

**IDENTIFY THE IMPACT OF INTELLECTUAL CAPITAL
ON CORPORATE ENTREPRENEURSHIP (CASE STUDY:
SAMEN-ALHOJAJ FINANCE AND CREDIT
INSTITUTION IN KHUZESTAN)**

Ali Akbar Jokar¹

Jafar Salehifar²

Abstract

The current study aimed at investigating the effects of intellectual capital on the corporate entrepreneurship. The statistical population of the study included 84 employees and managers in Samen-Alhojaj finance and credit institution in Khuzestan. The sampling was done using stratified random sampling and Cochran methods and 69 peoples were chosen as samples. The data were collected using a standard questionnaire. SPSS was used for data analysis and for structural equation modeling, the PLS software was used in two parts of measurement model and structure. For the first part, the technical features of the questionnaire were evaluated and for the second part, the t coefficients were used for testing the research hypotheses. The results of the study indicative of the significant and positive impact of intellectual capital on the corporate entrepreneurship, the positive and significant effect of human capital, Structural Capital and relational capital on the corporate entrepreneurship.

Keywords: Intellectual Capital, Human Capital, Structural Capital, Relational Capital, Corporate Entrepreneurship.

¹ Assistant Professor, Payam Noor University, Tehran, Iran

² Department of Business Management, Islamic Azad University, Ghesm Branch, Iran

Introduction

Firms in the dynamic atmosphere of modern global competition, despite rapid changes, have been increasingly committed to entrepreneurial activities in order to survive and improve their performance (Covin & Kuratko, 2008). Dess et al. (1999) express that firms must have an entrepreneurial approach in order to improve their performance and consequently act as more competitive in the market. Entrepreneurship is a basis for job creation, innovation, new value and competition in the market. Today, entrepreneurship is considered as one of the tools of development (Samila & Sorenson, 2011); since the existence of entrepreneur people causes the creation of platform for success. On the other hand, considering the rapid increase of new rivals and creation of mistrust of traditional management methods in companies, the necessity of entrepreneurship in organizations is felt. Naman & Slevin (1993) believe that companies have more tendency toward being innovativeness, risk-taking and proactiveness (Farsi et al., 2013).

One of the important factors that affect on corporate entrepreneurship is intellectual capital. The intellectual capital is the intellectual part of 21st century organizations. It is a resource-based theory which is considered as a strategic resource (Zeghal & Maaloul, 2010). Intellectual capital is a set of knowledge-based assets which belongs to an organization. In other words, intellectual capital is defined as having knowledge, using experience, organizational technology, communication with the customer and supplier, besides professional abilities provide the company with a competitive advantage in the market (Ileanu & Tanasoiu, 2008). Intellectual capital provides many organizational value varieties such as benefit creation, determining a strategy (market share, leadership, and brand), innovation, customer loyalty, cost reduction, improvement in effectiveness and other things (Sullivan, 2000).

Therefore, the different aspects of intellectual capital such as human capital, structural capital, and relational capital make possible the well investigation and reviewing the future opportunities and procedures in the organization, so the managers can use these opportunities for higher entrepreneurial behavior corporate. Accordingly, the intellectual capital is a vital and important subject for the organizations for achieving higher entrepreneurship.

Theoretical basis of research and hypotheses development

Intellectual Capital

Nowadays, intellectual capital management plays an undeniable role on the success of firms in future lines of competitive markets. In the current economy who is facing knowledge-based competitions, the knowledge and intellectual capitals of a firm are considered as its key competitive advantages (Chang & Chen, 2012). Knowledge-based economy is an economy in which knowledge and intangible assets are considered as driving factors of production (Massa & Testa, 2009). The intellectual capital is a type of capital arising from staffs, managers, leaders, supervisors, chief executive officers and in general manpower of the firm. Intellectual capital is viewed from a resource-based theory and is also considered as a strategic source (Zeghal & Maaloul, 2010). In general, the intellectual capital is known as a set of knowledge-based assets allocated to a firm.

Moon and Kym (2006) have divided intellectual capital to three types (human capital, structural capital, and relational capital). Human capital or employees' merits imply skill, training, experience, and value features of work force (Ling, 2013). Penning et al defines the human capital of an organization as its experts' knowledge and skills for providing professional services (Swart, 2006). Ling (2013) consider structural capital as a part of organization's internal structure denoting the included knowledge in organizational procedures and structures, created by the employees and mostly belonging to the organization.

According to Gadau (2012), the structural capital is indicative of human capital substructure and includes the organization's ability for compatibility with markets' occasions, managerial philosophy, organization culture, trademarks, moral property, managerial processes, and other assets owned by the company. The relational capital includes the current value and future potential value of organizations' connections with the customers. It also includes cases such as: trademarks, market share, customers' information, communication with the customers, the accessible centers for the customers, and commercial contracts (Bontis et al., 2000).

Corporate Entrepreneurship (CE)

Corporate entrepreneurship is a mindset and provides a perspective that is reflected in current processes and organizational culture of the company. Lots of scholars in the field of entrepreneurship claim that the organizations effectively achieve their goals with strong entrepreneurial behaviors (Dess & Lumpkin, 2005; Naldi et al., 2007).

Corporate entrepreneurship is developing a new investment in an existing organization to take advantage of a new opportunity and create economic value (Parker, 2011). Kassa and Raju (2014) suggest that Individual entrepreneur is someone that focuses on creativity and innovation, an idea to make a profitable investment in the organization. CE which is reflected in organizational aspects such as Innovativeness, risk taking, proactiveness and Competitive Aggressiveness is considered as an important determinant of firms' development (Lumpkin and Dess, 1996). Innovativeness as the first dimension of CE refers to a firm's willingness to engage in creative activities and processes via introducing new products/services as well as technological leadership and R&D in developing new mechanisms (Lumpkin & Dess, 1996).

Risk taking means implementing activities without relying on specific and full knowledge about the probable results. In large firms, risk taking may lead to independent, semi-dependent units or new currents (Farsi et al, 2013). The third dimension of CE is proactiveness pertaining to have a perspective viewpoint through which the firms are permanently seeking new opportunities for developing new products/services and attaining first rank competitive situations as well as orienting the environment and market (Wiklund and Shepherd, 2005). Competitive aggressiveness refers to the tendency to get involved in hard and direct challenges with competitors to improve their market situation. Companies which aggressively make their competitive position and take the opportunities with force to achieve profitability may be able to better maintain their competitive advantage in the long term; provided that their target is overtaking rivals and not hitting those (Dess & Lumpkin, 2005).

The components of CE in terms of innovation, risk taking, proactiveness and Competitive Aggressiveness, are mainly applied together to improve entrepreneurial performance of an organization (Talebi et al., 2015).

Investigating the related literature it is revealed the intellectual capital and its aspects affect the corporate entrepreneurship. Assessing the perspectives of each main variable, the following hypotheses are suggested:

H₁: There is a positive impact of intellectual capital on corporate entrepreneurship.

H₂: There is a positive impact of human capital on corporate entrepreneurship.

H₃: There is a positive impact of structural capital on corporate entrepreneurship.

H₄: There is a positive impact of relational capital on corporate entrepreneurship.

Considering the main objective of the study and also the research hypothesis, the conceptual model of the study (figure 1) is prepared which is shown as below:

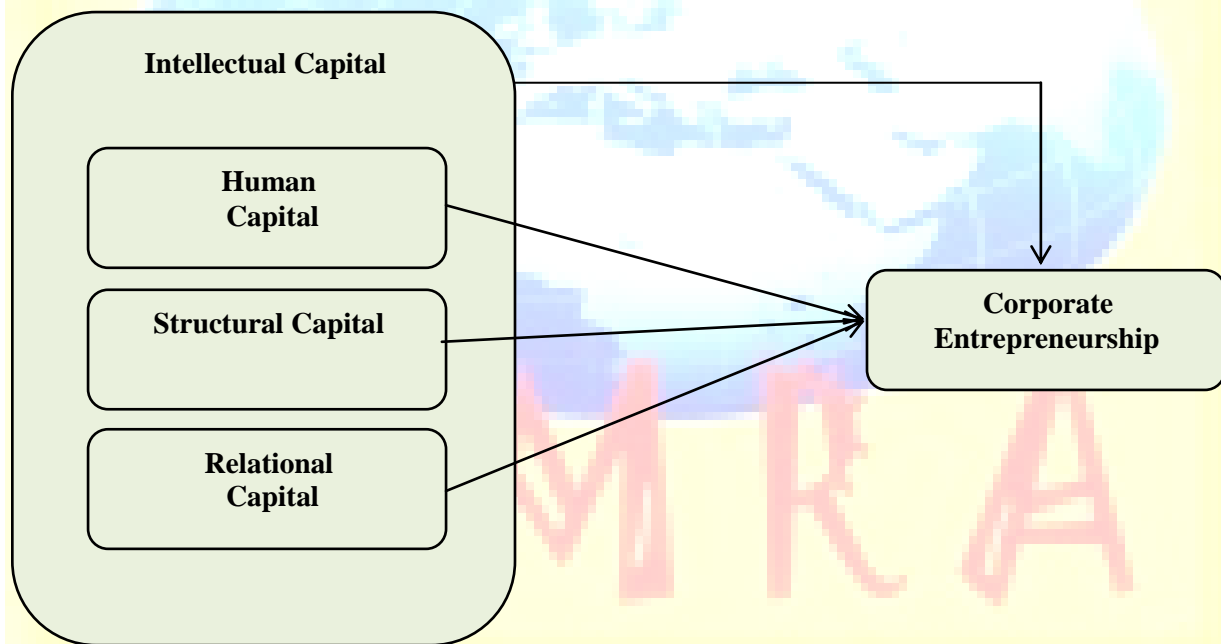


Figure (1): Research Model

Research Methodology

In terms of objective, the current study is an applied study and considering the data collection, it is descriptive-survey. Moreover, quantitative data were collected for hypothesis testing for which some questionnaires were distributed among all employees and managers working Samen-Alhojaj finance and credit institution in Khuzestan and the results were recorded. The statistical population of the study included all employees and managers working Samen-Alhojaj finance and credit institution in Khuzestan were who 84 persons. Sample size was calculated using Cochran method and 69 employees were chosen as samples, and the questionnaire was distributed among them. Two standard questionnaires were used for data collection: Moon & Kym intellectual capital standard questionnaire (2006) and Aktan & Bulut corporate entrepreneurship standard questionnaire (2008). The intellectual capital questionnaire included 41 questions which 11 questions allocated to human capital, 19 questions allocated to structural capital, and 11 questions allocated relational capital. The corporate entrepreneurship questionnaire also included 15 questions which 4 questions allocated to innovation, 5 questions allocated to risk taking, 3 questions allocated to proactiveness and 3 questions allocated to competitive aggressiveness.

The SPSS software was used for assessment of the reliability of the questionnaire. The reliability of the instrument accounts using Cronbach's alpha coefficient and results showed that the appropriate research tools. As a result Cronbach's alpha for intellectual capital 0.87 and for CE 0.79 is obtained. The questionnaire's validity was also assessed by both convergent and divergent validity criteria which are specific to structural equation modeling. AVE (Average Variance Extracted) was used for convergent validity assessment in PLS software whose results for the research variables are presented in table 1. The acceptance criterion for AVE was 0.5 (Hulland, 1999). As indicated in table 1; All the AVE values for constructs are higher than 0.5 which approves the questionnaire's convergent reliability. In addition, for divergent validity, the differences between one construct's indices with those of another construct are compared. This is done through comparison between each construct's square AVE and correlation coefficients values of constructs. The obtained results from PLS indicated that each construct's square AVE was higher the correlation coefficients of that construct compared to other constructs, which approves the divergent validity of the constructs.

Table (1): Convergent and Divergent validity criteria

constructs	HC	SC	RC	Innovation	Risk Taking	Proactivness	Competitive Aggressivness
AVE	0.60	0.57	0.56	0.67	0.70	0.65	0.61
HC	0.72						
SC	0.32	0.53					
RC	0.39	0.25	0.84				
Innovation	0.31	0.43	0.25	0.73			
Risk Taking	0.49	0.21	0.32	0.17	0.73		
Proactivness	0.36	0.11	0.36	0.24	0.31	0.63	
Competitive Aggressivness	0.29	0.19	0.33	0.39	0.41	0.46	0.58

For the next stage, the PLS software was used for confirmatory factor analysis of measurement models assessment and also evaluation of causal paths coefficients for assessing the structural section of the used model.

According to figure 2 in the PLS output, the relationship between intellectual capital and dimension of them with corporate entrepreneurship is direct and significant, and according to resulted standard coefficients from PLS software, 75% of the changes in corporate entrepreneurship by intellectual capital can be predicted.

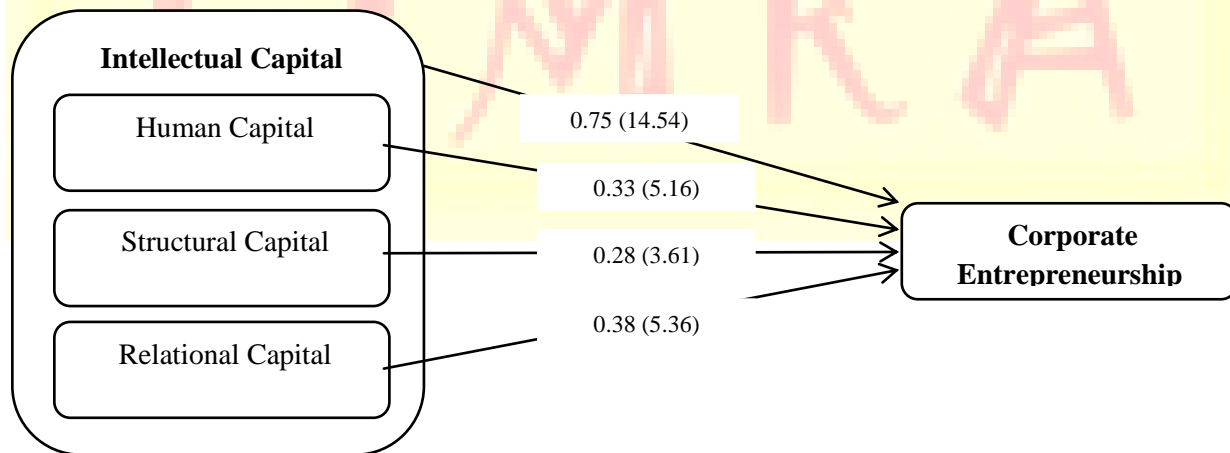


Figure (2): paths coefficients in PLS

The table 2 shows the model's paths coefficients. When the t-values are higher than +1.96 or lower than -1.96, the parameter is significant. Therefore, using the obtained results, it can be said that the relationships between the hypotheses are significant and consequently, they are approved.

Table (2): Model's Paths Coefficients

Hypothesis	Path Coefficients	t-values	Conclusion
IC →	0.75	14.54	+
HC →	0.33	5.16	+
SC →	0.28	3.61	+
RC →	0.38	5.36	+

Conclusion

As it was mentioned, the intellectual capital is indicative of a set of knowledge-based assets owned by an organization and they are among the most important features of that organization and through adding values to the key beneficiaries of the organization, significantly help with the competitive situation of the organization. These capitals are among the important and effective factors on creativity, innovation and corporate entrepreneurship, noted in many studies (Khalique & Mansor, 2016).

The main hypothesis testing results indicated that intellectual capitals have a direct and significant effect on the corporate entrepreneurship. It means that considering the intangible capitals of the organization and developing these assets derive the company's staff to activities with higher entrepreneurial activities and ultimately better competitive of the company. The results testing this hypothesis are in lines with those of the studies in Khalique & Mansor (2016) and Sullivan (2000). Those studies indicated that availability of intellectual capital is potential source for competitive advantage which causes growth and development of the organization and ultimately improvement of the corporate entrepreneurship.

The results of testing the secondary hypotheses of the study are also indicative of the effectiveness of human, structural, and relational capitals on corporate entrepreneurship. Therefore, by these hypotheses approved, it can be mentioned the availability of human capitals

as inputs existing in the company's employees, the availability of structural capitals which are indicative of existing structures and processes in an organization used by the employees for utilizing their knowledge and skills, and availability of relational capitals which are indicative of potential assets an organization own as covert assets outside it, lead to outputs such as improvement of creativity and corporate entrepreneurship activities.

Thus, according to the results of the study suggest that the managers are using entrepreneurship programs and training in this regard, seeks to empower employees to be entrepreneurial activities. Also organization with the uses of accurate information systems, provide of access to information that enable them to more creative and entrepreneurial.

References

- [1] Aktan, B., & Bulut, C. (2008). Financial performance impacts of corporate entrepreneurship in emerging markets: A case of Turkey. *European Journal of Economics, Finance and Administrative Sciences*, 12, 69-79.
- [2] Bontis, N., Keow, W. C. C., & Richardson, S. (2000). Intellectual capital and business performance in Malaysian industries. *Journal of intellectual capital*, 1(1), 85-100.
- [3] Chang, C.H., and Chen, Y.S. (2012). The determinants of green intellectual capital. *Management Decision*, 50(1), 74-94.
- [4] Covin, J. G., & Kuratko, D. F. (2008). *The concept of corporate entrepreneurship*. In V. Narayanan & G. O'Connor (Eds.), *The Blackwell encyclopedia of technology and innovation management*. Oxford, UK: Blackwell Publishers.
- [5] Dess, G. G., Lumpkin, G. T., & McGee, J. E. (1999). Linking Corporate Entrepreneurship to Strategy, Structure, and Process: Suggested Research Directions. *Entrepreneurship Theory and Practice*, 24(1), 85-102.
- [6] Dess, G.G., and Lumpkin, G.T. (2005). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship, *The Academy of Management Executive*, 19(1), 147-156.
- [7] Farsi, J.Y., Rezazadeh, A., and Najmabadi, A.D. (2013). Social capital and organizational innovation: the mediating effect of entrepreneurial orientation', *Journal of Community Positive Practices*, 13(2), 22-40.

- [8] Gadau, L. (2012). The Intellectual Capital-a Significant, but Insufficiently Highlighted Source in the Financial Situations. *Procedia-Social and Behavioral Sciences*, 62, 668-671.
- [9] Hulland, J. (1999). Use of partial least squares (pls) in strategic management research: A review of four recent studies, *Strategic Management Journal*, 20(2), 195–204.
- [10] Ileanu, B. V., & Tanasoiu, O. E. (2008). Factors of the Earning Functions and Their Influence on the Intellectual Capital of an Organization. *Journal of applied Quantitative methods*, 3(4), 366-374.
- [11] Kassa, A. G., & Raju, R. S. (2014). Corporate entrepreneurship and innovation. *European Journal of Business and Management*, 6(31), 50-67.
- [12] Khalique, M., & Mansor, S. A. (2016). Intellectual capital in Malaysian hotel industry: a case study of Malacca. *International Journal of Business Performance Management*, 17(1), 103-116.
- [13] 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.
- [14] Lumpkin, G.T., and Dess, G.G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance, *Academy of Management Review*, 21(1), 135-72.
- [15] Massa, S., and Testa, S. (2009). A knowledge management approach to organizational competitive advantage: Evidence from the food sector, *European Management Journal*, 27(2), 129-141.
- [16] Moon, Y. J., & Kym, H. G. (2006). A model for the value of intellectual capital. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 23(3), 253-269.
- [17] Naldi, L., Nordqvist, M., Sjöberg, K., and Wiklund, J. (2007). Entrepreneurial orientation, risk taking, and performance in family firms, *Family Business Review*, 20(1), 33-47.
- [18] Parker, S. C. (2011). Intrapreneurship or entrepreneurship?. *Journal of Business Venturing*, 26(1), 19-34.
- [19] Samila, S; Sorenson, O. (2011). Venture capital, Entrepreneurship and Economic growth, *The Review of Economics and Statistics*, 93(1), 338–349.
- [20] Sullivan, P. H. (2000). *Value driven intellectual capital: how to convert intangible corporate assets into market value*. John Wiley & Sons, Inc.

- [21] Swart, J. (2006). Intellectual capital: disentangling an enigmatic concept. *Journal of Intellectual Capital*, 7(2), 136-159.
- [22] Talebi, K., Rezazadeh, A., & Najmabadi, A. D. (2015). SME alliance performance: the impacts of alliance entrepreneurship, entrepreneurial orientation, and intellectual capital. *International Journal of Entrepreneurship and Small Business*, 24(2), 187-207.
- [23] Wiklund, J., and Shepherd, D. (2005). Entrepreneurial orientation and small business performance: a configurational approach, *Journal of business venturing*, 20(1), 71-91.
- [24] Zeghal, D., & Maaloul, A. (2010). Analysing value added as an indicator of intellectual capital and its consequences on company performance. *Journal of Intellectual capital*, 11(1), 39-60.

