar Publishing.

- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in international marketing*, 20(1), 277-319.
- Hillier, D., Grinblatt, M., & Titman, S. (2008). *Financial Markets and Corporate Strategy*, European Edition, McGraw-Hill. Maidenhead.
- Hillier, D., Grinblatt, M., & Titman, S. (2011). *Financial markets and corporate strategy* (No. 2nd Eu). McGraw-Hill.
- Hillman, A.J., & Keim, G.D. (2001). Shareholder value, stakeholder management, and social issues: what's the bottom line? *Strategic management journal*, 22(2), 125-139.
- Hoque, Z. (2004). A contingency model of the association between strategy, environmental uncertainty and performance measurement: impact on organizational performance. *International Business Review*, 13, 485-502.
- Hoque, Z. (2005). Linking environmental uncertainty to non-financial performance measures and performance: a research note. *The British Accounting Review* 37 (2005) 471–481.
- Hoque, Z., & James, W. (2000). Linking balanced scorecard measures to size and market factors: impact on organizational performance. *Journal of Management Accounting Research*, 12, 1-17.
- Hoque, Z., Mia, L. &, Alam, M. (2001). Market Competition, Computer-Aided Manufacturing and Use of Multiple Performance Measures: *An Empirical Study*. *British Accounting Review*, 33, 23–45.
- Hosnavi, R, & Ramezan, M. (2011). Intellectual Capital and Organizational Organic Structure How are the Concept are Related? *Trends in Applied Sciences Research* 6, 256-268.
- Houthoofd, N., Desmidt, S., & González Fidalgo, E. (2010). Analyzing firm performance heterogeneity: The relative effect of business domain. *Management Decision*, 48(6), 996-1009.
- Hovakimian, A., Opler, T., & Titman, S. (2001). The debt-equity choice. *Journal of Financial and Quantitative analysis*, 36(01), 1-24.
- Howard, S. (2002). A spiritual perspective on learning in the workplace. *Journal of Managerial psychology*, 17(3), 230-242.
- Hsu, H.Y. (2006). Knowledge management and intellectual capital. *Unpublished PhD thesis*, Southern Illinois University Carbondale.



- Huang, G., & Song, F. (2006). The Determinants of Capital Structure: Evidence from China. *China Economic Review*, 17, pp. 14-36.
- Huang, S.G., & Song, F M. (2005). The Determinants of Capital Structure: Evidence from China. . *Journal of China Economy Review*, pp. 1-23.
- Hung, Y.C., Ping Chuen Albert, C., & Chi Man Eddie, H. (2002). Capital structure and profitability of the property and construction sectors in Hong Kong. *Journal of Property Investment & Finance*, 20(6), 434-453.
- Huang, D., Miyoshi, J., La Torre, D., Marshall, A., Perez, P., & Peterson, C. (2007). Exploring the Intellectual, Social and Organizational Capitals at LA's Best. CSE Technical Report 714. *National Center for Research on Evaluation, Standards, and Student Testing (CRESST)*.
- Iacobucci, D., & Churchill, G.A. (2010). *Marketing Research: Methodological Foundations*: South-Western Cengage Learning.
- Isaac, R.G., Herremans, I.M., & Kline, T.J. (2010). Intellectual capital management enablers: a structural equation modeling analysis. *Journal of Business Ethics*, 93(3), 373-391.
- Islam, J., & Hu, H. (2012). A review of literature on contingency theory in managerial accounting. *African Journal of Business Management*, 6 (15), 5159-5164.
- Ismail, M. (2005). The influence of intellectual capital on the performance of Telekom Malaysia. (*Ph.D. thesis*), *Universiti Teknologi Malaysia*, Kuala Lumpur.
- Ittner, C., & Larcker, D. (2001). Assessing empirical research in managerial accounting: a value-based management perspective. *Journal of Accounting and Economics*, 32, 349-410.
- Ittner, C.D., & Larcker, D.F. (1997). Quality strategy, strategic control systems, and organizational performance. *Accounting, Organizations and Society*, 22(3-4), 293-314.
- Ittner, C.D., & Larcker, D.F. (1998). Innovations in Performance Measurement:Trends and Research Implications. *Journal of Management Accounting Research*, 10, 205-38.
- Ittner, C.D., & Larcker, D.F. (1998). Are nonfinancial measures leading indicators of financial performance? An analysis of customer satisfaction. *Journal of accounting research*, 36, 1-35.

- Jahanzeb, A., Rehman Khan, S., & Hafiz Bajuri, N (2014). Determinants of Capital Structure and Human Capital. *International Journal of Information Processing and Management (IJIPM)*,5(4).
- Jamshidi, M., Sofian, S., Bajuri, N.H., & Karchegani, M.R. (2013). Influence of intellectual capital on board of directors style. *Asian Journal of Applied Sciences*, 7(2), 1-15.
- Jauch, L.R., & Kraft, K.L. (1986). Strategic Management of Uncertainty. *Academy of Management Review*, 11(4),777-790.
- Jensen, M., & Meckling, W. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*,3 (4), 305-360.
- Jones T. (1995). Instrumental stakeholder theory: A Synthesis of Ethics and Economics, *Academy of Management Review*, 20(2), 404-437.
- Jones, T.M., & Wicks, A.C. (1999). Convergent stakeholder theory. *Academy of management review*, 24(2), 206-221.
- Jurczak, J. (2008). Intellectual capital measurement methods. *Economics and Organization of Future Enterprise*, 1(1), 37-45.
- Jusoh, R. (2006). The Usage Of Balanced Scorecard Measures, Business Strategy And Firm Performance [HD30. 28. R987 2006 f rb] (*Doctoral dissertation, Universiti Sains Malaysia*).
- Jusoh, R. (2008). Environmental Uncertainty, Performance, and the Mediating Role of Balanced Scorecard Measures Use: Evidence from Malaysia. *International Review of Business Research Papers*,4 (2), 116-135.
- Kale, J.R., & Shahrur, H. (2007). Corporate Capital Structure and the Characteristics of Suppliers and Customers. *Journal of Financial Economics*, 83(2), 321-365.
- Kaplan, R.S, & Norton, D. (1996a). *Translating Strategy into Action: The Balanced Scorecard*. Harvard University Press:Boston MA.
- Kaplan, R.S, & Norton, D. (1996b). Using the Balanced Scorecard as a Strategic Management System. *Harvard Business Review*, 74, pp. 75-85.
- Kaplan, R. S., & Norton, D. P. (2005). The balanced scorecard: measures that drive performance. *Harvard business review*, 83(7), 172.
- Kaplan, R.S. (2010). Conceptual Foundations of the Balanced Scorecard, *SSRN Working Paper Series*.

- Kaplan, R.S., & Norton, D.P. (2001). Transforming the balanced scorecard from performance measurement to strategic management: part 1. *Accounting Horizon*, 15 (1), 87-104.
- Kaplan, R.S. (2010). Conceptual Foundations of the Balanced Scorecard. *SSRN Working Paper Series*.
- Kaplan, R.S., & Norton, D.P. (1996c). The Balanced Scorecard: Translating Strategy into Action. *Cambridge, Massachusetts: Harvard Business School Press*.
- Karadeniz, E., Kandir, S.Y., Balçilar, M., & Onal, Y.B. (2009). Determinants of capital structure: evidence from Turkish lodging companies. *International Journal of Contemporary Hospitality Management*, 21(5), 594-609.
- Karchegani, M.R. (2014). Influence of Intellectual Capital on the Board of Directors' Styles. *Asian Journal of Applied Sciences*, 7(2), 51-65.
- Karimi, J., Somers, T. M., & Gupta, Y. P. (2004). Impact of environmental uncertainty and task characteristics on user satisfaction with data. *Information Systems Research*, 15(2), 175-193.
- Keats, B. W., & Hitt, M. A. (1988). A causal model of linkages among environmental dimensions, macro organizational characteristics, and performance. *Academy of management journal*, 31(3), 570-598.
- Keister, L.A. (2000). *Chinese business groups: The structure and impact of interfirm relations during economic development*: Oxford University Press.
- Kelly, D., & Amburgey, T. L. (1991). Organizational inertia and momentum: A dynamic model of strategic change. *Academy of Management journal*, 34(3), 591-612.
- Khandwalla, P.N. (1977). *The Design of Organizations*. Harcourt Brace Jovanovich:New York, NY).
- Khani, A.H., Ahmadi, F., & Homayouni, G. (2011). The Impact of Intellectual Capital on performance of Iranian food firms. *Interdisciplinary Journal of Contemporary Research In Business*, 2(10), 315-326.
- Kim, E. A., & Seong, J. K. (2011). Development of a Measurement of Intellectual Capital for Hospital Nursing Organizations. *Journal of Korean Academy of Nursing*, 41(1).
- Kiprop, V. K. (2014). *Effect Of Capital Structure On Value Of Firms Listed In Nairobi Securities Exchange* (Doctoral dissertation, University Of Nairobi).

- Kitchenham, B., Pickard, L., & Pfleeger, S. L. (1995). Case studies for method and tool evaluation. *IEEE software*, 12(4), 52.
- Klapper, L.F., Sarria-Allende, V., & Zaidi, R. (2006). Firm-level analysis of small and medium size enterprise financing in Poland. *World Bank Policy Research Working Paper*, (3984).
- Kline, R.B. (2011). *Principles and practice of structural equation modeling*: Guilford press.
- Kline, R.B. (2005). *Principles and Practice of Structural Equation Modeling (2nd Edition ed.)*. New York: The Guilford Press.
- Kobrin, S.J. (1979). Political Risk: A Review And Reconsideration. *Journal of International Business Studies*, 10(1), 67-80.
- Kochhar, R. (1997). Strategic Assets, Capital structure and Firm Performance. *Journal of Financial and Strategic Decisions*, 10 (3).
- Kochhar, R., & Hitt, M.A. (1998). Linking Corporate Strategy to Capital Structure: Diversification Strategy, Type and Source Financing. *Strategic Management Journal*. 19 (6).
- Kochhar, R. (1996). 'Explaining firm capital structure: The role of agency theory vs. transaction cost economics', *Strategic Management Journal*, 17(9), 713-728.
- Korajczyk, R.A., & Levy, A. (2003). Capital structure choice: macro-economic conditions and financial constraints. *Journal of Financial Economics*, 68(1), 75-109.
- Kotha, S., & Nair, A. (1995). Strategy and environment as determinants of performance: evidence from the Japanese machine tool industry. *Strategic management journal*, 16(7), 497-518.
- Kruger, M. & Seng, Y. (2005). Leadership with Inner Meaning: A Contingency Theory of Leadership Based on the Worldviews of Five Religions. *The Leadership Quarterly*, 16(5), 771-806.
- Kujansivu, P, & Lönnqvist, A. (2007). Investigating the value and efficiency of intellectual capital. *Journal of Intellectual Capital*, 8(2), 272-287.
- La Rocca, M., & La Rocca, T. (2007). Capital structure and corporate strategy: An overview. Available at SSRN 1023461.
- Lawrence, P., & Lorsch, J. (1967). *Organizations and Environment*. Irwin: Homewood. IL.

- Lee, Y.J., Wang, G.L., & Chang, L.Y. (2011). The influence of intellectual capital and marketing innovation strategies upon marketing performance: Taking Taiwan-listed life insurance firms as an example. *African Journal of Business Management*, 5(22), 9240-9248.
- Lev. B., & Zambon. S. (2003). Intangibles and intellectual capital: an introduction to a special issue , *European Accounting Review*, 12(4), 597-603.
- Lewin, A. Y., Long, C. P., & Carroll, T. N. (1999). The coevolution of new organizational forms. *Organization Science*, 10(5), 535-550.
- Li, S., Ragu-nathab, B., Ragu-nathab, T. S. (2006). The impact of supply chain management practices on competitive advantage and organizational performance. *Omega-International Journal of Management Science*, 34(2), 107–124.
- Ling, Y. H. (2013). The influence of intellectual capital on organizational performance—Knowledge management as moderator. *Asia Pacific Journal of Management*, 30(3), 937-964.
- Link, S., & Naveh, E. (2006). Standardization and discretion: does the environmental standard ISO 14001 lead to performance benefits? *IEEE Transactions on Engineering Management* 53, 508-519.
- Lipe, M., & Salterio, S. (2000). The judgmental effects or the balanced scorecard's information organization and diversity. *The Accounting Review*, 75(3): 283-298.
- Liu, A. (2008). Measuring Spiritual Capital as a latent variable. *The RM Institute, USA. Also Available at: <http://www.researchmethods.org/MeasuringSpCapital.pdf>.*
- Liu, Q., & Wong, K.P. (2011). Intellectual capital and financing decisions: evidence from the US patent data. *Management Science*, 57(10), 1861-1878.
- Liu, Y., & Zhuang, Y. (2009). An empirical analysis on the capital structure of Chinese listed IT companies. *International Journal of Business and Management*, 4(8), 46.
- Long, M.S., & Malitz, I.B. (1985). *Investment patterns and financial leverage Corporate capital structures in the United States* (pp. 325-352): University of Chicago Press.
- Lönnqvist, A. (2004). Measurement of intangible success factors: case studies on the design, implementation and use of measures doctoral dissertation, *Publication 475, Tampere University of Technology, Tampere.*

- López-Gracia, J., & Sánchez-Andújar, S. (2007). Financial structure of the family business: Evidence from a group of small Spanish firms. *Family Business Review*, 20(4), 269-287.
- López de Silanes, F., La Porta, R., Shleifer, A., & Vishny, R. (1998). Law and finance. *Journal of political economy*, 106, 1113-1155.
- Lu, I.R., Kwan, E., Thomas, D.R., & Cedzynski, M. (2011). Two new methods for estimating structural equation models: An illustration and a comparison with two established methods. *International Journal of Research in Marketing*, 28(3), 258-268.
- Luft, J., & Shields, M.D. (2003). Mapping management accounting: graphics and guidelines for theory-consistent empirical research. *Accounting, organizations and society*, 28(2), 169-249.
- Lynch, R. L., & Cross, K. F. (1991). *Measure up!* Cambridge, MA: Blackwell Publishers.
- Mac An Bhaird, C., & Lucey, B. (2006). *What determines the capital structure of SMEs: Irish evidence*. Working Paper, Dublin City University and Trinity College Dublin.
- MacKinnon, D.P., Lockwood, C.M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate behavioral research*, 39(1), 99-128.
- MacKinnon, D. P. (2008). *Introduction to Statistical Mediation Analysis*. New York: Erlbaum and Taylor Francis Group.
- Madhani, P. M. (2009). Resource Based View (RBV) of Competitive Advantages: Importance, Issues and Implications. *KHOJ Journal of Indian Management Research and Practices*, 1(2), 2-12.
- Maditinos, D., Chatzoudes, D., Tsairidis, C., & Theriou, G. (2011). The impact of intellectual capital on firms' market value and financial performance. *Journal of intellectual capital*, 12(1), 132-151.
- Maksimovic, V., & Titman, Sh. (1991). Financial policy and reputation for product quality. *Review of Financial Studies*, 4(1), 175-200.
- Malgharni, A. M., Soomasundaram, N. R., & Muthaiyah, S. (2010). Nonfinancial performance for firm's evaluation. *European Journal of Economics, Finance, and Administrative Sciences*, 23, 123-138.

- Marilyn, M., Bonnie, D., Vince, F., Richard, J., Bruce, M., Barbara, M., & Allan, S. (1999). Measuring and Reporting Intellectual Capital: Experience, Issues and Prospect. *Paper presented at the Guidelines and instruction for OECD Symposium (International Symposium), Paris and Amsterdam.*
- Marr, B., Gray, D., & Neely, A. (2003). Why do firms measure their intellectual capital? *Journal of Intellectual Capital*,4(4),441 - 464.
- Marr, B., Schiuma, G., & Neely, A. (2004). Intellectual capital – defining key performance indicators for organizational knowledge assets. *Business Process Management Journal*,10 (5), 551-569.
- Marr, B., Gray, D., & Neely, A. (2003). Why do firms measure their intellectual capital?. *Journal of intellectual capital*, 4(4), 441-464.
- Marr, B., Schiuma, G., & Neely, A. (2004). The dynamics of value creation: mapping your intellectual performance drivers. *Journal of Intellectual Capital*, 5(2), 312-325.
- Marr, B, & Starovic, D. (2003). Understanding corporate value: managing and reporting intellectual capital. CIMA.
- Mashayekhi, B., & Bazaz, M. S. (2008). Corporate Governance and Firm Performance in Iran. *Journal of Contemporary Accounting & Economics*, 4(2), 156-172.
- Mat Kila.s, & M., Wan Mansor. W. (2008). Capital Structure and Firm Characteristics: Some Evidence from Malaysian Companies. *Universiti Teknologi MARA Terengganu Paper series*,(14616).
- Mat Nawi, H. (2015). Determinants of capital structure in small and medium sized enterprises in Malaysia (Doctoral dissertation, Brunel University London).
- McGaha, A. M., & Porter, M. E. (1997). How Much Does Industry Matter, Really? *Strategic Management Journal*, 18 (Summer Special Issue), 15-30.
- Mehralian, Gh., Rajabzadeh, A., Sadeh, M.R., & Rasekh, H.R. (2013). Intellectual capital and corporate performance in Iranian pharmaceutical industry. *Journal of Intellectual Capital*, 13(1), 138.
- Meihami, B., Varmaghani, Z., & Meihami, H. (2014). Role of Intellectual Capital on Firm Performance (Evidence from Iranian Companies). *International Letters of Social and Humanistic Sciences* ,1, 43-50.

- Meritum, P, Cañibano, L., Sánchez, P., García-Ayuso, M., & Chaminade, C. (2002). Guidelines for managing and reporting on intangibles (Intellectual capital report).
- Messbacher, U. (2004). *Does capital structure influence firms value?* University of Ulster.
- Mia, L. (1993). The role of MAS information in organisations: an empirical study. *The British Accounting Review*, 25(3), 269-285.
- Mia, L., & Clarke, B. (1999). Market competition, management accounting systems and business unit performance. *Management Accounting Research*, 10(2), 137-158.
- Michaelas, N., Chittenden, F., & Poutziouris, P. (1999). Financial policy and capital structure choice in UK SMEs: Empirical evidence from company panel data. *Small business economics*, 12(2), 113-130.
- Miles, R. E., Snow, C. C., Meyer, A. D., & Coleman, H. J. (1978). Organizational strategy, structure, and process. *Academy of management review*, 3(3), 546-562.
- Miles, R.E , & Snow, C.C. (2003). *Organization Strategy, Structure and Process*. Stanford Business Classics, California.
- Miles, R.H. (1980). *Macro organizational behavior*: Goodyear Pub. Co.
- Miller, D., & Friesen, P. H. (1983). Strategy-making and environment: the third link. *Strategic management journal*, 4(3), 221-235.
- Miller, D. (1986). Configurations of strategy and structure: Towards a synthesis. *Strategic Management Journal*, 7(3), 233-249.
- Miller, K.D. (1993). Industry and country effects on managers' perceptions of environmental uncertainties. *Journal of International Business Studies*, 24(4), 693-714.
- Milliken, F.J. (1987). Three types of perceived uncertainty about the environment: State, effect, and response uncertainty. *Academy of Management Review*, 12, 133-143.
- Mintzberg, H. (1988). Generic strategies: toward a comprehensive framework. *Advances in strategic management*, 5(1), 1-67.
- Mitra, S., & Webster, S. (2008). Competition in remanufacturing and the effects of government subsidies. *International Journal of Production Economics*, 111(2), 287-298.



- Mitroff, I.I., & Denton, E. A. (1999). A spiritual audit of corporate America: A hard look at spirituality, religion, & values in the workplace. *San Francisco, CA: Jossey-Bass*. 259 pp.
- Modigliani, F., & Miller, M. (1963). Corporate income taxes and the cost of capital: A correction. *American Economic Review*, 53(3), 433-443.
- Modigliani, F., & Miller, M.H. (1958). The cost of capital, corporation finance and the theory of investment. *American Economic Review*, 48(3): 261-281.
- Moro, A., Lucas, M., Grimm, U., & Grassi, E. (2010). Financing SMEs: A model for optimising the capital structure. *In: 17th Annual Global Finance Conference*, 27-30, Poznan.
- Mosavi, S.A., Nekoueizadeh, SH., & Ghaedi, M. (2012). A study of relations between intellectual capital components, market value and finance performance. *African Journal of Business Management*, 6 (4), 1396-1403.
- Mouritsen, J., Larsen, H. T., & Bukh, P. N. (2001). Valuing the future: Intellectual capital supplements at Skandia. *Accounting, Auditing & Accountability Journal*, 14(4), 399.
- Mouritsen, J., Larsen, H.T., & Bukh, P.N. (2005). Dealing with the knowledge economy: Intellectual capital versus balanced scorecard. *Journal of Intellectual Capital*, 6(1), 8-27.
- Mouritsen, J. (2004). Measuring and intervening: how do we theorise intellectual capital management? *Journal of Intellectual Capital*, 5(2), 257 - 267.
- Mouritsen, J., & Larsen, H.T. (2005). The 2nd wave of knowledge management: The management control of knowledge resources through intellectual capital information. *Management Accounting Research*, 16(3), 371-394.
- Muhammad, N. M. N., & Ismail, M. K. A. (2009). Intellectual capital efficiency and firm's performance: study on Malaysian financial sectors. *International Journal of Economics and Finance*, 1(2), 206.
- Mutenheri, E., & Green, C. (2002). *Financial reform and financing decisions of listed firms in Zimbabwe*. University of Manchester, Institute for Development Policy and Management.
- Myers, B.W., & Saretto, A. (2010). Union strikes and the impact of non-financial stakeholders on capital structure. *SSRN eLibrary*.
- Myers, S. C. (1984). The capital structure puzzle. *The journal of finance*, 39(3), 574-592.

- Myers, S. C. (2001). Capital structure. *Journal of Economic Perspectives*, 15(2), 81-102.
- Myers, S., & Majluf, N. (1984). Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have. *Journal of Financial Economics* 13(1),187-221.
- Myers, S.C. (1977). Determinants of Corporate Borrowing. *Journal of Financial Economics*, 5(2), 147-175.
- Namvar, M., Fathian, M., Akhavan, P., & Gholamian, M. R. (2010). Exploring the impacts of intellectual property on intellectual capital and company performance: The case of Iranian computer and electronic organizations. *Management Decision*, 48(5), 676-697.
- Nash, H. (1998). Accounting for the future, a disciplined approach to value-added accounting. *Verfügbar unter: <http://home.sprintmail.com/~humphreynash/indexback.htm> (05.10. 2006).*
- Nazim, T. (2015). A critical analysis of Balanced Scorecard as a performance measurement tool: an overview of its usage and sustainability. [Online] Available: <http://www.academia.edu/6154100/>
- Newman, A., Gunessee, S., & Hilton, B. (2011). Applicability of financial theories of capital structure to the Chinese cultural context: A study of privately owned SMEs. *International Small Business Journal*, 0266242610370977.
- Ngah, R., & Ibrahim, A. R. (2009). The relationship of intellectual capital, innovation and organizational performance: A preliminary study in Malaysian SMEs. *International Journal of Management Innovation Systems*, 1(1), 1.
- Nguyen, T. D. K., & Ramachandran, N. (2006). Capital structure in small and medium-sized enterprises: The case of Vietnam. *ASEAN Economic Bulletin*, 23(2), 192-211.
- Nimtrakoon, S. (2015). The relationship between intellectual capital, firms' market value and financial performance. *Journal of Intellectual Capital*, 16(3), 587 - 618.
- Niven, P.R. (2006). *Balanced Scorecard Step-by-Step: Maximizing Performance and Maintaining Results* (2ed ed.): Hoboken, New Jersey: John Wiley & Sons, Inc John Wiley & Sons.

- Norton, E. (1991). Capital structure and small growth firms. *The Journal of Entrepreneurial Finance*, 1(2), 161.
- Nunkoo, P.K., & Boateng, A. (2010). The empirical determinants of target capital structure and adjustment to long-run target: evidence from Canadian firms. *Applied Economics Letters*, 17(10), 983-990.
- Nunnally, J.C., & Bernstein, I.H. (2010). *Psychometric theory*: McGraw-Hill.
- Otley, D.T. (1999). Performance management: a framework for management control systems research. *Management Accounting Research* 10(1), 363-382.
- Otley, D.T. (2003). Management control and performance management: whence and whither? . *The British Accounting Review* 35(4), 309-326.
- Owen, K., Mundy, R., Guild, W., & Guild, R. (2001). Creating and sustaining the high performance organization. *Managing Service Quality*, 11(1 ), 10 - 21.
- Pal, K., & Soriya, S. (2012). IC performance of Indian pharmaceutical and textile industry. *Journal of Intellectual Capital*, 13(1), 120.
- Pandey, I.M (2004). Capital Structure and profitability and Market Structure :Evidance From Malaysia. *Asia Pacific Journal Of Economics & Business*, 8(2).
- Parmar, B.L, Freeman, R.E., Harrison, J.S, Wicks, A.C, Purnell, L., & De Colle, S. (2010). Stakeholder theory: The state of the art. *The Academy of Management Annals*, 4(1), 403-445.
- Pennings, J.H. (1975). The Relevance of the Structural-Contingency Model for Organisational Effectiveness. *Administrative Science Quarterly*, 20 (3), 393-410.
- Perotti, E.C., & Spier, K. E. (1993). Capital Structure as a Bargaining Tool: The Role of Leverage in Contract Renegotiation. *The American Economic Review*, 1131-1141.
- Perrow, C. (1979). *Complex organizations (2nd ed.)*. Glenview, IL: Scott, Foresman.
- Peter, J Paul. (1981). Construct validity: a review of basic issues and marketing practices. *Journal of Marketing Research*, 133-145.
- Peteraf, Margaret A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic management journal*, 14(3), 179-191.
- Petersen, M. A., & Rajan, R. G. (2002). Does distance still matter? The information revolution in small business lending. *The Journal of Finance*, 57(6), 2533-2570.

- Petty, R., & Guthrie, J. (2000). Intellectual capital literature review: Measurement, reporting and management. *Journal of Intellectual Capital*, 1(2), 155 - 176.
- Petty, R., & Guthrie, J. (2000). Intellectual capital literature review Measurement, reporting and management. *Journal of Intellectual Capital*, 1(2), 155.
- Pfeffer, J., & Salancik, G.R. (1978). *The External Control of Organisations*. Harper & Row, New York.
- Pham, C. D., & Carlin, T. M. (2008). Financial performance of privatized state owned enterprises (SOEs) in Vietnam. Available at SSRN 1131542.
- Phillips, R., Freeman, R. E., & Wicks, A. C. (2003). What stakeholder theory is not. *Business Ethics Quarterly*, 13(04), 479-502.
- Pindyck, R. (2007). Uncertainty in Environmental Economics. *Review of Environmental Economics and Policy*, 1(1), 45–65.
- Piri, P., Alghyani, M., & Sadaghiani, S. (2014). A study on the effects of intellectual capital efficiency on economic performance. *Management Science Letters*, 4(5), 985-992.
- Pitkanen, A. (2007). Defining and Measuring Factors Explaining Firm's Intellectual Capital in Manufacturing and Information Technology Industries—A Contingency Approach. *Department of Accounting and Finance, Turku School of Economics, Turku*.
- Porter, M.E. (1980). *Competitive Strategy*. Free Press: New York.
- Prahalad, C. K, & Hamel, G. (1990). *The core competence of the corporation*. Copyright By the President and fellows of Harvard College
- Prahalad, C. K, & Hamel, G. (1994). Strategy as a field of study: Why search for a new paradigm? *Strategic management journal*, 15(2), 5-16.
- Preacher, K.J, & Hayes, A.F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36(4), 717-731.
- Preacher, K.J, & Hayes, A.F. (2008a). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40(3), 879-891.
- Preacher, K. J., & Hayes, A. F. (2008b). Assessing mediation in communication research. *The Sage sourcebook of advanced data analysis methods for communication research*, 13-54.

- Priem, R. L., Love, L. G., & Shaffer, M. A. (2002). Executives' perceptions of uncertainty sources: A numerical taxonomy and underlying dimensions. *Journal of Management*, 28(6), 725-746.
- Pulic, A. (1998, January). Measuring the performance of intellectual potential in knowledge economy. In *2nd McMaster World Congress on Measuring and Managing Intellectual Capital by the Austrian Team for Intellectual Potential*.
- Pulic, A. (2000). MVA and VAIC analysis of randomly selected companies from FTSE 250. *online] www.vaicon.net*.
- Quinn, J. B. (1980). *Strategies for change: Logical incrementalism*. Irwin Professional Publishing.
- Rahimnia, F., Keyvanipoor, S., & Moghadasian, M. (2014). Analysis of BSC perspectives as related to the alignment of environmental uncertainty and supply chain strategy, Benchmarking. *An International Journal*, 21(6), 903 - 916.
- Rajan, R. G., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *The journal of Finance*, 50(5), 1421-1460.
- Ramezan, M. (2011). Intellectual capital and organizational organic structure in knowledge society: How are these concepts related? *International Journal of Information Management*, 31(1), 88-95.
- Ramírez, Y. (2010). Intellectual capital models in Spanish public sector. *Journal of Intellectual Capital*, 11(2), 248-264.
- Ravi, S. A., & Stern L.W. (1988). Environmental Determinants of Decision-Making Uncertainty in Marketing Channels. *Journal of Marketing Research*, 25(1), 36-50.
- Recalde, C. J. (2011). Corporate Governance and Intellectual Capital Retrieved from [www.ucema.edu.ar/cegopp-base/download/.../recalde\\_feb2011.pdf](http://www.ucema.edu.ar/cegopp-base/download/.../recalde_feb2011.pdf)
- Regan, P. (2012). Making Sense of Uncertainty: An Examination of Environmental Interpretation. *International Journal of Business and Management*, 7(6), 18.
- Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of Research in Marketing*, 26(4), 332-344.
- Rhoads, C., & Fassih, F. (2011). Iran vows to unplug internet. *Wall Street Journal*, 28.

- Ringle, C. M., Wende, S., & Will, A. (2005). *Smart PLS Version 2.0 M3* (Version 2.0 M3).
- Riportella, C., & Casasola, M.J (2003). *What do we know about the financial behaviour of the Spanish SME?: an empirical analysis*(No. wb033708).
- Robert, P., Robert Phillips, R. E. F., & Robert Phillips, R. E. F. A. C. W. (2003). What stakeholder theory is not. *Business Ethics Quarterly*, 13(4), 479-502.
- Robock, S. H. (1971). Political Risk: Identification and Assessment. *Columbia Journal of World Business*, 6(4), 6-20.
- Romanelli, E., & Tushman, M. L. (1986). Inertia, environments, and strategic choice: A quasi-experimental design for comparative-longitudinal research. *Management Science*, 32(5), 608-621.
- Romano, C. A., Tanewski, G. A., & Smyrnios, K. X. (2000). Capital structure decision making: A model for family business. *Journal of Business Venturing*, 16, 285-310.
- Roos, G., Bainbridge, A., & Jacobsen, K. (2002). Intellectual capital analysis as a strategic tool. *IEEE Engineering Management Review*, 30(3), 46-52.
- Roos, G., Pike, S., & Fernström, L. (2005). *Managing Intellectual Capital in Practice*. Oxford, Butterworth-Heinemann.
- Roos, J., Roos, G., Dragonetti, N., & Edvinsson, L. (1997). *Intellectual Capital: Navigating in the New Business Landscape*. New York: New York University Press, NY.
- Ross, S.A. (1977). The determination of financial structure: the incentive-signalling approach. *The bell journal of economics*, 23-40.
- Rostami, J, & Akbarpour, Z. (2012). Study of the Relationship between Capital Structure and Tax: Evidence from Iran. *International Journal of Contemporary Business Studies*, 3(11), ISSN 2156-7506.
- Rudež, H.N., & Mihalič, T. (2007). Intellectual capital in the hotel industry: A case study from Slovenia. *International Journal of Hospitality Management*, 26(1), 188-199. doi: 10.1016/j.ijhm.2005.11.002
- Rumelt, R. (1991). How much does industry matter? *Strategic Management Journal*, 12 (3) ,167-186.
- Sachs, S., & Riihli, E. (2011). *Stakeholders matter: A new paradigm for strategy in society*. Cambridge University Press.

- Saeedi, A , & Mahmoodi, I. (2011). Capital Structure and Firm Performance: Evidence from Iranian Companies. *International Research Journal of Finance and Economics*, 70, ISSN 1450-2887.
- Saeedi, A, & Mahmoodi, I. (2012). The Determinants of Capital Structure: Evidence from an Emerging Market. *ISBN: 978-1-61804-066-4 Recent Advances in Business Administration*.
- Sajedi, J., & Talebian Nia, H. (2015). The Relationship between Intellectual Capital and Organizational Performance in Ministry of Sport and Youth. *International Journal of Sport Studies*,5 (1), 69-73.
- Salehi, M. (2009). Study of the relationship between capital structure measures and performance: Evidence from Iran. *International Journal of Business and Management* ,4(8).
- Santoso, E. (2012). Intellectual capital in Indonesia: The influence on financial performance of banking industry. (*D.M. Ph.D. Thesis*), University of Phoenix, United States-Arizona.
- Sarig, O. H. (1998). The Effect of Leverage on Bargaining with a Corporation. *Financial Review*, 33(1), 1-16.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business students*. 4th ed. London: Prentice Hall.
- Savalei, V., & Bentler, P. M. (2009). A two-stage approach to missing data: Theory and application to auxiliary variables. *Structural Equation Modeling: A Multidisciplinary Journal*, 16(3), 477-497.
- Sbeiti, W. (2010). The determinants of capital structure: evidence from the GCC countries. *International Research Journal of Finance and Economics*, 47(2), 56-82.
- Schendel, D., & Hofer, C.W. (1979). *Strategic management: A new view of business policy and planning*: Little, Brown.
- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of educational research*, 99(6), 323-338.
- Schulz, A., Wu, A., & W. Chowc, CH. (2010). Environmental Uncertainty, Comprehensive, Performance Measurement Systems, Performance-Based Compensation, and Organizational Performance. *Asia-Pacific Journal of Accounting & Economics*,17 (2) 17–40.

- Schumacker, R.E., & Lomax, R.G. (2012). *A Beginner's Guide to Structural Equation Modeling*: Third Edition: Taylor & Francis.
- Schwartz, G., & Clements, B.(1999). Government subsidies. *Journal of Economic Surveys*, 13(2), 119-148.
- Scott, J. M., & Irwin, D. (2009). Discouraged advisees? The influence of gender, ethnicity, and education in the use of advice and finance by UK SMEs. *Environment and Planning: Government and Policy*, 27(2), 230-245.
- Sekaran, U. (2006). *Research Methods for Business: A Skill Building Approach*, 3<sup>rd</sup> edition, New York: John Wiley & Sons.
- Sekaran, U., & Bougie, R. (2010). *Research Method for Business, A Skill Building Approach*. John Wiley & Sons Inc: Singapore.
- Sener, R. (1989). An empirical test of the de angelo-masulis tax shield and tax rate hypotheses with industry and inflation effects. *Journal of Business, Mid-Atlantic*, 26.
- Shaari, J, Nassir, A , Khalique, M, & Abu Hassan, I.b.M (2010). Ranking of Public and Domestic Private Sector Commercial Banks in Pakistan on the Basis of the Intellectual Capital Performance. *Proceedings of International Borneo Business Conference (BBC2010)*, (1).
- Shah, A, & Hijazi, T. (2004). The Determinants of Capital Structure of Stock Exchange-listed Non-financial Firms in Pakistan. *The Pakistan Development Review*, 43 (4) ,605–618.
- Shah, A, & Khan, S. (2007). Determinants of Capital Structure: Evidence from Pakistani Panel Data. *International Review of Business Research Papers*, 3 (4),265-282
- Sharabati, A. A. A., Jawad, S. N., & Bontis, N. (2010). Intellectual capital and business performance in the pharmaceutical sector of Jordan. *Management Decision*, 48(1), 105-131.
- Shields, M.D. (1997). Research in Management Accounting by North Americans in the 1990s. *Journal of Management Accounting Research* 9, 1-59.
- Shipton, H., West, M. A., Dawson, J., Birdi, K., & Patterson, M. (2006). HRM as a predictor of innovation. *Human Resource Management Journal*, 16(1), 3-27.
- Shrout, P. E., & Bolger, N. (2002). Mediation in Experimental and Nonexperimental Studies: New Procedures and Recommendation. *Psychological Methods*, 7(4), 422–445.



- Simerly, R., & Li, M. (2000). Environmental Dynamism, Capital Structure and Performance: A Theoretical Integration and an Empirical Test. *Strategic Management Journal*, 21(1), 31-49.
- Sirmon, D.G, Hitt, M.A, & Ireland, R. D. (2007). Managing firm resources in dynamic environments to create value: Looking inside the black box. *Academy of management review*, 32(1), 273-292.
- Slotwinski. M. (2010). Law Enforcement Expenditures and Crime Rates in Canadian Municipalities: A Statistical Analysis of How Law Enforcement Expenditures Impact Municipal Crime Rates in Canada. *MPA Research Report ,Submitted to The Local Government Program Department of Political Science*. The University of Western Ontario.
- Smith, P. C., Balzer, W., Josephson, H. I., Lovell, S. E., Paul, K. B., Reilly, B. A., & Reilly, C. E. (1989). Whalen, M. A. Users' manual for the Job Descriptive Index (JDI) and the Job in General (JIG) scales. *Bowling Green, Ohio: Bowling Green Scale University*.
- Smither, J.W., & London, M. (2009). Performance Management: Putting Research into Action. *ISBN: 978-0-470-19232-0*.
- Sobel, M. E. (1982). Asymptotic Confidence Intervals for Indirect Effects in Structural Equation Models. *Sociological Methodology*, 13,(1), 290-312.
- Sofian, S., Tayles, M., & Pike, R. (2006). The implications of intellectual capital on performance measurement and corporate performance. *Jurnal kemanusiaan*, (8), 13-24.
- Sofian, S. (2005). Intellectual Capital and Management Accounting Practices. (*Ph.D*), *University of Brradford, Brradford*.
- Speckbacher, G., Bischof, J., & Pfeiffer, T. (2003). A descriptive analysis on the implementation of Balanced Scorecards in German-speaking countries. *Management Accounting Research*, 14(1), 361–387.
- Standfield, K. (1998). Extending the intellectual capital framework. *Available on line <http://www.knowcorp.com/article075.htm>*.
- Stewart, T.A. (1997). Intellectual Capital: The New Wealth of Organizations. *New York: Bantam Doubleday Dell Publishing Group, NY*.
- Stewart, T. A. (2007). *The wealth of knowledge: Intellectual capital and the twenty-first century organization*: Crown Business.

- Stewart, T.A. (1997). *Intellectual capital: the new wealth of organizations*, *The Globe and Mail*. (Index-only), p. B11.
- Storey, D.J. (1994). *Understanding the small business sector*. London: Routledge.
- Subramaniam, M., & Youndt, M.A. (2005). The influence of intellectual capital on the types of innovative capabilities. *Academy of Management Journal*, 48(3), 450-463.
- Sudiyatno, B, & Mustika S.S. (2013). Determinants of debt policy: An empirical studying Indonesia stock exchange. *Educational Research*, 4(1),98-108.
- Sudman, S., & Bradburn, N. (1982). *Asking Questions: a Practical Guide to Questionnaire Design*. USA: Jossey-Bass.
- Sullivan, P.H. (2000). *Value-driven Intellectual Capital: How to Convert Intangible Corporate Assets into Market Value*. John Wiley & Sons,Inc, 238-244.
- Sung, T. J, Lu, Y. T, & Ho, S. S. (2010). Time-based strategy and business performance under environmental uncertainty: An empirical study of design firms in Taiwan. *International Journal of Design*, 4(3), 29-42.
- Survilaitė, S., Tamošiūnienė, R., & Shatreovich, V. (2015). Intellectual Capital Approach to Modern Management through the Perspective of a Company's value added. *Business: Theory and Practice/Verslas: Teorija ir Praktika*, 16(1), 31-44.
- Sutcliffe, K. M., & Zaheer, A. (1998). Uncertainty in the transaction environment: An empirical test. *Strategic Management Journal*, 19(1), 1-23.
- Sveiby, K.E. (1997). *The New Organizational Wealth: Managing and Measuring Knowledge-based Assets*. San Francisco, Barrett-Kohler, Publishers,CA.
- Swamidass, P., & Newell, W. (1987). Manufacturing strategy, environmental uncertainty and performance: a path analytic model. *Management Science*, 33(4), 509±24.
- Tabachnick, B. G., & Fidell, L. S. (2007). Multilevel linear modeling. *Using multivariate statistics*, 781-857.
- Taggart, J. (1985). *Secular patterns in the financing of U.S corporations*. In Friedman, B.M. *Corporate capital structures in the United States*, University of Chicago Press, 13-80.
- Tayles, M. , Pike, R., & Sofian, S. (2007). Intellectual capital, management accounting practices and corporate performance: Perceptions of managers. *Accounting, Auditing and Accountability Journal*, 20(4), 522-548.

- Teece, D.J. (1986). Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. *Research policy*, 15(6), 285-305.
- Tehrani, R., & Najafzadehkhoe, S. (2015). Macroeconomic uncertainty and corporate capital structure: evidence from firms listed in Tehran stock exchange, *International Journal of Economics, Commerce and Management*, 3(6), 318-331.
- Thies, C. F., & Klock, M. S. (1992). Determinants of Capital Structure, *Review of Financial Economics*, 1(2), 40-53.
- Thompson, James D. (1967). *Organizations in action: Social science bases of administrative theory*: Transaction publishers.
- Thorelli, Hans B.. (1967). Organizational Theory: An Ecological View. *Academy of Management Proceedings*, 66 - 84.
- Times, T. (2012). Iran advances 41 places in industrial production". Retrieved 2012-02-07., from <http://en.trend.az/business/economy/1646904.html>.
- Titman, Sh. (1984). The effect of capital structure on a firm's liquidation decision. *Journal of Financial Economics*, 13(1), 137-151.
- Titman, Sh, & Wessels, R (1988). The Determinants of Capital Structure Choice. *Journal of Finance*, 43, 1-19.
- Tomo, O. (2011). Intangible Asset and Market Value Study. *Managerial Auditing Journal*, 17(1/2), 9 - 15.
- Trung, D., & Kumar, S. (2005). Resource use and waste management in Vietnam hotel industry. *Journal of Cleaner Production*, 13, 109-116.
- Tseng, Hui-Kuan, Wu, Jy S., & Liu, Xiaoshuai. (2013). Affordability of electric vehicles for a sustainable transport system: An economic and environmental analysis. *Energy Policy*, 61, 441-447.
- Tseng, Kuo-An, Lin, Ching-I, & Yen, Szu-Wei. (2015). Contingencies of intellectual capitals and financial capital on value creation: Moderation of business cycles. *Journal of Intellectual Capital*, 16(1), 156-173.
- Tung, A, Baird, K , & Schoch, H.P. (2011). Factors influencing the effectiveness of performance measurement systems. *International Journal of Operations & Production Management*, 31(12), 1287-1310.

- Tung, Rosalie L. (1979). Dimensions of organizational environments: An exploratory study of their impact on organization structure. *Academy of Management Journal*, 22(4), 672-693.
- Tushman, M. L., & Nadler, D. A. (1978). Information Processing as an Integrating Concept in Organizational Design. *Academy of management review*, 3(3), 613-624.
- Tymon Jr, W.G, Stout, D.E, & Shaw, K.N. (1998). Critical analysis and recommendations regarding the role of perceived environmental uncertainty in behavioral accounting research. *Behavioral Research in Accounting*, 10, 23.
- Ullah, W., & Nishat, M. (2008, September). Capital structure choice in an emerging market: evidence from listed firms in Pakistan. In *21st Australasian Finance and Banking Conference*.
- Usoff, C. A., Thibodeau, J. C., & Burnaby, P. (2002). The importance of intellectual capital and its effect on performance measurement systems. *Managerial Auditing Journal*, 17(1/2), 9 - 15.
- Uzzi, B. (1999). Embeddedness in the making of financial capital: How social relations and networks benefit firms seeking financing. *American sociological review*, 481-505.
- Van Buren, M. (1998). "Virtual coffee klatch", *Technical Training*, 9(5), 42-6.
- Van de Ven, A. H., Delbecq, A. L., & Koenig Jr, R. (1976). Determinants of coordination modes within organizations. *American sociological review*, 322-338.
- Van der Stede, W.A, Chow, Ch.W, & Lin, T.W. (2006). Strategy, Choice of Performance Measures, and Performance. *Behavioral Research in Accounting*, 18, 185-205.
- Veen-Dirks, P., van, & Wijn, M. (2002). Strategic control: meshing critical success factors with the balanced scorecard. *Long Range Planning*, 35, 402-427.
- Wagner, M. (2005). How to reconcile environmental and economic performance to improve corporate sustainability: corporate environmental strategies in the European paper industry. *Journal of Environmental Management* 76, 105-118.

- Wahba, H. (2008). Does the market value corporate environmental responsibility? An empirical examination. *Corporate Social Responsibility and Environmental Management*, 15, 89-99.
- Walker, O. C. Jr., & Ruekert, R. W. (1987). Marketing's role in the implementation of business strategies: A critical review and conceptual framework. *Journal of Marketing for Mental Health*, 51(3), 15-33.
- Wan Mahmood, W.M., & Zakaria, R. (2007). Profitability and Capital Structure of the Property and Construction Sectors in Malaysia. *Pacific Rim Property Research Journal*, 13(1).
- Wang, W. Y, & Chang, C. (2005). Intellectual capital and performance in causal models Evidence from the information technology industry in Taiwan. *Journal of Intellectual Capital*, 6(2), 222-236.
- Wang, Y.H. (2006). The Influence of Corporate Governance and Changes in Managers on Shareholder Wealth. *unpublished Master's thesis, Institute of Economics and Management, National University of Kaohsiung.*
- Wang, Y.J. (2002). Liquidity management, operating performance, and corporate value: evidence from Japan and Taiwan. *Journal of Multinational Financial Management*, 12(2), 159-169.
- Watson, K., Klingenberg, B., & Polito, T., Geurts, T. (2004). Impact of environmental management system implementation on financial performance. *Management of Environmental Quality*, 15, 622-628.
- Watson, R.T. (1990). Influences on the IS manager's perceptions of key issues: information scanning and the relationship with the CEO. *MIS Quarterly* 14 (2), 217-231.
- Welch, I. (2004). Capital Structure and Stock Returns, *Journal of Political Economy*, 112, 106-31.
- Wang, W. Y., & Chang, C. (2005). Intellectual capital and performance in causal models: Evidence from the information technology industry in Taiwan. *Journal of intellectual capital*, 6(2), 222-236.
- Wernerfelt, B. (1995). The resource-based view of the firm: Ten years after. *Strategic management journal*, 16(3), 171-174.
- West, J., & Drnevich, P.L. (2010). The effects of environmental uncertainty on young and small businesses. In *Small Business, Entrepreneurship, and Economic Recovery Conference*. Atlanta: Kauffman Foundation, Federal

- Reserve Bank. Retrieved August 27, 2013, [http://www.frbatlanta.org/documents/news/conferences/10smallbusiness\\_WestDrnevich.pdf](http://www.frbatlanta.org/documents/news/conferences/10smallbusiness_WestDrnevich.pdf).
- Wicks, A. (1996). Overcoming the separation thesis: The need for a reconsideration of business and society research. *Business and Society*, 35, 89-118.
- Williamson, O.E. (1988). Corporate finance and corporate governance. *The journal of finance*, 43(3), 567-591.
- Withers, M. (2011). Director Mobility: The Role of Human and Social Capital in Board Appointments. (Ph.D. 3453519), Arizona State University, United States -- Arizona.
- Wiwattanakantang, Y. (1999). An empirical study on the determinants of the capital structure of Thai firms. *Pacific-Basin Finance Journal* 7 999. 371–403.
- Worthington, A, & West, T. (2001). Economic Value-Added: A Review of the Theoretical and Empirical Literature. *Asian Review of Accounting* 9(1),67-86.
- Worthington, A.C. , & West, T. (2004). Australian evidence concerning the information content of economic value-added. *Australian Journal of Management*, 29(2), 201-24.
- Wu, M., Lee, Y., & Wang, G. (2012). To verify how intellectual capital affects organizational performance in listed taiwan IC design companies with considering the moderator of corporate governance. *Journal of Global Business Management*, 8(1), 20- 32.
- Wu, W.Y., & Tsai, H.J. (2005). Impact of Social Capital and Business Operation Mode on Intellectual Capital and Knowledge Management. *International Journal Technology Management*, 30(1/2).
- Yan-xi, L., Shi-ze, B., & Xian-jing, K. (2006). Environment risk, capital structure, growth and high-tech firm' s performance [J]. *Science Research Management*, 6, 005.
- Yi, A., & Davey, H. (2010). Intellectual capital disclosure in Chinese (mainland) companies. *Journal of Intellectual Capital*, 11(3), 326-347.
- Yitmen, I. (2011). Intellectual capital: A competitive asset for driving innovation in engineering design firms. *Engineering Management Journal*, 23(2), 3-19.
- Yung, Y. F., & Bentler, P. M. (1994). Bootstrap-corrected ADF test statistics in covariance structure analysis. *British Journal of Mathematical and Statistical Psychology*, 47(1), 63-84.

- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of consumer research*, 37(2), 197-206.
- Zhu, Jianxin, & Lu, Ya Yan. (2004). Validity of one-way models in the weak range dependence limit. *Journal of Computational Acoustics*, 12(01), 55-66.
- Zikmund, W.G. (2003). *Business Research Methods 7th ed.* USA: South-Western.
- Zohar, D., & Marshall, I. (2004). *Spiritual capital: Wealth we can live by.* Berrett-Koehler Publishers.
- Zschockelt, F. (2009). The importance of developing intellectual capital for innovative organizations: contributions from a HRM-perspective.