

## Örgütsel Davranış Araştırmaları Dergisi

Journal Of Organizational Behavior Research Cilt / Vol.: 3, Sayı / Is.: S2, Yıl/Year: 2018, Kod/ID: 81S292



# IMPACT OF ENTREPRENEURIAL ORIENTATION AND STRATEGIC ENTREPRENEURSHIP ON THE PERFORMANCE OF EXPORTING COMPANIES

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#### ABSTRACT

Corporations and institutions active in the field of exports are one of the most important economic pillars of the most countries in the world. Therefore, the purpose of this study is to measure the impact of strategic entrepreneurship and entrepreneurial orientation on the performance of export companies in Guilan province. The statistical population consists of 110 top managers of export companies in Guilan province. To determine the sample size, Cochran formula with limited community was used and simple random sampling method was adopted. To collect data, 64 questionnaires containing items of personal characteristics and items related to the research hypotheses were distributed among the sample and all 64 questionnaires were then completed and returned for analysis. The data collection tool is a questionnaire. The results showed that entrepreneurship can affect corporate financial and non-financial performance only by playing a mediating role in the strategic entrepreneurship and entrepreneurial orientation is unlikely to be effective without strategic entrepreneurship.

Keywords: Entrepreneurial orientation, Strategic Entrepreneurship, Financial and Non-Financial Performance.

#### INTRODUCTION

The trends in business today are rapidly undergoing changes. The industrial development and economic growth of society are based on changing ideas and creating innovations and country's successful path to development and progress depends upon being a leader in science and innovation (Ebrahimi and Mirbargkar, 2017). Today, export-led economic growth for governments is a key to economic recovery. In almost all developing countries, the issue of development and export performance has become a top priority and policy on the development agenda of the government like developed countries. Achieving high levels of performance in an exporting context is a major challenge because of physical distance and cultural differences between independent business partners, and different competitive situations (Leonidou et al., 2014). Organizational performance comprises the actual output or results of an organization as measured against its intended outputs (objectives) (Ebrahimi et al., 2016). Financial and nonfinancial measures are important in the organizational performance topics. In general, financial measures or objectives are based on financial statements and balance sheets data (Hamdam et al., 2012). These measures are more tangible and encompass profit, profit growth rate, return on equity, return on sales and return on assets. The current performance measures are determined by performance and financial efficiency to a great extent and typically with a highly manageable outlook. However, this approach neglects the role and contribution of employees in achieving organizational performance (Prowse and Prowse, 2010). Financial measures include market share (against competitors), sales volume (against competitors), sales growth (against

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competitors), and profitability of competitors, as well as non-financial measures for customer satisfaction (Gunday et al., 2011). Furthermore, organizational performance has been defined as "comparing the expected results with the actual ones, investigating deviations from plans, assessing individual performance and examining progress made towards meeting the targeted objectives" (Ngah and Ibrahim, 2010). The impact of entrepreneurial orientation on different levels of company on the performance, growth and profitability of the company has been examined (Covin and Slevin, 1991; Engelen et al. 2015; Gupta and Gupta, 2015; Ebrahimi et al., 2018a; Ebrahimi et al., 2018b). The best definition of entrepreneurial orientation is the process of innovation and opportunity utilization with much diligence combined with the acceptance of financial, psychological and social risks, driven by financial gain, self-interest, personal satisfaction and independence (Hisrich, 2002; Ebrahimi et al., 2018a). The entrepreneurial orientation plays an effective role in corporate strategic decision making and type of management and is regarded as dynamic capability stimulating the company's growth and performance (Frank et al., 2010; Ebrahimi et al., 2018b). It also includes three dimensions of risk aversion, innovativeness and proactiveness that have been used widely to measure entrepreneurial behavior (Wales et al., 2013). Because of the complex and dynamic nature and characteristics of today's environment influenced by the two main factors of the speed of technology change process and market change, it is difficult to find out an industry refraining to enter into the entrepreneurship field continuously and periodically, because entrepreneurship is regarded as a vital mechanism that will lead to fostering the competitive position of companies and industries in the future competitive world (Tamayo et al., 2010). Nevertheless, researchers believe that entrepreneurial objectives cannot be achieved without an entrepreneurial strategy, because the strategy determines how to arrange resources, processes, products and systems that industries and companies take to address distrust in their surroundings. Therefore, the linkage between strategy and entrepreneurship, which can be termed as strategic entrepreneurship, is the basis for the success of entrepreneurship in organizations and the improvement of performance is rooted in the adoption of these strategies by the managers of the organizations (Talebi et al., 2014). According to Ireland et al. (2003), strategic entrepreneurship involves simultaneous opportunity-seeking and advantage-seeking behaviors in the corporate and results in the company's entrepreneurial levels are focused on strategic entrepreneurship (Covin and Kuratko, 2010; Kuratko et al., 2011; Kuratko and Audretsch, 2013). According to the literature outlined above, the aim of the current study is to evaluate the impact of strategic entrepreneurship and entrepreneurial orientation on the performance of export companies in Guilan province. In the second part of the study, literature is reviewed and the research methodology and findings are discussed in the subsequent sections.

#### THEORETICAL FRAMEWORK OF RESEARCH AND HYPOTHESES

With the growing importance of more intangible results at entrepreneurial level, entrepreneurship literature has started to focus on the quality of corporate performance over recent years (Urban, 2012). Hence, it is very worthwhile to pay attention to the performance indicators with regard to entrepreneurship in the organization. Since entrepreneurship at the corporate level is essential for all organizations in competitive markets, the importance of a review in this regard, especially with respect to the relationship between entrepreneurship and organizational performance in developed economies becomes increasingly very important (Wei



and Lin, 2015; Ebrahimi and Mirbargkar, 2017). Corporate exposure to emerging markets with highly uncertain and hostile competitive conditions and their growing pressures require companies to increasingly focus on innovativeness and entrepreneurship. According to Tajudin et al. (2014), organizational entrepreneurship has an impact on corporate competitiveness and helps them survive successfully in an unstable environment. Accordingly, some entrepreneurial literature has recently started to focus on the link between entrepreneurship at the company level and the performance of the organization (Cai et al., 2014). In this regard, a research was conducted by Martin and Javalgi (2015) entitled as entrepreneurial orientation, marketing and performance capabilities, and the moderating role of the intensity of competition in the new Latin American overseas investments. The findings showed the moderating role of competitive intensity between EO and marketing capabilities for better corporate performance. These outcomes may have some implications for decision makers to allocate an entrepreneurial orientation in order to enhance the required marketing capabilities needed to enhance performance. In addition, Kajalo and Lindblom (2015) examined the impact of market orientation and entrepreneurial orientation on the performance of small businesses. The results of their research indicated that both entrepreneurial orientation and market-oriented entrepreneurship act as a basis for developing the business performance of small businesses. However, the impact of performance on small businesses is not so straightforward. Their research suggests that both market orientation and entrepreneurial orientation are in the need for marketing capabilities to open up their value creation potentials among small companies. Furthermore, Fellnhofer et al. (2016), in an attempt to elaborate the different perceptions of female-centered entrepreneurship compared to their male counterparts, as well as the study of the relationship between entrepreneurial orientation and performance at two individual and organizational levels, came to the conclusion that entrepreneurial orientation has a positive impact on performance at both individual and organizational levels. There was a greater tendency towards entrepreneurship in men rather than in women, but men had better performance. The conceptual model of the research adopted from the model (Kantur, 2016) has been presented in figure (1) which includes financial and non-financial performance as a defendant variable and strategic entrepreneurship as the mediating variable and entrepreneurial orientation as an independent variable.

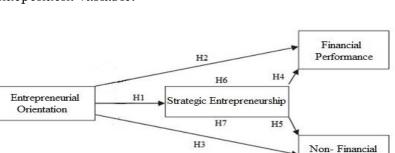


Figure 1. Conceptual Model of the study (Kantur, 2016)

Performance

According to the model, the following assumptions are made:

Hypothesis 1: Entrepreneurial orientation has an impact on strategic entrepreneurship.

Hypothesis 2: Entrepreneurial orientation has an impact on financial performance.

Hypothesis 3: Entrepreneurial orientation has an impact on non-financial performance.



Hypothesis 4: Strategic entrepreneurship has an impact on financial performance.

Hypothesis 5: Strategic entrepreneurship has an impact on non-financial performance.

Hypothesis 6: Considering the mediating role of strategic entrepreneurship, entrepreneurial orientation has an impact on financial performance.

Hypothesis 7: Considering the mediating role of strategic entrepreneurship, entrepreneurial orientation has an impact on non-financial performance.

#### METHOD

The present research has an applied purpose and used a descriptive survey method to collect information. The statistical population of this research consists of 110 senior managers of export companies in Guilan province. Therefore, according to the limited population of the study, the Cochran formula was used to determine the sample size and minimum sample size was estimated 64 senior managers and simple random sampling method was used. To collect data, a 5 point Likert- type questionnaire was employed. Regarding the organizational performance variable, 3 items for financial dimension (Iseri Say et al., 2008; Kantur, 2016) and 4 items for non-financial dimension were used for measuring performance (Iseri Say et al., 2008; Kantur, 2016). Entrepreneurial orientation with 6 items and strategic entrepreneurship with 9 items offered by (Kantur, 2016) have been measured. To determine the reliability of the questionnaire, with emphasis on the internal consistency of the items, the Cronbach's alpha coefficient and the composite reliability coefficient of the sum of items related to each variable were calculated by SmartPLS 3 software.

Table 1. Cronbach's alpha coefficients and CR for items of each variable

Variable	Items	Cronbach's alpha coefficient	CR
Entrepreneurial orientation	1~6	0.758	0.798
Strategic entrepreneurship	7~15	0.767	0.828
Financial performance	16~18	0.711	0.791
Non-financial performance	19~22	0.747	0.839

Based on different sources, the minimum value of 0.7 for the alpha coefficient and CR is necessary to prove the reliability of a tool (Ebrahimi and Mirbargkar, 2017). Therefore, according to Table (1), the proposed research tool is valid based on the internal consistency of the variables. Two indicators are used to calculate convergent validity. The first indicator is the average variance extracted, or AVE, which values greater than 0.5 (Ebrahimi et al., 2018a) for each variable imply the appropriate convergent validity shown in Table (2). Also, in the confirmatory factor analysis, factor loading values greater than 0.4 (Ebrahimi et al., 2017; Ebrahimi et al., 2018a) indicate the convergent validity of the research variables (Hulland, 1999); all the indicators show a value greater than 0.4 in this study.

Table 2. Factor loading and AVE values for convergent validity

Variable	Indicator	Factor loadings	AVE
Entrepreneurial orientation	Q1	0.637	0.500
	Q2	0.615	
	Q3	0.455	
	Q4	0.444	
	Q5	0.440	

	Q6	0.553	
Strategic entrepreneurship	Q7	0.446	0.516
	Q8	0.757	
	Q9	0.398	
	Q10	0.576	
	Q11	0.746	
	Q12	0.751	
	Q13	0.459	
	Q14	0.604	
	Q15	0.577	
Financial performance	Q16	0.740	0.588
	Q17	0.788	
	Q18	0.711	
Non-financial performance	Q19	0.801	0.567
	Q20	0.642	
	Q21	0.798	
	Q22	0.760	

#### **FINDINGS**

In this study, 78.1% of the respondents (n = 50) were male and 21.9% (n= 14) were female. 7.8% (n=5) of the respondents aged 30-40 years old, 59.4% (n = 3) were 41-50 years old and 32.8% (n = 21) aged over 50 years. In addition, none of the respondents were under 30 years of age. In terms of education, 32.8% (n = 21) of the respondents had an associate and bachelor degree, 57.8% (n = 37) had master's degree and 9.4% (n = 6) had a doctorate. Prior to testing the hypothesis of research, we must first ensure the normality of the data. K-S, Shapiro-Wilk tests and PP. Plot graph have been used to test the assumption of normality. According to table (3) and figure (2), data does not follow a normal distribution.



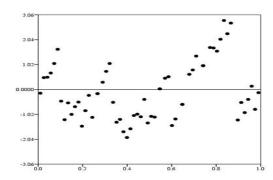


Figure 2. PP-Plot and non-normal distribution of data

Table 3. K-S and Shapiro-Wilk test results

	K-S test	Shapiro-Wilk test
Sample size	64	64
Sig	0.022	0.010

Since one of the assumptions used is the causal relationships between the lack of a multiple linear relationship between variables, the correlation coefficients used between the variables were

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for the saturation model, suggesting that this model did fit.

calculated to examine the absence of a common multiple linear relationship between the variables before causal analysis (Table 4).

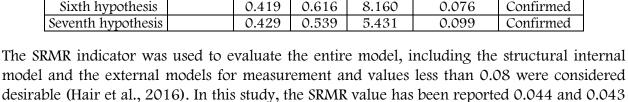
Variable	Entrepreneurial orientation	Strategic ntrepreneurship	Financial erformance	Non-financial performance
Entrepreneurial orientation	1			
Strategic entrepreneurship	0.535**	1		
Financial performance	0.288*	0.617**		
Non-financial performance	0.396**	0.579**	0.562**	

Note: \* Consistency at a significant level of 0.05 and \*\* Consistency at a significant level of 0.01

According to Table (4), the correlation coefficients used between variables in the research indicated that all correlations had values less than 0.8, so the assumption of a multiple linear relationship between variables was rejected (Tabachnick and Fidell, 1996). Path coefficients and T-Statistics have been used to examine the research hypotheses (Appendix 1). The results of assumptions have been presented in Table (5).

Table 5: Results of research hypotheses

Hypotheses	Direct impact	Indirect impact	Total	T~statistic	Standard deviation	Result
First hypothesis	0.748		0.748	11.761	0.064	Confirmed
Second hypothesis	0.197		0.197	1.356	0.145	Rejected
Third hypothesis	0.110		0.110	0.695	0.158	Rejected
Fourth hypothesis	0.561		0.561	3.851	0.146	Confirmed
Fifth hypothesis	0.573		0.573	4.013	0.143	Confirmed
Sixth hypothesis		0.419	0.616	8.160	0.076	Confirmed
Seventh hypothesis		0.429	0.539	5.431	0.099	Confirmed



#### **CONCLUSION**

An entrepreneurial orientation is regarded as one of the major viewpoints that link the entrepreneurship process to the organization's strategies (Chen et al., 2015). Entrepreneurial orientation (EO) has its roots in strategy-making process literature and refers to strategy-making process that provides organizations with a basis for entrepreneurial decisions and actions. Therefore, entrepreneurial orientation can be conceptualized as the strategic orientation of the company, and refers to the processes, practices and decision-making activities that lead to 'new entries'. The salient *dimensions* of EO *can be derived* from a review and *integration* of the *strategy* and *entrepreneurship* literatures (Miller, 2011). The results of the first hypothesis are consistent with the results of previous research (Kantur et al., 2016). According to the population of our study, it seems that entrepreneurial orientation indicators have no significant effect on financial and non-financial performance indicators which could be due to the lack of proper attention to entrepreneurial orientation, lack of proper implementation and its inefficiency in export companies in Guilan province which are struggling with a lot of



economic and financial problems and are in need of support because of inflation. Although the role of market turbulence and economic downturn cannot be neglected in failing financial and non-financial performance of these companies, it is expected that adoption of proper, knowledge-driven and strategic entrepreneurship policies can improve the financial and nonfinancial performance of these firms. The results of the second hypothesis are in line with previous research results (Kantur et al., 2016), and (Kajalo and Lindblom, 2015). Entrepreneurial orientation literature has been attracted widespread attraction; some literature has a tendency towards the fact that corporations that act with entrepreneurial orientation enjoy superior and improved performance, although the existing empirical findings are not consistent with this. Thus, conceptual arguments suggest that EO leads to higher performance. However, the magnitude of the relationship seems to vary across studies. While some studies have found that businesses that adopt a strong entrepreneurial orientation perform much better than firms that do not adopt an entrepreneurial orientation, their studies reported lower correlations between EO and performance and were even unable to find a significant relationship between EO and performance. Thus, there is a considerable variation in the size of reported relationships between EO and business performance. These contradictory outcomes on the impacts of entrepreneurial orientation on performance have a significant impact on organizations, especially on limited-resource export companies, because they need to overcome their constraints by adopting a proper mix of resources and capabilities in the early stages of internationalization. The results of the third hypothesis are in line with previous research results (Kantur et al., 2016), and (Kajalo and Lindblom, 2015). The strategic entrepreneurship was considered a factor which could affect the output of the small, medium and big organizations and improve the growth and wealth of an organization. Nowadays, large numbers of organizations exploit the strategic entrepreneurship as a procedure to achieve long-term competitive advantages (Ebrahimi et al., 2018b). The results of the fourth hypothesis are in agreement with the results of previous research (Kantur et al., 2016; Kajalo and Lindblom, 2015). Although entrepreneurship is a factor that can stimulate organizational proactiveness by introducing new methods and creating comparative advantages, achieving significant successes is not possible without strategy (Webb et al., 2010). Therefore, the synergy and effective exploitation of the benefits of both of them depend upon employing strategic entrepreneurship. Thus, strategic entrepreneurship can be defined as carrying out entrepreneurial activities with strategic perspective for the development and achievement of superior performance and activities designed to create wealth (Raduan, 2009). Additionally, the linkage between strategy and entrepreneurship, which can be termed as strategic entrepreneurship, is the basis for the success of entrepreneurship in organizations and the improvement of performance is rooted in the adoption of these strategies by the managers of the organizations. With regard to the today's competitive environment and companies need to improve their performance, use or application of strategic entrepreneurship within the company are of particular importance, because it is effective on creating wealth, competitive advantage, and performance. Therefore, it seems that paying attention to the application of a mix of entrepreneurship and strategic management is a growing need for organizations. It is recommended that in addition to exporting companies, this research should be carried out in different types of companies and their results are compared with the results of this research. It also proposes a longitudinal rather than cross-sectional scheme for future studies.

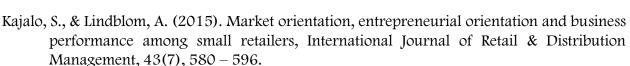


#### References

- Cai, L., Liu, Q., Deng, S. & Cao, D. (2014). Entrepreneurial orientation and external technology acquisition: an empirical test on performance of technology-based new ventures, Journal of Business Economics and Management, 15(3), 544-561.
- Chen, Y., Wang, Y., Nevo, S., Benitez-Amado, J., & Kou, G. (2015). IT capabilities and product innovation performance: The roles of corporate entrepreneurship and competitive intensity, Information & Management, 52(6), 643-657.
- Covin, J. G., & Slevin, D.P. (1991). A conceptual model of entrepreneurship as firm behavior. Entrepreneurship Theory and Practice, 16(1), 7-24.
- Covin, J.G., & Kuratko, D.F. (2010). The concept of corporate entrepreneurship, in Narayanan, V.K. and Connor, G.C.O.' (Eds), The Blackwell Encyclopedia of Technology and Innovation Management, Wiley Publishers, West Sussex, 207-213.
- Ebrahimi, P., Chamanzamin, M. R., Roohbakhsh, N., Shaygan, J. (2017). Transformational and transactional leadership: Which one is more effective in the education of employees' creativity? Considering the moderating role of learning orientation and leader gender. *International Journal of Organizational Leadership, 6*(1), 137-156.
- Ebrahimi, P., & Mirbargkar, S.M. (2017). Green entrepreneurship and green innovation for SME development in market turbulence. Eurasian Business Review, Doi: 10.1007/s40821~017-0073-9
- Ebrahimi, P., Moosavi, S.M., Chirani, E. (2016). Relationship between leadership styles and organizational performance by considering innovation in manufacturing companies of guilan province. Procedia Social and Behavioral Sciences, 230, 351-358.
- Ebrahimi, P., Shafiee, B., Gholampour, A., & Yousefi, L. (2018a). Impact of Organizational Innovation, Learning Orientation and Entrepreneurship on SME Performance: The Moderating Role of Market Turbulence and ICT. In: Khajeheian, D., Friedrichsen, M., & Modinger, W. (Eds), *Competitiveness in Emerging Markets*. Berlin: Springer.
- Ebrahimi, P., Shirsavar, H.R.A., Forootani, F., & Roohbakhsh, N, Ebrahimi, KH. (2018b). Entrepreneurship and SMEs Performance: Studying the Mediating Role of Innovation and the Moderating Role of Firm Size. In: Khajeheian, D., Friedrichsen, M., & Modinger, W. (Eds), *Competitiveness in Emerging Markets*. Berlin: Springer.
- Engelen, A., Gupta, V., Strenger, L., & Brettel, M. (2015). Entrepreneurial orientation, firmperformance, and the moderating role of transformational leadership behaviors. Journal of Management, 41(4), 1069-1097.
- Fellnhofer, K. Puumalainen, K. Sjögrén, H. (2016), Entrepreneurial orientation and performance are sexes equal?, International Journal of Entrepreneurial Behavior & Research, 22(3), 346 374.
- Frank, H., Kessler, A., & Fink, M. (2010). Entrepreneurial orientation and business performance—a replication study. Schmalenbach Bus Rev, 62(2), 175–198.



- Gunday, G., Ulusoy, G., Kilic, K., & Alpkan, L. (2011). Effects of innovation types on firm performance. International Journal of Production Economics, 133(2), 662-676.
- Gupta, V. K., & Gupta, A. (2015). Relationship between entrepreneurial orientation and firm performance in large organizations over time. Journal of International Entrepreneurship,13(1), 7-27.
- Hair, J.F., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. (2016). A Primer on Partial Least Squares Structural Equation Modelling (PLS-SEM), 2nd ed., Sage, Thousand Oaks, CA.
- Hamdam, H., Pakdel, A., & Soheili, S. (2012). The study of board's remuneration and its relationship with accounting indicators for firm's performance evaluation (evidence from Tehran Stock Exchange). Australian Journal of Basic & Applied Sciences, 6(10), 403-408.
- Hisrich, R.D., & Peters, M. (2002). Entrepreneurship, New York: Mc-Graw Hill.
- Hulland, J.S. (1999). Use of partial least squares (PLS) in strategic management research: a review of four recent studies. Strategic Management Journal, 20(4), 195~204.
- Ireland, R.D., Hitt, M.A., & Sirmon, D.G. (2003). A model of strategic entrepreneurship: The construct and its dimensions. Journal of Management, 29(6), 963–989.
- İşeri Say, A., Toker, A. & Kantur, D. (2008), Do popular management techniques improve performance? Evidence from large businesses in Turkey, Journal of Management Development, 27(7), 660-677.



- Kantur., D. (2016). Strategic entrepreneurship: mediating the entrepreneurial orientation performance link. Management Decision, 54(1), 24-43.
- Kuratko, D.F., & Audretsch, D.B. (2013). Clarifying the domain of corporate entrepreneurship. International Entrepreneurship and Management Journal, 9(3), 323-335.
- Kuratko, D.F., Morris, M.H., & Covin, J.C. (2011). Corporate Entrepreneurship & Innovation, 3rd ed., Thomson/Southwestern Publishing, Mason, OH.
- Leonidou, L.C., Samiee, S., Aykol, B., & Talias, M. A. (2014). Antecedents and outcomes of exporter–importer relationship quality: Synthesis, meta-analysis, and directions. Journal of International Marketing, 2(22), 21-46.
- Martin, S.L., & Javalgi, R.G. (2015). Entrepreneurial orientation, marketing capabilities and performance: the moderating role of competitive intensity on latin American international new venture. Journal of Business Research, 69(6), 125-134.
- Miller, D. (2011). A reflection on EO research and some suggestionsfor the future. Entrepreneurship: Theory and Practice, 35(5), 873–894.



- Ngah, R., & Ibrahim, A.R. (2010). The effect of knowledge sharing on organizational performance in small and medium enterprises. Knowledge Management: Theory, Research & Practice, Proceedings Knowledge Management 5th International Conference, 503~508.
- Prowse, P., and Prowse, J. (2010). Whatever happend to human resource management performance. International Journal of Productivity and Performance Management, 59(2), 145-162.
- Raduan C.R et al. (2009). Management, Strategic Management Theories and the Linkage with Organizational Competitive Advantage from the Resource-Based View, European Journal of Social Sciences, 11(3), 402-418.
- Tabachnick, B., & Fidell, L.S. (1996). Using multivariate statistics. NEWYORK: Happer Collins College.
- Tajudin, A.A., Mahmood, R.A. & Abdullah, M.H. (2014). The relationship between entrepreneurial orientation and business performance of SMEs in Malaysia, International Journal of Management Excellence, 2(3), 221-236.
- Talebi, K., Davari, A., & Taghavi, N.S. (2014). Identifing the Impact of Strategic Entrepreneurship on Financial and Non-Financial Performance (Case Study: Fanab Company). Entrepreneurship Development, 7 (4), 635 651.
- Tamayo, T., Ruiz, M. and Antonio, J., (2010). The moderating effect of innovative apacity on the relationship between real options and strategic flexibility. Industrial Marketing, 39(7), 1120-1127.
- Urban, B. (2012). The effect of pro~entrepreneurship architecture on organizational outcomes, Journal of Business Economics and Management, 13(3), 518~545.
- Wales, W.J., Gupta, V.K., & Mousa, F-T. (2013). Empirical research on entrepreneurial orientation: an assessment and suggestions for future research. Int Small Bus J, 31(4), 357–383.
- Webb, J., Ketchen, D., & Ireland, Duane (2010). Strategic entrepreneurship within family-controlled firms: Opportunities and challenges, Journal of Family Business Strategy, 1, 67–77.
- Wei, L., and Ling, Y. (2015). CEO characteristics and corporate entrepreneurship in transition economies: evidence from China, Journal of Business Research, 68(6), 1157-1165.



### APPENDIX 1

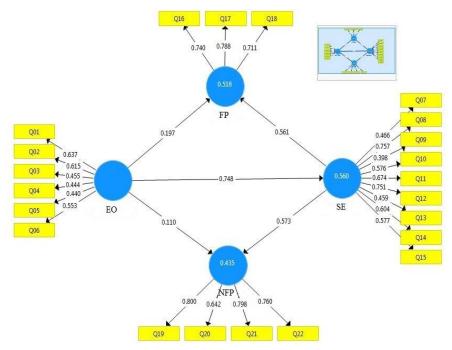


Figure 3. Path coefficients (and load factors values) of the research model

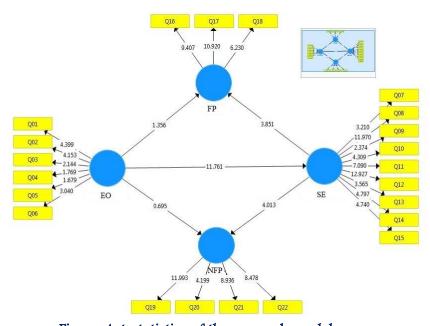


Figure 4. t-statistics of the research model

