

Shahamak Rezaei · Léo-Paul Dana  
Veland Ramadani *Editors*

# Iranian Entrepreneurship

Deciphering the Entrepreneurial  
Ecosystem in Iran and in the  
Iranian Diaspora

 Springer

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*To my parents and my sons Nicolai and  
Alexander*

Shahamak Rezaei

*In the spirit of my Persian ancestry, to my late  
father Albert and my mother Clemy,  
who taught me love and respect for Iran and  
its people*

Léo-Paul Dana

*To my wife Lindita and my sons Rron and  
Rrezon*

Veland Ramadani

# Foreword

This book grew out of the texts written chiefly for those who have demonstrated much enthusiasm to know more about entrepreneurs and entrepreneurship in Iran. It is basically designed to provide a broad perspective and build up a model for policy promotion and entrepreneurship education with an emphasis on entrepreneurs and perception of entrepreneurial process.

In reality, the present book is the outcome of the arduous tasks of a number of authors who have made an in-depth analysis of Iranian entrepreneurship in the context of joint efforts to create values, generate knowledge, develop skills, transfer experience, shape debates and reinforce beliefs in the readers and target audience at the center of preparation process. It lays the ground for looking critically at the Iranian Entrepreneurship by discussing the anatomy of a new paradigm named entrepreneurship by combining practice and theory and unfolding mathematical proofs tailored to the needs urgently felt in a society like Iran.

More specifically, the contents and language of this book principally aim to move one step closer to greater self-awareness, greater self-perception and greater self-expression of a multidisciplinary field like entrepreneurship with emphasis on the outstanding features of the topics suitable for near-term applications and a vision generally consistent with current thinking on the entrepreneurial concepts and ideas. Equally important is a coherent framework as a complementary approach for bolstering professionalism, entrepreneurship, and knowledge acquisition.

To have a better understanding of the philosophy of preparing this work, it is added that the existence of the Faculty of Entrepreneurship is indisputably regarded as a major force behind the accelerating process of knowledge generation and knowledge diffusion under the title of Iranian Entrepreneurship. Academically speaking, when the independent School of Entrepreneurship was born in 2007 for the first time in the Middle East, entrepreneurship was chiefly considered to be a great engine which would touch off a storm of fresh ideas in tandem with immense opportunities to create employment, promote self-development and develop entrepreneurial thinking and concept in various societal segments and economic sectors. In a very broad sense, the Faculty of Entrepreneurship made every effort to spearhead its academic program far beyond the country's national borders. For this

purpose, the Faculty firmly moved ahead to create an appropriate entrepreneurial setting for effective exchange of ideas and experiences among theorists, academicians, experts, researchers, and practitioners inside and outside the country. It mapped out various trajectories towards introduction of entrepreneurship as a universal phenomenon supported by key elements anchored in novelty, creativity, and originality.

To maintain this momentum, the Faculty of Entrepreneurship took giant steps based on a policy to open up new vistas kaleidoscopically for exploring new choices and expanding linkages far beyond the national boundaries. Interestingly, this policy underpinned by careful planning and hard work came to fruition and emerged in the form of cooperation with a number of internationally known institutions and organizations such as membership in the Boston-based Global Entrepreneurship Monitor (GEM), entry into an agreement with UNESCO entitled UNESCO Chair in Entrepreneurship as well as initiatives in the form of organizing international conferences on entrepreneurship and launch of festivals of entrepreneurial leaders, to name a few. To broaden the territorial realms of entrepreneurship, this policy is seriously pursued on the back of experiences, strategies, approaches, and models which it is genuinely anticipated to impart the meaningful message of hope, encouragement, and strong motivation emerging as a tremendous boost to the spirit of entrepreneurial adventures.

In conclusion, it is fervently hoped that this book will be a major breakthrough in the proximity of various entrepreneurial disciplines and will add to the profundity, analytical precision and enrichment of the work which will appear under the title of Iranian Entrepreneurship. There is no doubt that every effort will pay off in the end. And this work is not an exception.

July 2016

Nezameddin Faghih  
PhD, Professor, Chair holder  
UNESCO Chair in Entrepreneurship  
Editor-in-Chief  
Journal of Global Entrepreneurship Research (JGER)

# Acknowledgements

To the reputable contributors, we would like to thank them to the upmost degree. Their experience, knowledge, research, dedication, and time were generously offered in a restless manner. With their work, the importance and necessity for bringing the book to academic researchers, students, and business owners was highlighted and realized.

To the reviewers, we owe a debt of gratitude to them, as they are exemplary individuals of academia in the field of entrepreneurship who have pursued their passion to better us all. Without their respected and appreciated reviews, this book would not have had the same value emphasizing the crucial aspects of the theoretic and practical insights provided by the contributors.

To the distinguished professor and researcher, Nezameddin Faghieh, we like extend a special acknowledgment for his appreciated foreword of the book. His remarkable ability to address readers with his thoughts and views provide justifiable proof of the significance of this pioneering book of Iranian entrepreneurship at home and in a diaspora.

To the editor from Springer, Prashanth Mahagaonkar, and his splendid team, we are grateful for their thoughtful suggestions, support, and encouragement that were offered and well-received.

To our families and colleagues, we must express our affectionate thanks. They have kept standing by us since the very first beginnings when the idea of this book was launched. Their support and motivation are always irreplaceable and necessary for each of us. We dedicate our gratitude, appreciation, and love for them.

Shahamak Rezaei  
Léo-Paul Dana  
Veland Ramadani



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**Léo-Paul Dana** a graduate of McGill University and of HEC Montreal, is Professor at Montpellier Business School and a member of the Entrepreneurship and Innovation chair, which is part of LabEx Entrepreneurship (University of Montpellier, France). This “laboratory of excellence” is funded by the French government in recognition of high-level research initiatives in the human and natural sciences (LabEx Entreprenre, ANR-10-LabEx-11-01). He has published extensively in a variety of leading journals including the British Food Journal, Cornell Quarterly, Entrepreneurship and Regional Development, Entrepreneurship: Theory and Practice, International Small Business Journal, Journal of Small Business Management, the Journal of World Business, and Small Business Economics.



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# Introduction to *Iranian Entrepreneurship*

Shahamak Rezaei, Léo-Paul Dana and Veland Ramadani

**Abstract** In this chapter are provided some general information about Iran, such as those about population, education, economy and reasons why this country could become an entrepreneurial powerhouse. Further is discussed how and why Iranian diaspora is very active in the entrepreneurial activities. The chapter ends with a portrait of all chapters included in this book.

Iran, as an heir to one of the world's oldest civilizations (Barrington 2012), is an independent state located in Western Asia. Iran, officially known as Islamic Republic of Iran is bordered to the north by the Caspian Sea; to the west by Turkey and Iraq; to the northwest by Armenia and Azerbaijan; to the south by the Persian Gulf and the Gulf of Oman; to the east by Afghanistan and Pakistan; and to the northeast by Turkmenistan. Iran is the second-largest country in the Middle East and the 18th-largest in the world. In Iran lives nearly 80 million inhabitants. Its capital is Tehran, which is the largest city and a leading economic center. Iran is consisted of many religious and ethnic groups. As an official language of the country is the Persian language.

Iran is an \$430 billion economy that make it the second largest one in the Middle East (after Saudi Arabia). Its economy expected to grow by almost 5% in 2017 (World Bank 2016). Entrepreneurship is seen as a great engine of the Iranian economy (Faghih 2017). According to MacBride (2016) there are seven reasons why

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Iran could become an entrepreneurial powerhouse: (1) The size of the economy and the lifting of world sanctions; (2) Highly educated population, where 9.4% are tertiary education and 7.5 million people with a university education; (3) Particular strengths in tech-fields, where nanotechnology is seeing as nascent area of growth; (4) Beside sanctions, ties are forming between entrepreneurial communities in Iran and the United States; (5) The country's infrastructure is undergoing a renewal; (6) Changes are happening faster than people expect; and (7) The startup scene is just entering what could be a heyday. The TEA index [the percentage of adults (18–64), who attempt to start a business or already are owners of small businesses set up earlier than 42 months] of Iran is 16%, which exceeds the average of its neighbors in the Asian and Oceania region; The average entrepreneur in Iran is male and young, with more than 50% falling between 25 and 44 years of age; More than 50% of entrepreneurs in Iran have university education (GEM 2014).

Iranian diaspora is also very active in the entrepreneurial activities, even that in the most of cases they deal exclusively with people they know and/or to whom they are related by kinship or marriage (Light 2016). Iranian diaspora is present all over the world, but still the US is the most popular destination, Germany and Canada ranked the second and third most popular destinations for Iranian immigrants followed by Sweden, UK, Israel, Netherlands, Australia, France and Denmark. Canada, UK and Australia were the top three attractive countries for recent emigrants (OECD 2012; Rezaei and Goli 2016). The immigrant business phenomenon, which is often labeled “ethnic business”, starts as small family units, but over the years it is normal, that some spin-off of larger immigrant controlled companies. In some cases, however, particularly in East Asia, immigrant businesses also encompass numerous large firms which may even dominate economic sectors or entire national economies. And increasingly, the traditional ill-educated and poor type of immigrant, is being substituted by the well-educated and wealthy immigrant, particularly in countries like Canada, the USA and Australia which are open to this type of immigration. This modern type of migration and immigrant business is more international in its orientation than the traditional type and often such immigrants operate businesses in more than one country (Rezaei 2009). Different studies in various parts of the world suggest that both the old type of loose coupling of immigrant businesses across borders, as well as the modern and more systemic type of international integration of immigrant businesses, may be of relevance to our understanding of how immigrant businesses in one country are linked to similar business communities in neighboring countries as well as to immigrants' countries of origin (Dana 2007; Light et al. 2013; Ramadani et al. 2014; Rezaei 2009).

The book—*Iranian Entrepreneurship: Deciphering the entrepreneurial ecosystem in Iran and in the Iranian diaspora*—covers a variety of topics in the field of entrepreneurship and small businesses from the Iranian perspective and context and Iranian diaspora, including female entrepreneurship, ethnic and migrant entrepreneurship, corporate entrepreneurship, academic entrepreneurship, transnational entrepreneurship, institutional support of entrepreneurial initiatives, entrepreneurial intention, entrepreneurial marketing and home-based businesses.

This book represents a comprehensive state-of-the-art picture of entrepreneurship and small business management issues and provides major theoretical and empirical evidence that is very likely to offer a brighter view of these fields from the perspective of Iran and its diaspora. The volume is an outcome of long lasting endeavor and it includes contributions of highly reputed authors and experts from Iran and beyond, specially written for the purposes of this book. It is divided in three parts: (1) Entrepreneurship and policy; (2) Diaspora and transnational entrepreneurship; and (3) International and marketing aspects.

Part one is opened by Saeed Jafari Moghadam and '*Entrepreneurship policy in Iran*'. The author tries to answer questions about the meanings of entrepreneurship from viewpoints of Iranian policymakers, the actions taken concerning entrepreneurship by government, the key effective factors influencing the policy-making process and finally finding the most prerequisites for effective entrepreneurship policy in Iran. These questions were answered in the wake of studying the relevant National Development Plans (NDPs), and reliable documents which have been recorded by accredited centers also the information gathered through interviews and questionnaires. Finally, this chapter contributes to the evolution of entrepreneurship policy in Iran confronted with unique political/legal, socio-cultural and economic challenges of this country at a glance.

The main purpose of '*The role of business regulations in economic growth of Iran*', contributed by Seyed Mostafa Razavi, Hamid Padash and Ali Nikoo Nesbati, is to estimate the relationship between business environment indicators and economic growth in Iran. The authors utilize several sources of data including the World Bank's Doing Business annual reports and World Development Indicators. Dependent variable is annual percentage growth rate of GDP per capita, available from the World Bank's World Development Indicators (WDI). The main explanatory variables are deduced from World Bank's Doing Business annual reports. Authors' estimates regressions results suggest that there is a positive and significant relation business environment (Doing Business) indicators and the economic growth of Iran. Some indicators such as "Enforcing Contracts" have the significant effect than others, but this conclusion is not general. The main contribution of this chapter is to analyze business regulations in Iran and suggest specific policies to improve its economic performance.

In '*Business startup in Iran: Entrepreneurial skills, personality, and motivation of Iranian nascent entrepreneurs*', contributed by Mohammad Reza Zali and Atieh Sadat Chaychian, talks about how numerous businesses are annually started up by the Iranian nascent entrepreneurs who have the required entrepreneurial skills, personality, and motivation. According to the Global Entrepreneurship Monitor (GEM) 2013 data, 75% of Iranian early stage entrepreneurs are nascent entrepreneurs whose average age is 32 and 73% of them are male. Most of nascent entrepreneurs (approximately 66%) are opportunity-based entrepreneurs versus 34% of them who are necessity-based entrepreneurs. Furthermore, 43% of Iranian nascent entrepreneurs believe that there will be good opportunities for starting a business in the next six months in the area where you live; meanwhile 83% of them have the knowledge, skill and experience that is necessary to start a new business. Accordingly, 67% of Iranian nascent entrepreneurs are risk takers (no fear of

failure) and 48% of them know someone personally who started a business in the past two years. However, multi-regression results show that the entrepreneurial skills of Iranian nascent entrepreneurs can affect the entrepreneurial motivation (19%). It means that nascent entrepreneurs who have more entrepreneurial skills start up their businesses based on entrepreneurial opportunities recognition rather than a necessity option. The main contribution of the study is the entrepreneurial motivation of Iranian nascent entrepreneurs depends on primarily their entrepreneurial skills not their personality. Therefore, entrepreneurship education programs should be formed to empower entrepreneurial skills.

Utilizing a quantitative research method, Afsaneh Bagheri and Javad Yazdanpanah, in *'Novice entrepreneurs' entrepreneurial self-efficacy and passion for entrepreneurship'* examines the effects of novice entrepreneurs' self-efficacy on their entrepreneurial passion and its dimensions including passion for inventing, passion for founding and passion for development. This study involved 254 novice food industry entrepreneurs in Mashhad, one of the biggest provinces of Iran. Structural equation modeling was used to analyze the data. The results suggested a strong influence of entrepreneurial self-efficacy on entrepreneurial passion. Furthermore, entrepreneurial self-efficacy has the greatest effect on passion for inventing followed by passion for development and founding. Implications of the findings for theory development, research and practice are discussed in this chapter. This study highly contributes to the few researches on the factors that shape entrepreneurial behavior among novice entrepreneurs. It also contributes entrepreneurial self-efficacy as the most influential factor that affect novice entrepreneurs' passion for inventing. Implications of the findings for theory development, research and practice are discussed in this chapter.

Kamal Sakhdari, in *'How do Iranian SMEs utilize external knowledge flows for corporate entrepreneurship? The role of externally oriented capabilities'* concludes that externally oriented capabilities have gained increasing attention because of their significant potential to stimulate innovative activities in companies. Yet, there is little understanding of these capabilities in relation to corporate entrepreneurship, in particular in the context of developing countries. The findings from a sample of 126 small and medium supplier companies providing products and services to the mining industry in Iran indicate that a firm's absorptive capacity enhances the level of corporate entrepreneurship. Moreover, firms with greater knowledge search can more effectively utilize their absorptive capacity for corporate entrepreneurship. The main contribution of this research is connecting externally oriented capabilities to corporate entrepreneurship and showing the way SMEs in developing countries can fill their knowledge gaps to proceed to corporate entrepreneurial purposes.

The following chapter, *'Women's entrepreneurship in Iran'*, a contribution of Zahra Arasti and Neda Bahmani is focused on Iranian women entrepreneurs. Women account for half of the population in Iran, but in the last five years, the number of employed women has dropped by 14.2%, resulting in total women's unemployment rate of 19.8%. According to the 2015 World Economic Forum report, Iran is among the countries with a high gender gap in economy ranking 141 in terms of women's economic participation among the 145 countries. In the other

hand, women's entrepreneurship does not seem to be enjoying an appropriate status in Iran and despite increased entrepreneurial activities by women, the ratio of businesses run by women to business run by their male counterparts are 2–10. Both contextual and structural factors influence entrepreneurial process; some are strengthening and some others are debilitating. So, if women and entrepreneurship are two important factors for growth especially in developing countries, it is particularly noticeable to understand what factors mobilize or prevent them from starting new businesses. The main contribution of this study is helping better recognition and understanding of ignored subject of women's entrepreneurship in Iranian context with distinctive socio-cultural characteristics and its specific requirements.

The chapter '*Academic entrepreneurship readiness in University of Tehran*', written by Jahangir Yadollahi Farsi, aims to report a qualitative research on determinants and barriers in the process of university research commercialization with emphasis on inevitable choice of approaching to internationalization. Through an in-depth literature review a conceptual framework developed to give a description and an explanation of the academic entrepreneurship concept and its role in economic development. Based on an interview with 76 faculty members who involved in at least one innovation project or act as managers in supporting organizations, the author identified the key factors which influence innovation commercialization. In order to prioritize the importance and intensity of barriers and obstacles, after analyzing qualitative data the author asked respondents to weight factors. He classifies identified factors in four categories. Determinants of innovation commercialization include: 1—Business environment factors, 2—supporting organization factors 3—Project management and team member's factors, 4—Industry and innovation project characteristics. The main contribution of this chapter is providing a framework for academic entrepreneurship readiness assessment. Also this framework is a guideline to transfer universities from traditional version to entrepreneurial university.

In '*Effect of organizational climate and structure on innovation performance*', a contribution written by Nader Seyyed Amiri, Hamidreza Yazdani and Alireza Kameli, talks about how identification of required infrastructures for effective knowledge management and making innovation is of high significance in organizations. Infrastructures have been studied separately in previous research but in this study it is tried to investigate the direct and indirect effects of organizational structure and climate on innovation performance by considering the mediatory role of knowledge management and social interaction by a comprehensive model. This study has been conducted in a sample including 140 staffs of sale and marketing department of Shuttle Company in Tehran by using simple random sampling. Research methodology was of correlative type and research instrument was questionnaire. Structural equation modeling by LISREL software was applied for data analysis. The finding showed that the effects of organizational structure on social interaction, organizational climate on knowledge management and social interaction on innovation performance were positive and significant. But organizational structure and social interaction variables on knowledge management, organizational climate on social interaction and knowledge management on innovation

performance couldn't have any direct and significant influence. The main contribution of this chapter is investigation new factors that affect on innovations performance can be developed corporate entrepreneurship.

Vanessa Ratten, Léo-Paul Dana, Veland Ramadani and Shahamak Rezaei open the second part of this book. In '*Transnational entrepreneurship in a diaspora*', the authors provide an overview of transnational entrepreneurship by focusing on the diaspora. The role of transnational diaspora entrepreneurs is discussed, which emphasizes the role of transnational living in the global economy. The role of transnational networks is discussed that leads to an examination of hybrid forms of entrepreneurship that integrate immigrant and ethnic entrepreneurship. The chapter end with future research suggestions.

Ivan Light and Parvin Shahlapour authored the '*Transnational Iranian entrepreneurs in the import/export industry of Los Angeles*' chapter. Their research obtains evidence regarding the actual social network ties that Iranian immigrant entrepreneurs in Los Angeles had with trading partners abroad. In this chapter, the authors, instead of looking at connections between the Iranians and their homeland, they examined their social connections with other locations in the Iranian international diaspora.

The following chapter, '*Entrepreneurial competencies benefiting entrepreneurial intention: Iranian adults at home and in the Diaspora*' is contributed by Shahamak Rezaei. Iran is the second largest economy and the second largest population in the Middle East and North Africa (MENA) region, with a stubbornly high unemployment rate of 11.4% in 2014. Iran's economy heavily rely on oil revenue, entrepreneurship potentially is a part of solution through creating jobs and wealth, Persian are known for being entrepreneurial; Iranian diaspora seize influential positions in technology, business and financial industries; however, Iranian adults at home seems not that active in private sectors. His study is answer whether the place of residence have an impact on entrepreneurial competencies and entrepreneurial intention, as well as examine the relation between entrepreneurial competencies and entrepreneurial intention by providing a comparative study for two groups—Iranian adults in Iran and Iranian diaspora. Using a sample of 3169 native-born Iranian adults in Iran and a sample of 361 Iranian diaspora who are fairly representative of the Iranian diaspora, the author found that entrepreneurial competencies in the form of self-efficacy, risk-opportunity and role modeling are more prevalent among Iranian adults in Iran, but opportunity-alertness is more prevalent among Iranian diaspora. He also found that Iranian adults in Iran are more likely to start a business compared to Iranian diaspora. Astonishingly, this study shows that entrepreneurial competencies in the form of risk-propensity do not benefit entrepreneurial intention. Only self-efficacy benefits entrepreneurial intention (in the form of intending phase and starting phase) regardless of where Iranians reside.

The chapter '*Networks around women and men entrepreneurs in the Iranian diaspora: Dual embeddedness in Iran and in host-society*' is contributed by Thomas Schött. His study concludes that women and men entrepreneurs are networking similarly in the private sphere, but men are networking more than women

in the public sphere. Entrepreneurs in traditional society, Iran, are networking more in the private sphere than entrepreneurs in the Iranian diaspora and in their host-societies. Conversely, entrepreneurs in the Iranian diaspora and in their host-societies are networking in the public sphere, more than entrepreneurs in Iran do. The gendering of networking, moreover, is moderated by culture, especially in that networking in the private sphere is especially extensive for women in Iran, whereas networking in the public sphere is especially extensive for men in the Iranian diaspora and in their host-societies. The study contributes to conceptualizing migrant entrepreneurship as a dual embeddedness in home-society and host-society, which entails hypotheses about migrant entrepreneurship; to understanding social capital in entrepreneurship by distinguishing between networking in the private sphere and networking in the public sphere, which entails hypotheses about gendering and influence of dual embeddedness; and to understanding the distinctiveness of entrepreneurship in Iran and in the Iranian diaspora.

Shayegheh Ashourizadeh is author of '*Iranian entrepreneurs at home and in diaspora: Entrepreneurial competencies, exporting, innovation and growth-expectations*'. Entrepreneurs use their competencies to discover and exploit opportunities for doing business. Both entrepreneurial competencies and performance expectedly depend on social circumstances, and specifically differ between natives and emigrants. Here the question is, how do entrepreneurs in Iran and in the Iranian diaspora differ in their competencies and performance? A representative survey of people in Iran and around the world identified 1639 natives in Iran and Iranians in the diaspora, who were intending to start, starting or operating a business. Statistical analysis shows that entrepreneurial competencies tend to be higher in the diaspora than in Iran, especially alertness to new business opportunities. Partly because of this difference in competencies, performance is higher in the diaspora than in Iran, specifically in terms of innovation, exporting and expectations for growth of the business. Lifting sanctions against Iran, though, will expectedly enhance performance in Iran, and also enhance the Iranian diaspora's exports to Iran.

Maryam Cheraghi and Emad Yaghmaei contributed the chapter '*Networks around Iranian entrepreneurs at home and in diaspora: Effects on performance*'. The purpose of this study is to analyze effects of Iranian entrepreneurs' network at home and in diaspora upon entrepreneurial outcomes. The authors used a sample of 1387 intending, starting and operating entrepreneurs, including 1330 native-born in Iran and 57 Iranians in the diaspora in age of 18–64, from Global Entrepreneurship Monitor. Based on the results, Iranian entrepreneurs in Iran receive advice mainly from their private sphere while Iranian entrepreneurs in diaspora use their public sphere. Being in diaspora affects entrepreneurs' innovativeness (use of new technology, newness of product for customers and newness of products in market) and exporting positively. Overall, Iranian entrepreneurs in diaspora have larger and more diverse networks, which affect their innovativeness, exporting and growth-expectation positively. This chapter contributes to the study of Iranian entrepreneurs' networking at home and in diaspora and the effects of public and private networking on their entrepreneurial outcomes.

In the last chapter of the second part, '*Future research directions for transnational entrepreneurship*', Vanessa Ratten examines transnational entrepreneurship where she suggests some new and interesting research avenues, such as those about individuals' links to sports and other cultural significant events that encourage their transnational entrepreneurship.

The last part, the third one, is opened by Babak Ziyae and Mohammad Reza Zali. In '*The reinvigorating of international entrepreneurship by open innovation strategy for Iranian businesses*', conclude that international mindset and innovative structure of businesses are vital routes for economic growth and for competitiveness of businesses particularly in the foreign markets. A key component to succeed in international entrepreneurship is promoting a new archetype of innovation that is called open innovation which is capable to match knowledge and technology innovation with business challenges and societal development inside alliances, networks, and joint ventures. Open innovation offered a unique outside-in process from suppliers, supply chain, research centers and then transformed into an advanced new process. This setup concurrently manages to create and sustain incremental and radical innovative efforts to develop international speed and intensity. It is completely obvious that employing of inbound, outbound, and coupled open innovation processes vary between the international networks nodes. Further, the incorporation of open innovation highlights that these not only take form in relation to external partners but also between units of the firm who fill network structural holes. The main contribution of this chapter is adding to the body of international entrepreneurship literature by introducing a novel theoretical model for Iranian businesses who wishes to join international trade networks, given the scope of international competition.

In '*Design of the 'international entrepreneurial marketing (IEM) pattern': Entrepreneurial firms of food industries throughout Iran*', Mehran Rezvani aims to present a rational and process-oriented framework originated from the pluralistic standpoint. The primary objective of this framework is to conceptualize the entrepreneurial marketing and entrepreneurs' marketing methods. For this purpose, a sequential exploratory mixed method was conducted that accomplished two different types of scientific collaborations. Statistical sampling was carried out amongst nineteen out of twenty one active entrepreneurial firms of Iran's food industries. Results showed that the pattern of IEM upon an evolutionary basis profited 5 different phases including 'restricted sales and initial activities of marketing', 'suitable and opportunistic sales', 'diversified marketing', 'profitable and integrated marketing' and also 'proactive marketing'. The main components of the considered phases comprised of 6 themes, 23 dimensions and 164 entrepreneurial details supposed to have different specifications during the different periods of time. Meanwhile, a new definition of entrepreneurial marketing has been accordingly presented. The main contribution of this chapter is exploring, distinguishing and conceptualizing the "International Entrepreneurial Marketing (IEM)" based on entrepreneurs/owners in this field by using life cycle approach.

Reza Mohammadkazemi in '*Identifying factors affecting export performance of sports equipment and sportswear firms*' realized a research with the goal of

identifying and prioritizing the factors that affect the export performance of sports equipment and sportswear firms. As the number of exporting firms in the area of sports equipment was limited (32 firms), a minimum number of 23 firms were selected based on the Morgan table among which 60 copies of the research questionnaire were distributed in order to collect data. Then, using the PLS software, the collected data was analyzed so as to assess each of the 5 factors in the model for the intended industry. Finally, the research provides some recommendations and suggestions that could help improve export performance in the sportswear and sports equipment industry. The main contribution of this chapter is identifying and prioritizing the factors that affect the export performance of sports equipment and sportswear firms.

In the era of knowledge economy, open innovation is becoming more and more highlighted and businesses need to build an open collaborative innovation. Collaborative innovation which takes knowledge value-added as its core is a kind of innovative business pattern to realize the integration and the innovation of science and technology. Today, small and medium sized enterprises (SMEs) are exposed to highly dynamic business environments, driven by rapid developments and ever-increasing pervasiveness of digital technologies. The increasing pervasiveness of digital technologies, also referred to as “Internet of Things” (IOT), offers a wealth of business model opportunities, which often involve an ecosystem of partners. In this context, businesses are required to look at business models beyond a firm-centric lens and respond to changed dynamics. In the field of entrepreneurship, SMEs are focusing mainly on platform solutions which companies can use to enhance the efficiency of their business process management systems, supply chain management, marketing strategies, and alliances. Many SMEs are working on future mobility solutions in the form of E-mobility. The application of “Internet of Things” and cloud computing, in particular, is undergoing changing in today’s SMEs. All these issues are treated in ‘*A DNA business model for the internet of things: a value-creating ecosystem in Iranian small and medium-sized enterprises*’ by Babak Ziyae and Mohammad Reza Zali. The main contribution of this chapter is adding to the current business model research in the context of “Internet of Things” by providing field-tested business model framework.

Amir Ekhlassi, Fatemeh Fazli and Ehsani Alinaghian, in ‘*Marketing and branding for Iranian home-based businesses*’ treat the unique nature of home-based businesses and their unique opportunities and challenges. Therefore, the key to success for such businesses is having a systematic approach towards seizing those unique opportunities while successfully dodging the challenges. Among the tools available for entrepreneurs to achieve such a thing, branding proves to be an incredibly successful strategy that would guarantee more sales, long term loyal customers and business durability. This study was conducted on Iranian home-based food businesses in order to find patterns in branding among these businesses. Most of these businesses had at least 5 successful years behind them which show a certain degree of stability and experience. 62.5% of these entrepreneurs were university educated, within a related field which is a sign that professional skills could guarantee success to a degree. Marketing Intelligence, defined as the ability to assess the environment and react accordingly seems to be very



influential as well. Another vastly effective method these businesses have employed seems to be viral marketing. Last but not least, as mentioned before, is Brand Position. Making sure that your product has enough positive, distinct features that it can find its permanent place within the consumer market. What's obvious to us is that the recipe for success is most definitely a balanced mixture of all the elements mentioned in our article. The main contribution of this chapter is finding a pattern of branding in home-based businesses. After analysis, that recognized 5 main elements and 17 sub-elements which are influential in the branding process among these businesses. Final result of this chapter is a branding model consists of these elements and relationships between them.

In the last chapter of this book, Mohammad Zarei, Amir Alambeigi, Behrouz Zarei and Parveneh Karimi, in '*The effects of mergers and acquisitions on the bank performance and entrepreneurial orientation*' aim to clarify whether mergers and acquisitions had an effect on both banks' performances and entrepreneurial orientation. Moreover, it tried to investigate whether entrepreneurial orientation moderated the relationship between banks' performances and Mergers and Acquisitions. For this purpose, 114 participants including both middle managers and top managers of Iranian banks were chosen and taken into consideration. The present study is an applied research and a cross-correlation method was used to carry out the investigation. The statistical procedure applied for testing the model and the hypotheses was partial least squares. The main contribution of the chapter is that entrepreneurial orientation act as a moderator variable between banks' performances and mergers and acquisitions. Likewise, mergers and acquisitions improved banks' performances both directly and indirectly, through promoting entrepreneurial orientation.

## References

- Barrington, L. (2012). *Comparative politics: Structures and choices* (2nd ed.). Mason: Cengage Learning.
- Dana, L.-P. (2007). *Handbook of research on ethnic minority entrepreneurship: A co-evolutionary view on resource management*. Cheltenham: Edward Elgar Publishing.
- Faghih, N. (2017). Foreword. In S. Rezaei, L.-P. Dana, & V. Ramadani (Eds.), *Iranian entrepreneurship: Deciphering the entrepreneurial eco-system in Iran and in the Iranian diaspora*. Cham: Springer.
- GEM. (2014). Iran: A regional leader in entrepreneurial self-belief. Available at: <http://www.gemconsortium.org/country-profile/71>. Accessed September 28, 2016.
- Light, I. (2016). *Form and content of TNE*. Paper Prepared for TNE Conference, University of Birmingham, April 14–15, 2016.
- Light, I., Rezaei, S., & Dana, L.-P. (2013). Ethnic minority entrepreneurs in the international carpet trade: An empirical study. *International Journal of Entrepreneurship and Small Business*, 18(2), 125–153.
- MacBride, E. (2016). *Seven reasons Iran could become an entrepreneurial powerhouse*. Available at: <http://www.forbes.com/sites/elizabethmacbride/2016/04/30/seven-reasons-iran-is-likely-to-be-an-entrepreneurial-powerhouse/#31560c176391>. Accessed September 30, 2016.
- OECD. (2012). *Key statistics on diaspora from Iran, in connecting with emigrants*. Paris: OECD Publishing.

- Ramadani, V., Rexhepi, G., Gërguri-Rashiti, S., Ibraimi, S., & Dana, L.-P. (2014). Ethnic entrepreneurship in Macedonia: The case of Albanian entrepreneurs. *International Journal of Entrepreneurship and Small Business*, 23(3), 313–335.
- Rezaei, S. (2009). The marginalization of globally-born businesses: Ethnically divided trade in Hamburg and the world economy: The case of global persian carpet trade through ethnic networks. *American Journal of Economics and Business Administration*, 1(2), 79–96.
- Rezaei, S., & Goli, M. (2016). *Divided we stand, together we fall: Iranians immigrants in Scandinavian countries: Sweden*. Denmark and Norway: Unpublished Work.
- World Bank. (2016). *Iran's economic outlook*. Available at: <http://www.worldbank.org/en/country/iran/publication/economic-outlook-spring-2016>. Accessed September 29, 2016.

## Author Biographies

**Shahamak Rezaei** is an Associate Professor at the Department of Social Sciences and Business, Roskilde University, Denmark. He is also affiliated with Sino-Danish Center for Education and Research (SDC) in 'Innovation Management' research group where he since 2010 has been conducting research and teaching in China. His research focuses on migration, global entrepreneurship, globally born SMEs, migrant entrepreneurship, transnational entrepreneurship, diaspora entrepreneurship, economic consequences of migration, informal economic activities, industrial relations and comparative welfare state analysis. Shahamak Rezaei is Research Coordinator for the research project "DiasporaLink" ([www.DiasporaLink.org](http://www.DiasporaLink.org)), financed by the European Commission under 'Horizon 2020—RISE Program'. He is also affiliated as Non-Resident Research Associate at Princeton University, CMD (Center for Migration and Development) where he collaborates with colleagues at Princeton on STEM (Science, Technology, Engineering and Math)—Migration. STEM-Migration is a new research field that he will be working on in the near future.

**Léo-Paul Dana**, a graduate of McGill University and of HEC Montreal, is Professor at Montpellier Business School and a member of the Entrepreneurship and Innovation chair, which is part of LabEx Entrepreneurship (University of Montpellier, France). This "laboratory of excellence" is funded by the French government in recognition of high-level research initiatives in the human and natural sciences (LabEx Entreprendre, ANR-10-LabEx-11-01). He has published extensively in a variety of leading journals including the British Food Journal, Cornell Quarterly, Entrepreneurship and Regional Development, Entrepreneurship: Theory and Practice, International Small Business Journal, Journal of Small Business Management, the Journal of World Business, and Small Business Economics.

**Veland Ramadani** is an Associate Professor at South-East European University, Republic of Macedonia where he teaches both undergraduate and postgraduate courses in entrepreneurship and small business management. His research interests include entrepreneurship, small business management, family businesses and venture capital investments. He authored or co-authored around eighty research articles and fifteen text-books. His last published book is *Entrepreneurship and Management in an Islamic Context*, published by Springer. Dr. Ramadani is an Associate Editor of *International Journal of Entrepreneurship and Small Business (IJESB)* and *International Journal of Technology Transfer and Commercialisation (IJTTC)*. Dr. Ramadani received the Award for Excellence 2016—Outstanding Paper by Emerald Group Publishing (*Journal of Enterprising Communities: People and Places in the Global Economy*).

**Part I**  
**Entrepreneurship and Policy**

# Entrepreneurship Policy in Iran

Saeed Jafari Moghadam

**Abstract** In retrospect, the government intervention in business ecosystem of Iran has a long history. Oddly enough the dimensions of such intervention are more conspicuous after the approval of the first Constitution in 1906. Nonetheless, it is essential to point out that the strict regulations imposed by the government were partially eased and, at later stages, new concepts in the business world were shaped. This trend greatly contributed to the emergence of entrepreneurship in Iran which goes back to 15 years ago when an Entrepreneurship Development Program at Universities was approved for the first time in this country. Furthermore, the research tries to answer questions about the meanings of entrepreneurship from viewpoints of Iranian policymakers, the actions taken concerning entrepreneurship by government, the key effective factors influencing the policymaking process and finally finding the most prerequisites for effective entrepreneurship policy in Iran. These questions were answered in the wake of studying the relevant National Development Plans (NDPs), and reliable documents which have been recorded by accredited centers also the information gathered through interviews and questionnaires.

## 1 Introduction

Entrepreneurship in Iran sounds a controversial phenomenon. When Islamic revolution took over in 1979, an ideologically Islamic country enthusiastically foreboded and imprecated capitalist executions, but not for more than one decade. Actually with start of the first administration after the war with Iraq in 1989, policymakers and planers of the first five-year Development Plan (DP) was practically accepted the economic adjustments founded on the liberalism fundamentals in elaborating this DP (Nili 1997) and a liberal politician, as president, started implementing it (Sinaee et al. 2012). Although no attention was paid to

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entrepreneurship and entrepreneurs were normally ignored, some signals indicated that some steps were in the offing.

In this research, we will study entrepreneurship, entrepreneurship policy and different effective factors on it in Iran. After a historical review, this chapter would cite the role of academicians in emergence of entrepreneurship and promoting this concept in academic communities across the country in frame of Third DP. Then with review of Forth-Fifth DPs (2000–2014) articles on entrepreneurship would try to answer research questions about the process of entrepreneurship policymaking and effective factors influencing it as well as the most prerequisites for effective entrepreneurship policy in Iran.

## 2 Historical Context

If early agricultural communities originated in a particular region<sup>1</sup> (Riehl et al. 2013), could be expected to appear the first nation-state and also one of the first government interventions at same region. Fortunately, these interventions in economic activities extent have usually been restricted to an income tax imposition. In retrospect, the government intervention in business ecosystem of Iran has a long history, as old as its governments. Nonetheless, this intervention as a tool for development planning formally started from the First Pahlavi era in 1937 (Bostock and Jones 1989). Government involvement came into a new stage by launching the First Seven-Year DP on 1948 in Iran and continued with other Seven-Year DP, Three Five-Year DPs before Islamic revolution and then Five Five-Year DPs, after it. The trend of government intervention in economy increased from plan to plan, in parallel with growing government oil revenues during these years, though this pathway moved back and forth, especially after Islamic revolution (1979).

More notably, it is necessary to cite the role of this revolution in historical background of entrepreneurship in Iran. Actually, at this juncture, people and government of this country changed in different spheres, especially in beliefs and ideals. So in this atmosphere, it was difficult to support and celebrate opportunistic men for a Muslim society that has experienced a big gap between poor and rich people for decades. Actually, a high percentage of above mentioned people thought these opportunistic men had been the main cause of all shortages and problems up to now and all such discrimination and inequalities with this revolution would be eliminated. In other words, the majority of this nation thought the entrepreneurship means rent-seeking and so an entrepreneur and his values are incompatible and even supposed to Islam.

Additionally, understanding the story of how entrepreneurship is spreading as an idea in Iran requires a look into the socioeconomic history of this country and its environment (Keyhani and Jafari-Moghadam 2008). In other words, in historical

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<sup>1</sup>It is assumed to be foothills of the Zagros Mountains in Iran.

review it is essential to point out that environmental changes including economic, political/legal, social/cultural and technological trends, found a relatively appropriate background for evolving the concept of entrepreneurship as an important issue for academicians and policymakers in Iran, after war with Iraq (1980–1988). Actually, the atmosphere of economic reconstruction and production in these years, based on the legal background of first and second Five-Year DPs, resulted in more focus of the government on the constitutional principals’ as a facilitator for economic activities of private sector—especially 44th article of The Constitution—(Sinaee and Zamani 2012). In addition, improvement in higher education development and skilled human resources, increase in government revenues arising from removal of war expenditures and beyond them, progress in political and commercial communications with other countries at regional and international levels (Sinaee et al. 2012) were the most effective above-mentioned trends.

### 3 Entrepreneurship Policy: The Jungle of Discursive Efforts

#### 3.1 *The Emergence of Entrepreneurship in Iran (2000–2004)*

As aforementioned above, Economic policy in the early years of the Revolution was heavily influenced by socialists’ thinking. Besides the early wave of nationalizations which increased state control over the economy, there was price control and rationing of a long list of essential commodities, which was deemed necessary while the war with Iraq was raging. But since the end of the war in 1988, successive governments have moved the economy away from the war-imposed restrictions which had severely limited the role of markets in allocation. A decisive change of direction toward markets took place with the Second Plan (1995–1999) (Salehi-Isfahani 2006). Nevertheless, for the first time in Iran, a PhD thesis, as the first survey research about entrepreneurship<sup>2</sup> (1998), introduced Iranian academicians and especially management researchers with this concept and its implications and advantages for national economy. This research report was published as one of the most efficient Farsi books regarding entrepreneurship (Ahmadpour Daryani 1999).

Concerning the translation of the word *Entrepreneurship* into *Farsi*, the writer of this book said: “I and my supervisor, based on our understanding of entrepreneurship and what we have studied about it, recognized the Farsi word of “Arzeshafarini”<sup>3</sup> as an appropriate translation for entrepreneurship word, but after

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<sup>2</sup>The topic of this thesis was “Designing a model for developing entrepreneurial managers in Iran industry” and its supervisor was Dr. Ali Rezaeian.

<sup>3</sup>This word can be translated into English with “value-creation” term in Farsi language.

several debates and in view of the fact that the first translators had translated this word into Farsi language as “Karafarini”, we preferred to accept this translation” (Ahmadpour Daryani 2010).<sup>4</sup> This translation in comparison to the traditional notion of entrepreneurship that returned to capitalistic, opportunistic and rent-seeking concepts and was pervasive in the first decade of new regime, received widespread acceptance in Iran society. Especially, owing to the fact that literal interpretation of this word in Farsi, promises to solve one of the country’s main socioeconomic problems<sup>5</sup> (Keyhani and Jafari-Moghadam 2008).

Moreover, the strict regulations and strong recommendations imposed by the government and reformers in the 1990s (first and second Five-Year DPs) were partially eased and, at later stages, new concepts in the business world were shaped (Parsi 2012). These changes greatly contributed to the emergence of entrepreneurship concept in Iran which dated back to 2000, when creation the KARAD Plan, an Academic Entrepreneurship (AE) program at Iran Universities, was formally approved in the Third Five-Year DP (2000–2004) for steering decisions to flourish entrepreneurship at universities (IROST<sup>6</sup> 2006).<sup>7</sup> Table 1 compares the approvals and accomplishments on Entrepreneurship through 3rd DPs.

### ***3.2 The Fourth Development Plan (2006–2010)***

It is supposed the policymakers’ attention to entrepreneurship has increased in the fourth DP, especially by considering “Business Environment” importance for the first time. Although, their direct referral to entrepreneurship in this Plan was limited to three articles with obligating government to:

- Allocate up to 50% the budget for productive and entrepreneurial plans,
- Support institutes and SMEs for entrepreneurship development,
- Improving incorporation between educational levels with technology development, entrepreneurship and wealth creation,
- Reform the mission and structure of universities for training professional, creative and entrepreneur persons,

Afterward, in practice the changes were made. Almost about the end of the third DP (2005<sup>8</sup>) two worthwhile routes aimed at entrepreneurship development was

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<sup>4</sup>Dr. Ahmadpour Daryani about his important references of his thesis referred to one paper: “Fry, F. L. (1993). *Entrepreneurship: A Planning Approach*. Minneapolis-St. Paul, MN: West Publishing” and Farsi translation of one book: “Meredith, G. G., Nelson, R. E. & Neck., P. A., (1982) *the practice of entrepreneurship*. Geneva: International Labour Office”.

<sup>5</sup>I.e. unemployment.

<sup>6</sup>The Iranian Research Organization for Science and Technology.

<sup>7</sup>Attachment 1: Complementary information about Bylaw of KARAD plan and 3th–5th Development plans concerning entrepreneurship.

<sup>8</sup>Third development plan practically finished at the end of year 2005, with one year delay.

**Table 1** Summary of entrepreneurship policies in Iran (3th DP: 2000–2004)

Policy approach	Policy making phase	
	Formulation	Implementation
	Approvals	Accomplishments
<b>Cognitive</b> – Entrepreneurship culture development	– Creating an established “academic entrepreneurship” (AE) program inside MSRT <sup>a</sup> – Planning to select core curriculums and prepare educational technologies for implementing AE program – Predicting and planning continuation of AE program via education, research and promotion in future – Approving and notification The (AE) program below to all Iran universities (IPRC <sup>b</sup> 2014)	– Founding entrepreneurship centers as operational arms of AE program just in 13 universities – Holding seminars and workshops on entrepreneurship in most of above-mentioned universities – Distributing books, journals, videos and legal reports about entrepreneurship and AE among universities (IROST 2006) – Starting to publish books about the life and business of different Iranian entrepreneurs <sup>c</sup> (Keyhani and Jafari-Moghadam 2008)
<b>Normative</b> – Appreciating entrepreneurs and recognition their value	– Selecting and encouraging superior entrepreneurs via holding annual festivals <sup>d</sup>	– Paying more attention to the importance of entrepreneurship via medias especially through the Radio and TV channels of Iran (Esfandiari 2014)
<b>Regulative</b> – Clarifying legal limitations and necessities	– Approving the establishment an executive organization for (AE) and inclusion of its budget in the national budget – Advising the first bylaw of KARAD plan: AE at universities (IPRC 2014)	– Creating an executive organization for AE – Allocating annual budget to AE – Approving the first legal bylaw for developing entrepreneurship at universities and offering relevant programs (IPRC 2014)

<sup>a</sup>The Ministry of Science, Research and Technology

<sup>b</sup>Islamic Parliament Research Center

<sup>c</sup>“Entrepreneurs of Iran: the role of business leaders in the development of Iran” is the name of 1st book about Iranian entrepreneurs narrated by Vaghefi (1975)

<sup>d</sup>The Ministry of Cooperative, Labour and Social welfare

pursued to teach entrepreneurship at graduate level with founding the first Faculty of Entrepreneurship in Middle East by the University of Tehran (FEUT<sup>9</sup> 2007) and holding annual festivals of excellent entrepreneurs by Ministry of Labour and Social Welfare (The Donya-e-Eqtesad 2005).

The first of this festival was held in 2006 and continued during the subsequent years through provincial and national referees committees (Tae 2014). Also, about nine months later, the Council of Ministers forced all the Ministries to establish a new department as “Entrepreneurship Office” under supervision of its related

<sup>9</sup>Faculty of Entrepreneurship at University of Tehran.



**Table 2** Summary of entrepreneurship policies in Iran (4th DP: 2006–2010)

Policy approach	Policy making phase	
	Formulation	Implementation
	Approvals	Accomplishments
<b>Cognitive</b> – Entrepreneurship culture development	– Reforming and reinforcing supporter institutes and SMEs for entrepreneurship development – Improving consistency between educational levels with technology development, entrepreneurship and wealth creation (IPRC 2014)	– Empowering entrepreneurship centers at universities and developing it to 10 new universities – Growing number and variety of educational programs for students and other job-seekers by universities and administrations of MCLS (IROST 2006) – Founding the first faculty of entrepreneurship by University of Tehran (FEUT 2007)
<b>Normative</b> – Appreciating entrepreneurs and recognition their value	– Continuing holding annual festivals at three sectors: Industry, Service and Agriculture	– Holding the first annual festival to introduce Iranian excellent entrepreneurs – Paying special attention of media to new businesses via starting professional journals and broadcasting special Radio and TV programs (Esfandiari 2014) – Increasing people who consider starting new businesses as a desirable career choice (GEM Report 2013)
<b>Regulative</b> – Clarifying legal limitations and necessities	– Financial support to industrial entrepreneurship plans – Reforming the mission and structure of universities for training professional, creative and entrepreneur people (IPRC 2014)	– Establishing a new department as “Entrepreneurship Office” in all ministries (Malekitabar 2006) – Increasing the annual budget of academic entrepreneurship (IPRC 2014)

undersecretaries (Malekitabar 2006). Besides, during this DP the KARAD program (IROST 2006) gained great impetus. Table 2 compares the approvals and accomplishments on Entrepreneurship through 4th DP.

This period also experienced a growing trend of publishing entrepreneurs’ biographies. Most of these books concerned pioneer entrepreneurs in form of helpful biographies for the public as well as entrepreneurship and history students (Khosrowshahi 2004; Saeedi and Shirinkam 2005, 2009; Shirinkam and Farjammia 2010).

In spite of all abovementioned efforts, entrepreneurship education, besides environmental barriers, has suffered from diverse challenges like unfamiliarity of different levels of society with its implications and benefits from one hand and

equivocality of entrepreneurship concept for universities' managers and professors from other hand. Additionally, the structure and regulations of universities were not consistent with entrepreneurship education necessities (Jafari-Moghadam 2008).

### 3.3 *The Fifth Development Plan (2011–2015)*

The 5th DP was formulated with special emphasis on “improving business environment” and also empowering SMEs and private sector<sup>10</sup> (IPRC 2014) by following actions:

- Allocating the annual budget to assist retailers and wholesalers in protecting their brands,
- Creating an “automated processing single window” for launching businesses.

Modifying Labor Law and Social Security regulations to increase flexibility in harmony between employees and employers, reinforcing the unemployment insurance, empowering tripartism approach, Improving work conditions, creating competitive markets, establishing “The Council of Government and Private Sector Negotiations”. This plan also had approached entrepreneurship as a job-creating tool which obligates government to support networks, clusters and SMEs' connections in local, home and family businesses. Table 3 compares the approvals and accomplishments on Entrepreneurship through 5th DP.

Fostering entrepreneurial awareness and positive attitudes towards entrepreneurship are high on the policy agenda of several economies (GEM Report 2013). This means governments' activities and implementing their policies to support new businesses and improving the business environment could result in fostering attitude and perceptions in a society. With this approach, key indicators changes of “attitudes and perceptions” during years somewhat could attribute to accomplished programs by government for improving entrepreneurship. Table 4 shows changes trend of entrepreneurial perceptions and attitudes as measured by Iran GEM team in 2013:

1. **Media Attention for Entrepreneurship:** The number of general and scientific Farsi journals concentrating on “small business” and “entrepreneurship” have grown from 7 to 13, among 2008–2014 without any specific government support. Also different Farsi journals have increased the number of papers and reports about entrepreneurship and small businesses and make use of these words in their papers and notes, as the frequencies of these words have doubled in mentioned period. Moreover, today the frequency of “entrepreneurship” and “running businesses” terms from reporters, announcers and narrators of radio and TV programs dramatically have increased. In reality, the number of TV and Radio programs related to entrepreneurship with emphasis on occupation-making

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<sup>10</sup>Articles 69–80.

**Table 3** Summary of entrepreneurship policies in Iran (fifth DP: 2011–2015)

Policy approach	Policy making phase	
	Formulation	Implementation
	Approvals	Accomplishments
<b>Cognitive</b> – Entrepreneurship culture development	– Reforming educational system to improve students’ skills consistent with market labour needs – Supporting vocational training in rural areas (IPRC 2014)	– Developing entrepreneurship education programs at graduate levels in public and private universities
<b>Normative</b> – Appreciating entrepreneurs – Recognition value of entrepreneurship	– Continuing holding annual festivals in three sectors: Industry, Service and Agriculture – Supporting SMEs to pay patent costs (IPRC 2014)	– Increasing special attention of media to entrepreneurship and knowledge-based SMEs – Improving Radio and TV programs on entrepreneurship (Esfandiari 2014) – Increasing people who consider starting new businesses as a desirable career choice (GEM Report 2013)
<b>Regulative</b> – Clarifying legal limitations and necessities	– Revising Labor law and social security to improve its capabilities on Tripartism – Allocating an annual budget to protect of Iranian brands (IPRC 2014) – Reforming regulations to support national production <sup>a</sup> – Creating “single window process” for launching businesses and custom services (IPRC 2014)	– Providing financial support to start and develop businesses – Allocating financial supports to activities on SMEs development in rural areas – Improving employee and employer relationships due to Labour law reforms – Starting financial support to start home-based businesses under new regulations <sup>b</sup>

<sup>a</sup>Islamic Consultative Assembly News Agency

<sup>b</sup>The Central Bank of Iran

businesses has soared at last three years. Specifically, from 2012 to 2014, just channel one TV, as the most important channel of Iran National TV, has shown one special program about entrepreneurs and their challenges in private and professional life. This program was broadcast in 44 sessions every Sunday night presented during a 75 min-program in 2014.

Furthermore, a radio station entitled “the Radio of Economy” was launched with focus on business and economy. This radio station broadcast five special weekly programs about entrepreneurship since last three years. Also, Iran National Radio has added a weekly consulting program on “starting new businesses” to its nightly programs. This program was selected as the most desirable program of current years from audience view. Finally, the total number of various programs about entrepreneurship on other radio stations increased during this period (Esfandiari 2014).

**Table 4** Key indicators changes of “attitudes and perceptions” between 2008 and 2013 (almost 2nd half of Fourth DP and four years of fifth DP) in Iran (GEM Report 2013)

No	Variable name	Description	2008	2009	2010	2011	2012	2013
1	Media attention for entrepreneurship	Percentage of 18–64 population who agree with the statement that in their country, you will often see stories in the public media about successful new businesses	<b>53</b>	61	62	58	61	<b>60</b>
2	High status successful entrepreneurship	Percentage of 18–64 population who agree with the statement that in their country, successful entrepreneurs receive high status	<b>82</b>	78	85	73	73	<b>82</b>
3	Entrepreneurship as desirable career choice	Percentage of 18–64 population who agree with the statement that in their country, most people consider starting a business as a desirable career choice	<b>57</b>	56	64	61	60	<b>64</b>
4	Know startup entrepreneur rate	Percentage of 18–64 population who personally know someone who started a business in the past two years	<b>46</b>	48	42	36	40	<b>43</b>
5	Entrepreneurial intention	Percentage of 18–64 population (individuals involved in any stage of entrepreneurial activity excluded) who intend to start a business within three years	<b>35.8</b>	22.3	31.4	29.9	22.8	<b>30.6</b>
6	Fear of failure rate	Percentage of 18–64 population with positive perceived opportunities who indicate that fear of failure would prevent them from setting up a business	<b>20</b>	32	30	33	41	<b>36</b>

(continued)

**Table 4** (continued)

No	Variable name	Description	2008	2009	2010	2011	2012	2013
7	Perceived opportunities	Percentage of 18–64 who see good opportunities to start a firm in the area where they live	<b>34</b>	31	42	32	39	<b>37</b>
8	Perceived capabilities	Percentage of 18–64 population who believe to have the required skills and knowledge to start a business	<b>61</b>	58	66	46	54	<b>57</b>

2. **High Status Successful Entrepreneurship:** Concerning the relatively high position of Iran in Total Early-Stage Entrepreneurial Activity (TEA) rate (GEM Report 2013), people typically place high value on business starters. As a result, successful entrepreneurs have had a high social status in this culture from past years, even without any government promotion program. Furthermore, when this rate is normally high, it will be more difficult to improve it.
3. **Entrepreneurship as Desirable Career Choice:** Whereas becoming entrepreneur is a good way for earning money and increasing people's social position, trying to run a business in an inflation-hit society will be an excellent alternative.
4. **Know Startup Entrepreneur Rate:** Relatively a low percentage of this indicator during mentioned years could be analyzed based on peoples' concerns to talk expressly about their intentions for starting a business to others (related to their cost considerations about tax and other formal and informal expenditures in countries like Iran) besides conservative spirit of Iranians to disclose the financial decisions. Also restricted pendulum range of this variable and its diminutive decrease during this period could attribute to specific political events and especially sanctions in recent years.
5. **Entrepreneurial Intention:** It appears that, the restrictions arising from sanctions, foreign currency rate changes and intensive inflation, especially during the last year of this period have resulted in drastic decrease in economy stability and unpredictability of affairs. The natural result of this situation is uncertainty about future and difficult decision making to start new ventures.
6. **Fear of Failure Rate:** Normally, probability of failure in running businesses in economically unstable and unpredictable situations will increase. The concern in comparison of its indicator between 2008 and 2013 is apparent. In reality, this percentage in the recent year, with the tightest sanctions, followed by rising prices has doubled.

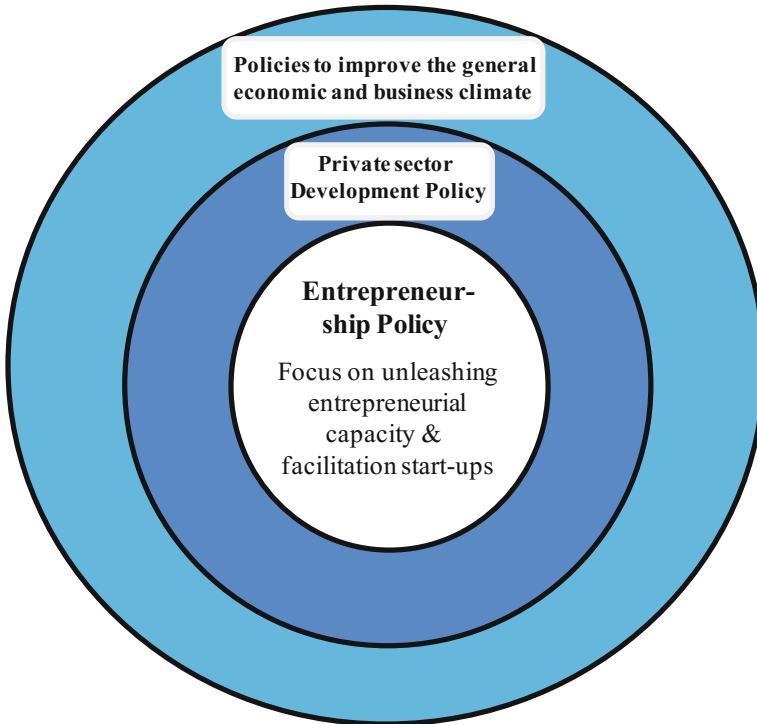
7. **Perceived Opportunities:** This variable which increased to 42% in 2010, failed to 32% just one year later, due to wave of threats against Iran via international sanctions. Also, possibly we may argue that the tangible improvement of this indicator up to 37% in 2013 with trying new-entrepreneurs to produce boycotted products and recognizing created opportunities to start new businesses.
8. **Perceived Capabilities:** 20% Decrease in this variable from 2010 to 2011, as a major change in abovementioned period, could be analyzed with regard to return of previous traditionalist government in 2011 and people's concerns of raising prices and increasing foreign currency rate. Reality, with enhancing threats and deficiencies of business environment, people underestimate their capabilities to start new businesses.

## 4 Conceptual Framework and Research Questions

Definitions of entrepreneurship have evolved over time and reflect a broad range of varied concepts so it is understandable that government policy makers may view entrepreneurship quite differently depending upon the definitions they are familiar with and ultimately choose to guide their actions. Consequently the focus of a policy may only target or reflect the elements of the specific definition or framework (Gartner 1985). More to the point, the meaning of policy and policy making have also changed over time but all definitions are based on more or less common fundamentals such as manipulation of business environment, facilitating business actions, supporting regulations, promoting programs, etc.

Additionally, Entrepreneurship is believed to contribute to economic development because entrepreneurs create new businesses, and new businesses create jobs, provide people with a variety of products and services, intensify competition, and increase productivity through technological change and positively impact individual lives on multiple levels (GEM Report 2013). GEM data also suggests that there is no country that has high levels of entrepreneurship and low levels of economic growth (Reynolds et al. 2002). Present research with emphasis on this approach to entrepreneurship, in a pervasive meaning, consider "Entrepreneurship Policy" as any government intervention to improve entrepreneurship ecosystem, facilitate private sector activities or empowering businesses.

One of the most consistent models with mentioned definition of entrepreneurship policy is entrepreneurship policy framework of UNCTAD (Fig. 1). This recognized model is presented by United Nations Conference on Trade and Development. UNCTAD's Entrepreneurship Policy Framework aims to support developing-country policymakers and those from economies in transition in the design of initiatives, measures and institutions to promote entrepreneurship. Afterwards, the main goal of this research is to identify the process of entrepreneurship policy transforming in Iran



**Fig. 1** The focus of UNCTAD's entrepreneurship policy framework

and effective factors on it. So that, the research questions, based on the mentioned goal and selected conceptual framework could be raised as follows:

1. What are the meanings of entrepreneurship in terms of the viewpoints of Iranian policy-makers?
2. What are the actions taken for developing entrepreneurship by government?
3. What are the key effective factors influencing the policy process?
4. What are the major prerequisites for effective entrepreneurship policy in Iran?

## 5 Methodology

Thereupon, our primary conceptual framework model designed in order to serve our overall goal to answer research questions. For gathering material information required, this goal was planned to conduct a survey research and concentrate on interviews with policy makers (Parliament members and top managers) to unfold

effective factors in formulation and implementation phases of policymaking. Researchers' attempts for making appointments with policymakers showed that they are so busy and it is very difficult and almost impossible as researchers tried to interview two of them, especially owing to the exceptional conditions in Iran. This challenge for more active and effective parliament members in entrepreneurship policy was greater. More to the point, our interview experiences and the background information of their interviews with scientific centers revealed almost all of them would not remember the main historical facts in detail effectively, and unfortunately a large number of them in their viewpoints were chiefly influenced by their political orientations which could result in the deficiencies in research findings.

As a result, researchers decided to concentrate on content analysis method as a main research method, because of not very difficult accessibility to DNIP<sup>11</sup> and National DPs' contents recorded in the "Library, Museum and Document Center of Iran Parliament" for answering the first research question. Also, to answer the second question, official documents and independent or state-sponsored research reports were selected as main sources. Additionally, 3th and 4th questions were answered through interviews with experts. Finally, the influencing factors on policy process and prerequisites of effective entrepreneurship policy were ranked through questionnaires findings. Therefore, research process (based on research questions) was specified in following steps:

- **First step:** As already mentioned, the research goal of this step is: To identify the meanings of entrepreneurship in terms of the viewpoints of Iranian policy-makers (via content analysis of two group information: DNIP and National DPs).

Shapiro and Markoff (1997) after reviewing six main meanings from different sources, proposed a minimal and encompassing definition for "content analysis" including of: "any methodological measurement applied to text for social science purposes". Reality, qualitative content analysis as a research method used to analyze text data (Hsieh and Shannon 2005: 1278) over time, it has expanded to also include interpretations of latent content (Graneheim and Lundman 2003). Therefore, content analysis could be described as a technique used for making replicable and valid inferences from texts to the context of their use (Krippendorff 2012). This method firstly highlights the exact words from the text that appear to capture key thoughts or concepts. Next, the researcher approaches the text by making notes of his or her first impressions, thoughts, and initial analysis. As this process continues, labels for codes emerge that are reflective of more than one key thought. These often come directly from the text and are then become the initial coding scheme. Codes then are sorted into categories based on how different codes are related and linked (Hsieh and Shannon 2005).

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<sup>11</sup>Detailed Negotiation of Iranian Parliament.



Thereupon, this research has chosen content analysis, as an empirical model to examine terms of entrepreneurship and entrepreneur as two concepts and also entrepreneurship policy as a renovative and transforming process in the debates of policymakers during the first phase of research. In this way, two Ph. D. candidates in skilled coder role, and writer, in role of team research mentor started text coding extracted from DNIP as well as documents of five-years DPs in order to answer the first research question. Each of researchers in this process randomly read detailed negotiations of parliament consist key words of “entrepreneurship” and “entrepreneur” from a specific period<sup>12</sup> and finally proposed his categories.

- **Second step:** this pace concentrated on recognizes the actions taken for developing entrepreneurship by government (through formal reports, independent or state-sponsored research reports and media news). The key tools for gathering information from experts in this step were proposed through qualitative approach (interviews and Delphi method). Qualitative evaluation normally involves face-to-face discussions with those in receipt of aid, those responsible for delivering programmes and other stakeholders. These conversations help to get a deeper understanding of the mechanisms by which policy impact is achieved. Also, qualitative evaluation has the major disadvantage that it is not good at providing reliable estimates of policy impact for a number of reasons. First, surveys of a sample of stakeholders run the risk of being unrepresentative of programme participants. Increasing the numbers however either adds considerably to budgets or reduces the quality or depth of the interviews. Second, despite the best efforts of interviewers, there remains a strong risk of interviewer bias. Thirdly, the outcome of qualitative evaluation is more often to describe a process rather than to evaluate an outcome. Fourthly, there is no opportunity for independent verification (OECD 2007). Afterwards, to estimate how a programme which took place several years ago even if some programme participants were able to undertake such mental gymnastics, others clearly could not and there is no way of distinguishing between the answers of the two groups (OECD 2007). With regard to subsequent limitations, our qualitative approach changed to review and analyze the most reliable reports and documents from authentic sources.

Since, neither the organizations and executive officers of different programs in these establishments, nor the beneficiaries of programmes were in a position of a careful, impartial and with a multidimensional view to recognize different positive and negative dimensions of every implemented program. So, it was inevitable to investigate the scientific and official reports. Additionally, non-comprehensiveness and discontinuity of related entrepreneurship actions had clarified the implementation phase complicity. Hence, review of the

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<sup>12</sup>This period considered from Third to Fifth Development Plans (2000–2014). Between 1996 and 2000, the word of entrepreneurship has been cited just 15 times in Iranian parliament and before this date we could not find any trace of this word in parliament.

trustworthy researches on Iran government interventions during three DPs (2000–2015) was essential. Literature review of the researches on DPs from reliable journals and conference proceedings (Meystre 2008) also, authentic centers reports from their supervisions and evaluations of DPs in Iran as well as international sources, like GEM reports, put in the research focus.

- **Third step:** last step of research focused on two fundamental points described below:
  - To realize the key effective factors influencing the policy process,
  - To determine the most prerequisites for effective entrepreneurship policy in Iran,

This step started with experts' interviews (entrepreneurship professors and scholars) regarding mentioned key factors and prerequisites. The information obtained from these two groups was summarized in a questionnaire to evaluate their priorities.

## 6 Finding and Discussion

First step is to identify the meanings of entrepreneurship in viewpoints of policy-makers through “content analysis” of two main groups of information in DNIP and INDPs:

Comparing three categorizations via three coders showed we have selected four exactly comparable categories, one almost similar and two merger-able small categories that finalized in Tables 5 and 6. Then, this process encompassed the main texts of three Five-Year DPs.

Final results of this step are presented in two mentioned tables (IPRC 2014). Unit of analysis in all steps was paragraphs containing the words of entrepreneurship or entrepreneur used by policymakers. Although putting any case in the related categories as well as coding them was possible just based on the background of debates and order of sessions for detailed negotiation of parliament and DPs articles, it was required to assure what had been the topic or core attention of issues and their backgrounds.

The results of this step as we can see in the Tables 5 and 6 reveal different attention-grabbing facts. As shown in Figs. 2 and 3 separated areas of personal understanding receives different attention with divers and unsteady frequencies during parliament sessions and DPs articles time to time. The first Misunderstanding of entrepreneurship<sup>13</sup> is “Employment and job creation” (149 frequencies) in

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<sup>13</sup>The Persian language has never had a single word that could encompass the full meaning of “entrepreneur” word and most of the Iranian entrepreneurship experts believe a significant misunderstanding is prevalent among policymakers about this word (Keyhani and Jafari-Moghadam 2008).

**Table 5** Connotations of entrepreneurship/entrepreneur words in DPs contents during 3th–5th DPs (2000–2015) (main categories of content analysis and their frequencies)

No	Topic of category	1th DP	2nd DP	3th development plan	4th DP	5th DP	Sum
1	Employment and job-creation		1	1	8	1	11
2	Creativity and business-starting skills			4	12	10	26
3	Running SMEs			4	2	2	8
4	Investment and private sector improvement			2	9	5	16
5	Production, empowering industry			1	7	1	9
6	Entrepreneurs as competent managers			2	0	2	4
	Sum		1	14	38	21	74

**Table 6** Connotations of entrepreneurship/entrepreneur words in detailed negotiations of parliament sessions during 3th–5th DPs

No	Topic of category	Main categories of content analysis and their frequencies				Sum
		2th development plan	3th development plan	4th development plan	5th development plan	
1	Employment and job-creation		46	55	48	149
2	Creativity and business-starting skills		43	49	14	106
3	Running SMEs		8	8	5	21
4	Investment and private sector improvement		31	27	34	92
5	Production, empowering industry		17	18	26	61
6	Entrepreneurs as competent managers		6	6	2	14
	Sum		151	163	129	443

comparison with other closer to the meaning of entrepreneurship, Like “creativity and business starting skills” (106 frequencies) or “investment and private sector improvement” (92 frequencies). In fact, about 34% of policymakers consider entrepreneurship as job-creation process and this misunderstanding have unexpectedly increased at the pick of the years of entrepreneurship education through 4th DPs. Besides, more precisely contents parliament negotiations’ indicated the fact that too many words of entrepreneurship connotations about concepts such as “Production, Empowering industry and investment” and “private sector improvement” among

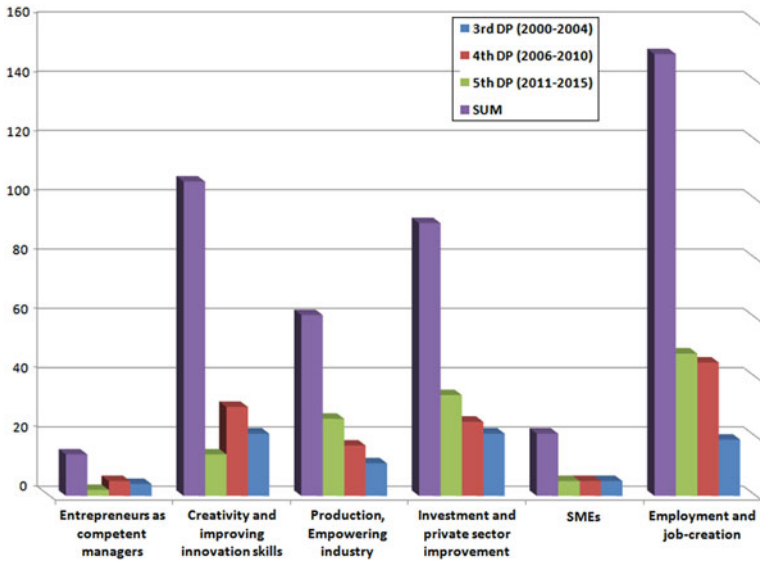


Fig. 2 Frequency of “entrepreneurship/entrepreneur words” in detailed negotiations of parliament sessions during 3th–5th DPs

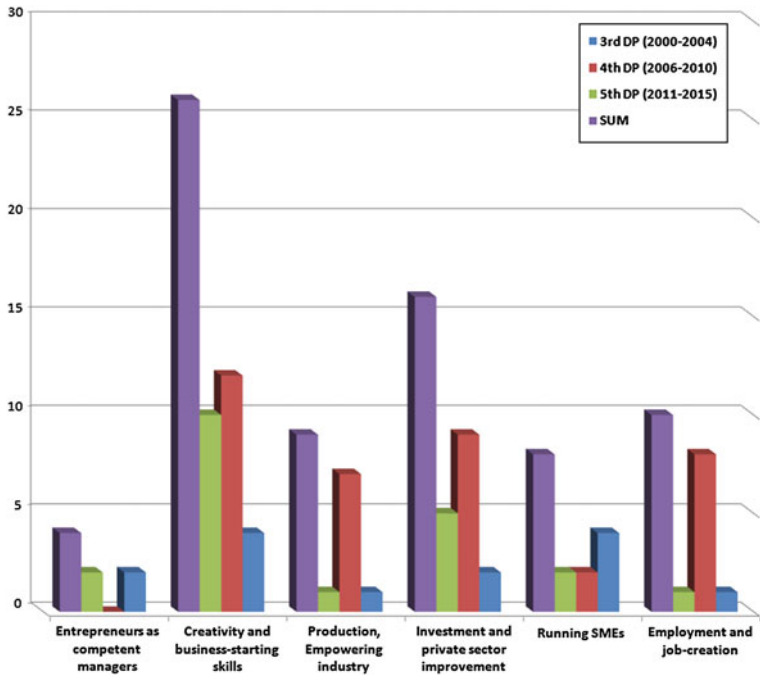


Fig. 3 Frequency of “entrepreneurship/entrepreneur words” in DPs contents during 3th–5th DPs (2000–2015)

policymakers were aimed to increase employment. Wholly, Diverse, vague and dissimilar understanding of the concept of entrepreneurship is clearly depicted in this picture.

Looking at the charts from different times also reveals various facts; even inconsistency among the one category of understanding during the period of study could be seen, for example during eight years (3rd and 4th DPs) entrepreneurship was considered more or less the same as job creation. In addition, By looking at the Fig. 2 dissimilarity is blurred again although it seems the provider of such DP have more or less better understanding of entrepreneurship concept but not adequate. Besides, whereas the base of categorization of this content analysis process has been concepts extracted from parliamentary debates or DPs' articles, with regard to the atmosphere of sentences, this argument could clearly present that amongst these talking and writing about entrepreneurship by top policymakers, during three DPs, has not followed comprehensive approach, policy or strategy to entrepreneurship and entrepreneurship policy or even signs of approaching this view.

Second step is to recognize the actions taken for developing entrepreneurship by government. As it was presented in implementation columns of Tables 1, 2 and 3, government actions on entrepreneurship are summarized in three related scopes: cognitive, normative and regulative policies). Moreover, review of the reliable centers' reports consisted of "Islamic Parliament Research Center", "The Iranian Research Organization for Science and Technology" also "The Ministry of Cooperative Labour and Social Welfare" confirmed that there is no center in charge of research about government accomplishments. So, there is no published comprehensive report on actions and achievements of government via the development plans implemented, and apparently no document on accomplishments concerning entrepreneurship. Thereupon, the research in this step were only confined to reliable journals, independent or state-sponsored research papers, formal reports and media news regarding DPs in Iran, our findings in first step of this research, as well as international sources, like GEM reports. So that the results could be obtained as vulnerable points in government accomplishments:

1. **Concentration on direct intervention in accomplishments on entrepreneurship development** (IPRC 2014) instead of trying to improve business environment and play an indirect role via private sector, NGOs or intermediary structures like networking,
2. **Emphasis on financial supports as a golden key in entrepreneurship policy** (IPRC 2014) instead of paying attention to practical instructions, consultation and steering through playing a supportive role for private sector alongside financial assistance,
3. **People/institution oriented actions for developing entrepreneurship** rather than obligatory legal actions (Katouzian 2004),<sup>14</sup>

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<sup>14</sup>An outstanding example of this intervention is supportive role of Dr. Jahromi as the Minister of Labour to running the first faculty of entrepreneurship of Iran in 2006 (Keyhani and Jafari-Moghadam 2008).

4. **Implementation in the country of “entrepreneurs without enterprises”<sup>15</sup>** these people or economic institutions which may seem the most beneficial to the encouragement of economic development can also serve as prime fodder for the political mobilization of the economic groups and result in state-society conflict (Mazaheri 2008; Fallahi 2012).
5. **Lack of consensus over economic policies** due to dominance of president’s proponents/opponents in the parliament during these years that influenced efficiency and effectiveness of government accomplishments (Habibi 2008; Razavi 2010).
6. **Lack of coherence and coordination among economic and entrepreneurship policies** (Habibi 2008; Ilias 2009).
7. **Lack of balance between what has done and what ought to be done** (Mohseni 2000; Fallahi 2012; Naraghi 2001): This imbalance is evident in the Tables 1, 2 and 3 too. In reality, what has been done usually is just a small part of what ought to be done and occasionally, some initiatives have accomplished based on personal decisions.
8. **Ineffectiveness of policies in practice due to Inefficiency of public administration** system and its subsystems (Danaeefard 2015).

Interestingly, it appears that finding a clear relationship between formulated and implemented policies and the changes in different indicators of entrepreneurship based on following reasons is almost impossible:

- Inaccessibility to clear, comprehensive and up-to-date information (Malekitabar 2006);
- A relatively big gap between viewpoints, comments, regulations and programs from one hand and actions, accomplishments and actual behaviors from other hand in society and especially among policymakers at different levels of government (Mohseni 2000; Fallahi 2012; Naraghi 2001).
- Lack of commitment to effective evaluation of national DPs accomplishments via an influential center (Jannat 2006).

The last steps of research started by arranging interview appointment dates with experts (entrepreneurship professors and scholars) is to identify the key effective factors influencing the policymaking process and the prerequisites for effective entrepreneurship policy in Iran. Interviewees’ opinions regarding the key effective factors on policymaking in Iran presented following elements (and their origins, based on UNCTAD’s framework) that were ranked by Friedman Test in Table 7. Additionally, recommendations of Interviewees as the prerequisites for effective entrepreneurship policy (and their origins, based on UNCTAD’s framework) ranked through Friedman Test in Table 8. Low range of changes in median rank of factors in both tables’ is their common character.

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<sup>15</sup>This term has applied to refer to “informal economic sectors in Iran” by Clifford Geertz.

**Table 7** Key effective factors influencing policymaking in Iran based on experts viewpoints

No	Key effective factors influencing the policy process	Median rank	Originated in/from
1	<b>Inconsistency of approvals in entrepreneurship scope</b> with other roles of national DPs	Oct-33	Policymaking process
2	<b>Inadequate recognition of implementers</b> of related to entrepreneurship approvals	Sep-34	Private sector Development Policy
3	<b>Inadequate familiarity of policymakers</b> with the concept and importance of entrepreneurship	Sep-27	Policymaking process
4	<b>Inconsistency and incompatibility of the rules</b> drafted in entrepreneurship	Sep-21	Policymaking process
5	<b>Inefficiency of approvals in entrepreneurship scope</b>	Aug-47	Private sector Development Policy
6	<b>Inadequate familiarity of executive organizations</b> with entrepreneurship approvals	Aug-44	Private sector Development Policy
7	<b>Inefficiency of policymaking process</b> in parliament and government	Aug-42	Policymaking process
8	<b>Inefficiency of systemic approach to entrepreneurship</b> and its advantages	Jul-95	Private sector Development Policy

**Table 8** Prerequisites for effective entrepreneurship policy in Iran based on experts viewpoints

No	Prerequisites for effective entrepreneurship policymaking in Iran	Median rank	Originated in/from
1	<b>Designing a national mega-policy</b> to empower entrepreneurship infrastructures in society and specially in private sector	Nov-72	General economic and business climate
2	<b>Holding a comprehensive program for honoring national entrepreneurs</b> and SME founders	Nov-33	Private sector Development Policy
3	<b>Planning a wide-ranging public entrepreneurship program</b> for implementing in the administrative establishments	Sep-93	Private sector Development Policy
4	<b>Planning a comprehensive organizational entrepreneurship development plan for implementing in private sector</b> nationwide	Sep-52	Private sector Development Policy
5	Designing and <b>implementing a national entrepreneurship training program for Iranian policymakers</b>	Aug-60	Policymaking process
6	Documentation and implementation of national development plans (5–7-year) <b>under a comprehensive national entrepreneurship development plan</b>	Aug-57	Policymaking process
7	Revising different laws and regulations in the framework of <b>a comprehensive policy to facilitate entrepreneurship</b> and launching new businesses	Aug-55	Policymaking process
8	Designing and implementing a <b>national program of entrepreneurship training</b> and promotion in societal institutions such as Families and schools	Aug-44	Private sector Development Policy

## 7 Conclusion and Proposed Model

Entrepreneurship policy offspring in Iran was university. Policymaking on entrepreneurship started with academic entrepreneurship in third DP (2000–2004), and developed in next DPs. Entrepreneurship policy progressively encompassed to more sectors of Iran society by holding the annual festivals to introduce Iranian excellent entrepreneurs, Establishing Entrepreneurship Offices in different ministries, improving Radio and TV programs on entrepreneurship and governmental supporting to start different kinds of SMEs under new regulations. So, it appears starting and developing entrepreneurship based on approval articles in Iranian Parliament have passed a relatively acceptable path, especially with regard to variety of societies' restrictions and challenges. But, in practice respecting the findings of study don't depict a satisfactory vision.

Importantly, UNCTAD's Entrepreneurship Policy Framework (Fig. 1) as the research conceptual framework, has identified six priority areas for policy focus that have a direct impact on entrepreneurial activity as follows: optimizing the Regulatory Environment, Enhancing Entrepreneurship Education and Skills Development, Facilitating Technology Exchange and Innovation, improving access to finance, and Promoting Awareness and Networking. Review of entrepreneurship policy process in Iran (Tables 1, 2 and 3) exposes the question that, though all approvals and accomplishments of Iranian government during these three DPs (2000–2014) are classifiable in one of these priorities, why don't we evaluate entrepreneurship policy in Iran as a preferential case. Apparently, UNCTAD's framework has answered the aforementioned question, by conditioning the effectiveness of entrepreneurship development strategies [policies] on two conditions:

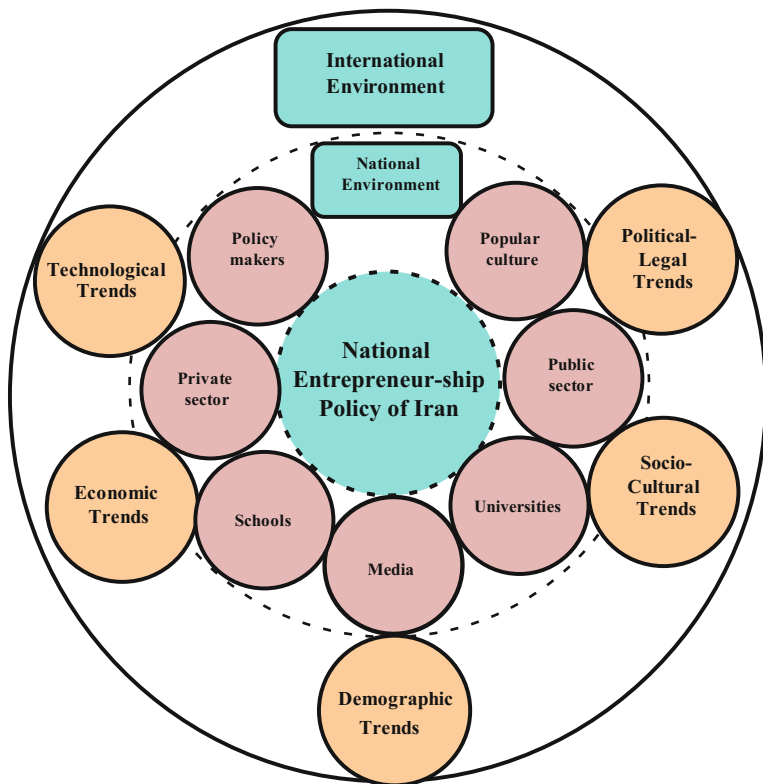
- **How the different elements of the strategy are integrated?**
- **How they are aligned with overall development strategies and with other national competitiveness and private sector development policies?**

Harmonization with strategic processes pursued by different national ministries and national commissions are crucial to exploit synergies.

The first challenge relates to the internal coherence of the strategy as a system. Second challenge is to embed the national entrepreneurship strategy (policy) in the overall DPs of governments. The targets set in those plans should be reflected in the specific objectives of entrepreneurship development from specific economic sectors or groups of society. The third and most challenging task is alignment of the entrepreneurship strategy with the broader private sector development agenda, based on competitive advantages of the country. Entrepreneurship policy is, therefore, an integral part of the overall national competitiveness policy. This calls for a coherent policy approach that interlocks different areas of private sector development, including industrial policy, investment promotion, trade facilitation, export promotion, SME promotion as well as fiscal policy.

As a result, Tables 7 and 8 also have revealed almost all of mentioned challenges among key effective factors influencing policymaking (especially numbers: 1, 4 and 8)





**Fig. 4** The multiple scopes policymaking model for Iran

or prerequisites for effective entrepreneurship policy in Iran (numbers: 1, 4, 6, 7, 8). Additionally, these factors are classified in two main groups of policies, based on UNCTAD framework (general economic and business climate and Private sector Development Policy) as well as one fundamental group (policymaking process) in these tables. Regarding to abovementioned results, paying more attention to both policy levels of business climate and private sector, for Iranian policymakers is completely necessity. Moreover, the policymaking process as a multidimensional and vulnerable process, respecting diverse scopes of policymaking in a developing country, could be considered a great challenge.

In conclusion, an entrepreneurship policymaking model, based on UNCTAD structure is presented as a conceptual framework for entrepreneurship policy in Iran. The model focuses on main scopes of policymaking with regard to research findings (Fig. 4). Indeed, it recommends concentration on seven main scopes of entrepreneurship policy as bellow: Policymakers, Popular culture, private and public sectors, Schools, Universities and Media, under a comprehensive national entrepreneurship policy (consistent with national vision and long-term development plan). In the model, the interactions among policy scopes have been seen at the

national level. Furthermore, it has been delighted these interactions with key trends in business environment (at national and international levels). Cut lines of model are devised to emphasis in the certainty of active and effective international relations to improve entrepreneurship policy in Iran.

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## References

- Ahmadpour Daryani, M. (1999). *Karafarini: Ta'arif, nazariat, olgooha [Entrepreneurship: Definitions, theories, models]*. Tehran: Pardis Publication.
- Ahmadpour Daryani, M. (2010). *Founding the faculty of entrepreneurship at University of Tehran* [Interview], November 18, 2014.
- Bostock, F., & Jones, G. (1989). *Planning and power in Iran: Ebtehaj and economic development under the Shah* (p. 238). London: Frank Cass and Company Ltd.
- Danaeefard, H. (2015). Invisible element in goals of Iran development plans: The role of public management in national policymaking. In *The 1st Iranian Conference on the Economy. IMPS* [Online]. Available from: <http://www.eghtesadnews.com/Live/Stories/DEN-109055>. Accessed January 14, 2015.
- Esfandiari, K. D. (2014). *Growing programs of Iran National Radio & television on entrepreneurship* [Interview], November 19, 2014.
- Fallahi, K. (2012). *Recognition of Iranian behaviors: An introduction to identify mentality, culture and behavior of Iranians*. Tehran: Mahkameh Publication.
- FEUT. (2007). Establish the faculty of entrepreneurship. *FEUT Portal* [Online]. Available from: <http://ent.ut.ac.ir/news-247.htm>. Accessed October 2, 2014.
- Garousi, H. (2014). Reforming regulations to support national production. *ICANA* [Online]. Available from: <http://www.mehrnews.com/news/2328434/>. Accessed October 3, 2014.
- Gartner, W. (1985). A conceptual framework for describing the phenomenon of new venture creations. *Academy of Management Journal*, 10(4), 696–706.
- GEM Report. (2013). Global entrepreneurship monitor: 2013. *Global Report* [Online]. Available from: <http://www.gemconsortium.org/key-indicators>. Accessed October 1, 2014.
- Graneheim, U., & Lundman, B. (2003). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 105–112.
- Habibi, N. (2008). The Iranian economy in the shadow of economic sanctions. *The Middle East Brief*, 31, 1–8.
- Hsieh, H., & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, 1277–1288.
- Ilias, S. (2009). Iran's economic conditions: U.S. policy issues. *Congressional Research Service* [Online]. Available from: [www.crs.gov](http://www.crs.gov). Accessed December 13, 2014.

- IROST. (2006). Entrepreneurship development office. *IROST* [Online]. Available from: <http://karad.irost.org/main.php/>. Accessed October 12, 2014.
- Islamic Parliament Research Center. (2009). Evaluation of industries based on performance indicators and comparison with quantitative goals of third & fourth development plans. *IPRC*. No. 9662 [Online]. Available from: <http://rc.majlis.ir/fa/report/show/738950>. Accessed October 7, 2014.
- Islamic Parliament Research Center. (2013). Studies on designing an ideal model of planning in Iran, comparison of Second to fifth Development Plans Documents. *IPRC*. No. 12824 [Online]. Available from: <http://rc.majlis.ir/fa/report/show/837201>. Accessed October 8, 2014.
- Islamic Parliament Research Center. (2014). Fourth developments plan. *IPRC* [Online]. Available from: <http://rc.majlis.ir/fa/report/show/950>. Accessed October 9, 2014.
- Jafari-Moghadam, S. (2008). Strategies for improving entrepreneurship culture in Iran: Entrepreneurship education obstacle's at universities. *Center for Strategic Research* [Online]. Available from: <http://www.csr.ir/Departments.aspx>. Accessed November 7, 2014.
- Jannat, M. (2006). Evaluation of development plans in Iran. *The Donya-e-eqtesad* (p. 32), January, 18 [Online]. Available from: [http://archive.donya-e-eqtesad.com/Default\\_view.asp](http://archive.donya-e-eqtesad.com/Default_view.asp)
- Katouzian, H. (2004). The short-term society: A comparative study in the problems of long-term political and economic development. *Middle Eastern Studies*, 40(1), 1–22.
- Keyhani, M., & Jafari-Moghadam, S. (2008). Language barriers to meme contagion: The case of entrepreneurship as a concept in Iran. In *International Conference on Entrepreneurship, ICE* (pp. 1–16). Faculty of Management and Muamalah, Selangor International Islamic University College, Malaysia, May 27–28, 2008.
- Khosrowshahi, K. (2004). *Reminiscences of entrepreneurship [Yaddashthaye karafarini: bar ma cheh gozasht]*. Tehran: Farzaneh books.
- Krippendorff, K. (2012). *Content analysis: An introduction to its methodology*. Beverly Hills, CA: SAGE.
- Malekitabar, M. (2006). A report of the process of holding second national festival of excellent entrepreneurs [Lecture] Lectures and introducing selected entrepreneurs. *Entrepreneurship vise minister: Ministry of cooperatives labour and social welfare*, Seminars Hall, February 2006.
- Mazaheri, N. (2008). An informal revolution: State business conflict and institutional change in Iran. *Middle Eastern Studies*, 44(4), 585–602.
- Meystre, S. (2008). Extracting information from textual documents in the electronic health record: A review of recent research. *US National Library of Medicine National Institutes of Health* [Online]. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/18660887/>. Accessed October 8, 2014.
- Mohseni, M. (2000). *A survey on socio-cultural attitudes in Iran*. Tehran: Ministry of Culture Press.
- Naraghi, H. (2001). *Homey sociology: Why we are hindered?* (Tehran 27th ed.). Akhtarvan Publication.
- Nili, Masoud. (1997). *Iran economy*. Tehran: Higher Education Institution of Economical Research & Planning.
- OECD. (2007). OECD framework for the evaluation of SME and entrepreneurship policies and programs. *OECD* [Online]. Available from: [www.oecd.org/publishing/corrigenda](http://www.oecd.org/publishing/corrigenda). Accessed October 26, 2014.
- Parsi, R., (2012). Iran: A revolutionary republic in transition. Chaillot Papers. *European Union*, Institute for Security Studies, No. 28.
- Razavi, R. (2010). The road to party politics in Iran 1979–2009. *Middle Eastern Studies*, 46(1), 79–96.
- Reynolds, P. D., et al. (2002). *Global entrepreneurship monitor 2002 executive report*.
- Riehl, S., Zeidi, M., & Conard, N. J. (2013). Emergence of agriculture in the foothills of the Zagros mountains of Iran. *Science*, 341, 65–67.
- Saeedi, A. A., & Shirinkam, F. (2005). *The position of merchants and industry owners in Iran in the Pahlavi era: The family capitalism of the Lajevardi family*. Tehran: Gam-e-No.

- Saeedi, A. A., & Shirinkam, F. (2009). *The position of merchants and industry owners in Iran in the Pahlavi era: The family capitalism of the Barkhordar family*. Tehran: Gam-e-No.
- Salehi-Isfahani, D. (2006). Iran's third development plan: A reappraisal Virginia. Polytechnic Institute and State University: Department of Economics. *Working Paper* (First version: 2005).
- Shapiro, G., & Markoff, G. (1997). In C. W. Roberts (Ed.), *Text analysis for the social sciences: Methods for drawing statistical inferences from text and transcripts* (pp. 9–31). Mahwah, NJ: Lawrence Erlbaum Associates.
- Shirinkam, F., & Farjamnia, E. (2010). *Growth pioneers*. Tehran: Iran Chamber of Commerce, Industries, Mines & Agriculture Publication.
- Sinaee, V., Mohaghar, A., & Zamani, S., (2012). A survey on the role of the 3rd Islamic Consultative Assembly of Iran in policy-making. *Iranian Political Science Association Journal*, 23.
- Sinaee, V., & Zamani, S. (2012). A survey on the role of the Iranian Government and Parliament in the changing of economic policies (Case study: The first economic, social and cultural plan, 1989–1993). *Encyclopedia of Economic Rights*, 19(2), 72–101.
- Taee, H. (2014). Holding the Amirkabir excellent entrepreneurs festival. *ICEA* [Online]. Available from: [http://www.icea.ir/?page\\_id=893](http://www.icea.ir/?page_id=893). Accessed November 19, 2014.
- Tayebnia, A. (2013). What are the main problems of Iran economy. *Iranian Economy* [Online]. Available from: <http://www.ireconomy.ir/fa/page/5498/AA.html>. Accessed December 28, 2014.
- The Donya-e-Eqtasad. (2005). Holding the first festival of excellent entrepreneurs, September 2. The Ministry of Cooperatives, Labour and Social Welfare. (2006). National festival of excellent entrepreneurs. *MCLS* [Online]. Available from: <http://karafarini.mcls.gov.ir/fa/home>. Accessed October 12, 2014.
- Vaghefi, R. M. (1975). *Entrepreneurs of Iran: The role of business leaders in the development of Iran*. Palo Alto, CA: Altoan Press.

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# The Role of Business Regulations in Economic Growth

Seyed Mostafa Razavi, Hamid Padash and Ali Nikoo Nesbati

**Abstract** The main purpose of this research is to estimate the relationship between business environment indicators and economic growth in MENA countries, especially Iran. We propose the following model:  $(\dot{G} = \alpha + \beta BE + \sum \gamma X + \varepsilon)$ , where  $\dot{G}$  represents economic growth; BE represents the individual business environment measures, X is a vector of control variables, and  $\varepsilon$  is the error term. To analyze, we utilize several sources of data including the World Bank's Doing Business annual reports and World Development Indicators. Dependent variable is annual percentage growth rate of GDP per capita, available from the World Bank's World Development Indicators (WDI). The main explanatory variables are deduced from World Bank's Doing Business annual reports. Our estimated regressions results suggest that there is a positive and significant relation business environment (Doing Business) indicators and the economic growth of Iran. Some indicators such as "Enforcing Contracts" have the significant effect than others, but this conclusion is not general. The main contribution of this paper is to analyze business regulations in Iran and suggest specific policies to improve its economic performance.

## 1 Introduction

The world economy has undergone many changes in recent times, and these changes have had profound effects on business (Sloman 2008, p. 3). What does factor explain the difference between countries? Why does output per worker vary

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enormously across countries? Why some countries grow faster than others? There are many different answers to this question; the neoclassical economists believe that accumulation of physical capital and effective labor are main determinants of economic growth. Neoclassical economists analyze the growth differences based on an aggregate production function. In the neoclassical era, there are two approaches: First approach taken by Mankiw et al. (1992) and second approach taken by Dougherty and Jorgenson (1996). Both approaches attribute differences among countries to differences in human capital, physical capital, and productivity (Hall and Jones 1999).

But recent researches show that differences in physical capital and educational attainment can only partially explain the variation economic growth. In fact, North and Thomas (1973) argued that institutions affect economic growth. According to them, institutions influence growth by recognizing property rights, changing incentive structures and reducing transaction costs. Hall and Jones (1999) found that the differences in capital accumulation, productivity, and therefore output per worker are driven by differences in institutions and government policies. Hall and Jones (1999) call the institutions and government policies as *social infrastructure*. Rodrik (2000) explained the role of non-market institutions in creating complete and contingent markets. Acemoglu et al. (2001), estimate large effects of institutions on income per capita in European economies. They show that institutions are a major determinant of long-term growth. According to their study, countries that had better political and economic institutions in the past are richer today. Acemoglu et al. (2001) conclude that in places where Europeans faced high mortality rates, they could not settle and were more likely to set up extractive institutions. Hall and Jones (1999) and Acemoglu et al. (2001) presented empirical evidence for this statement that institutions matter to explain the differences between countries. Institutional economists, especially North (1990, 2005) argue theoretically that institutional quality is a main determinant of long-term growth. Djankov et al. (2006), following institutional approach, introduced a new measure of institutional quality and focused on a particular type of institution, i.e. business regulations. Djankov et al. (2006) estimated the effect of business regulations on economic growth of 135 countries. They show that countries with better regulations grow faster. The effect of more business-friendly regulations on growth remains positive and significant in 2SLS regressions. Djankov et al. (2006) use Doing Business (DB) indicators as a proxy for business regulations. Siddiqui and Ahmad (2013) believe that institutions contribute to growth by reducing the risk of doing business.

In this chapter, we examine this hypothesis: If do changes in DB lead to changes in economic growth or not?

## 2 Literature Review

### 2.1 *Institutions and Economic Growth*

Institutional economists believe that *institutions matter*. However there are different explanations about this issue that why institutions are important and also which institutions matter. While some scholars provide historical explanations such as Acemoglu and Robinson (2012), Shirley (2009), others such as Knaak and Keefer (1995), Acemoglu and Johnson (2005) use econometric analysis for showing that institutions have significant impact on economic growth.

Now, it is said that “We are all Institutionalists”. But, it may be questioned that how do the institutions effect on economic growth? What are the mechanisms? In fact, different researches refer to different mechanisms (Ogilvie and Carus 2014). Some researchers insist on shaping incentive for investigating on human capital and innovations. Others notice to their impact on collective action in favorite of or contrast to technological innovations. Some researchers investigate the effect of institutions on demographic behavioral and, finally, some other researchers points out the effect of institutions on socio-political conflict and their consequence on economic growth (Ogilvie and Carus 2014, 404).

The second question about institutions is that Is it possible to quantify institutional quality?: How are they measured? Beside many different theoretical explanations, there are considerable quantified indicators for measuring institutions in empirical literature.

Siddiquia and Ahmed (2013) suggest nine indicators for measuring institutional quality such as Political Risk Service (PRS) and Business Environment Risk Intelligence (BERI) and also World Economic Forum (WEF), Global Integrity, Freedom House, Fraser Institute (FI), Heritage Foundation, and Bertelsmann, Marshall et al. (POLITY) that has been provided in recent years (Siddiquia and Ahmed 2013, 19). Each of these indicators measures some aspects of institutional quality.

### 2.2 *Business Regulations as a Proxy for Institutions*

In recent decade, many institutional researchers have developed the empirical literature. Many of these researches use the regulation as a measurable institution. In fact, the statistical databases of World Bank verify this development. Nicoletti and Scarpetta (2003), using the set of cross-country quantitative indicators of regulatory reform in particular industries, have related the scope and depth of regulatory reforms to growth outcomes in OECD countries. They estimate linkage between regulation and growth and find that reforms promoting private governance and competition tend to boost productivity. According to them, good governance, strong incentives and competitive pressures are likely to encourage productivity improvements and innovation. They believe that reforms in privatisation, liberalisation of potentially competitive markets and pro-competitive regulation of natural monopoly markets, would improve economic growth by improving corporate governance and increasing competitive pressures.

Gørgens et al. (2003) have estimated the relation between regulation and growth by a fixed effect non-linear panel data regression model using a new semi-parametric estimator. Their study shows that high levels of regulation lowers growth, but there is no effect on growth for moderate to low levels of regulation. The assumption is that the level of regulations is a policy decision and growth is the outcome.

Barone and Cingano (2008) study how regulation in the supply of a variety of services impacts on the economic performance of downstream manufacturing industries. They find that lower service regulation translates into faster value added, productivity, and export growth of downstream service-intensive industries.

Bah and Fang (2011), using a general equilibrium model, assess the effects of the business environment (regulation, crime, corruption, infrastructure and access to finance) on output and total factor productivity (TFP) for 30 Sub-Saharan African countries. They find that the quantitative effects of these dimensions of the business environment are large, leading to decreases in output and TFP in the range of 40–77% and 18–44% respectively.

Tetlow and Hanusch (2012) believes that improving the investment climate is among the top priorities in development. He discusses the potential role of the Doing Business Indicators in the reform process. According to him, the evidence suggests that focusing on indicators relating to credit and the enforcement of contracts is the most important. Indicators related to cost have the largest potential for fostering growth.

Haidar (2012) investigate the link between business regulatory reforms and economic growth in 172 countries. He concludes that there is statistically significant evidence, across 172 countries, for economic growth response to business regulatory reforms. According to him, on average, each business regulatory reform is associated with a 0.15% increase in growth rate of GDP (Table 1).

**Table 1** Descriptive statistics (According to World Bank Database)

Variables	Mean	Median	Maximum	Minimum	Std. dev.
Doing business index (ranking)	102.8333	108.0000	187.5000	24.00000	52.04693
GDP per capita growth	2.057790	2.564074	8.437486	-6.90522	2.880708
Inflation	8.028747	9.159320	16.22719	1.794867	4.190247
Literacy rate, adult	84.43507	88.14509	97.76419	57.65550	11.46634
Labor force	5779567	3045719	24809107	172286.4	7189055
Gross fixed capital formation	7.89E+12	2.14E+09	1.55E+14	0.000000	3.37E+13
Real effective exchange rate	37.66239	0.000000	103.2793	0.000000	49.25019
Procedures to enforce a contract (number)	5.861905	6.000000	12.00000	0.000000	2.817885
Time required to enforce a contract (days)	672.4667	630.0000	1225.000	505.0000	184.8737
Time required to register property (days)	41.57143	31.00000	131.4000	0.000000	35.50844
Time required to start a business (days)	25.48228	24.00000	67.30000	8.000000	14.05387



### 3 Model

In the empirical literature, the most used model for measuring the effect of Doing Business on economic growth is of Djankov et al. (2006). This model has been derived from Barro (1991). The econometric specification of model is as follow:

$$Growth = \alpha + \beta Business\ Regulations + \gamma Ln(GDPpct_0) + \delta X + \varepsilon$$

where

- Business Regulation: Doing Business aggregate index (the simple average of country Rankings)
- Growth: the annual average GDP per capita growth rate
- GDPpct<sub>0</sub> = GDP Per Capita in the starting year
- X: a set of control variables.

Following this model, we specify control variables as Table 2. Control Variables are macroeconomic variables as follow:

- Literacy rate, adult total (% of people ages 15 and above)
- Gross fixed capital formation (constant LCU)
- Inflation, GDP deflator (annual %)
- Real effective exchange rate index (2010 = 100)
- Labor force, total.

Our proxies for robustness checks are some regulatory indicators such as:

- Time required to enforce a contract (days)
- Time required to register property (days)
- Time required to start a business (days)
- Procedures to enforce a contract (number).

Finally, we use GDP Per Capita Growth as a dependent variable.

### 4 Data Description

The descriptive statistical indicators show that the average rank of MENA countries is 102 among 189 countries. The economic growth of these countries after 2004 has been 2.07% in average. According to World Bank (2014), average Distance to Frontier (DTF) of MENA countries has been 52 point.

The Doing Business are including: starting a business, paying taxes, obtaining licenses, getting credit, protecting investors, employing workers, international trade, property registration, closing a business and enforcement of private contracts. We use Polity IV indicators for control variables. The Doing Business Ranking Index is the simple average of all ranks of MENA countries.

**Table 2** Definition of variables

Variable	Indicator	Definition	Statistical source
Ltrcy	Literacy rate, adult total (% of people ages 15 and above)	Adult literacy rate is the percentage of people ages 15 and above who can, with understanding, read and write a short, simple statement on their everyday life	United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics
GDPpcg	GDP per capita growth (annual %)	Annual percentage growth rate of GDP per capita based on constant local currency. Aggregates are based on constant 2005 U.S. dollars. GDP per capita is gross domestic product divided by midyear population. GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources	World Bank national accounts data, and OECD National Accounts data files
gcptlfrmn	Gross fixed capital formation (constant LCU)	Gross fixed capital formation (formerly gross domestic fixed investment) includes land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. According to the 1993 SNA, net acquisitions of valuables are also considered capital formation. Data are in constant local currency	World Bank national accounts data, and OECD National Accounts data files

(continued)

**Table 2** (continued)

Variable	Indicator	Definition	Statistical source
Infl	Inflation, GDP deflator (annual %)	Inflation as measured by the annual growth rate of the GDP implicit deflator shows the rate of price change in the economy as a whole. The GDP implicit deflator is the ratio of GDP in current local currency to GDP in constant local currency	World Bank national accounts data, and OECD National Accounts data files
REER	Real effective exchange rate index (2010 = 100)	Real effective exchange rate is the nominal effective exchange rate (a measure of the value of a currency against a weighted average of several foreign currencies) divided by a price deflator or index of costs	International Monetary Fund, International Financial Statistics
lbrfrc	Labor force, total	Total labor force comprises people ages 15 and older who meet the International Labour Organization definition of the economically active population: all people who supply labor for the production of goods and services during a specified period. It includes both the employed and the unemployed. While national practices vary in the treatment of such groups as the armed forces and seasonal or part-time workers, in general the labor force includes the armed forces, the unemployed, and first-time job-seekers, but excludes homemakers and other unpaid caregivers and workers in the informal sector	International Labour Organization, using World Bank population estimates
tcntr	Time required to enforce a contract (days)	Time required to enforce a contract is the number of calendar days from the filing of the lawsuit in court until the final determination and, in appropriate cases, payment	World Bank, doing business project ( <a href="http://www.doingbusiness.org/">http://www.doingbusiness.org/</a> )

(continued)

**Table 2** (continued)

Variable	Indicator	Definition	Statistical source
rgstr	Time required to register property (days)	Time required to register property is the number of calendar days needed for businesses to secure rights to property	World Bank, doing business project ( <a href="http://www.doingbusiness.org/">http://www.doingbusiness.org/</a> )
start	Time required to start a business (days)	Time required to start a business is the number of calendar days needed to complete the procedures to legally operate a business. If a procedure can be speeded up at additional cost, the fastest procedure, independent of cost, is chosen	World Bank, doing business project ( <a href="http://www.doingbusiness.org/">http://www.doingbusiness.org/</a> )
pcntr	Procedures to enforce a contract (number)	Number of procedures to enforce a contract are the number of independent actions, mandated by law or courts that demand interaction between the parties of a contract or between them and the judge or court officer	World Bank, doing business project ( <a href="http://www.doingbusiness.org/">http://www.doingbusiness.org/</a> )
DBRKN	Ease of doing business index (1 = most business-friendly regulations)	Ease of doing business ranks economies from 1 to 189, with first place being the best. A high ranking (a low numerical rank) means that the regulatory environment is conducive to business operation. The index averages the country's percentile rankings on 10 topics covered in the World Bank's Doing Business. The ranking on each topic is the simple average of the percentile rankings on its component indicators	World Bank, doing business project ( <a href="http://www.doingbusiness.org/">http://www.doingbusiness.org/</a> )
DBDTF	Distance to Frontier (DTF)	The gap between an economy's performance and a measure of best practice across the entire sample of 31 indicators for 10 doing business topics	World Bank, doing business project ( <a href="http://www.doingbusiness.org/">http://www.doingbusiness.org/</a> )

**Table 3** First regression result

Variables	Coefficient	Std. error	t-Statistic
Constant	-0.542301	1.295506	-0.418602
Doing business ranking index	0.025285	0.011295	2.238483
R-squared	0.208690		
F-statistic	5.010807		

## 5 Estimation Results

When we run two-variable regression, estimated regression results show that, if we take the significant level in 5%, there is positive and significant relation between doing easily business and the economic growth. F-Statistic will be 5.01 in the 5% significant level (see Table 3).

If we want to check robustness of this result, we can use Distance to Frontier Index (DTF) as an independent variable. In this way, the estimated regression verify the same finding. In this situation, the R-square of regression is very low (Table 4).

When we add control variables and run the model, we could observe that R-square of model would increase to 53%. In 5% significant level, the more distance to frontiers the weaker economic growth. Doing easily business in MENA countries would reinforce their GDP per capita growth (Table 5).

**Table 4** Robustness check

Variables	Coefficient	Std. error	t-Statistic
Constant	5.536568	2.244121	2.467143
Doing business DTF	-0.062065	0.038555	-1.609780
R-squared	0.120020		
F-statistic	2.591392		

**Table 5** The main regression result

Variables	Coefficient	Std. error	t-Statistic
Constant	10.76012	7.960068	1.351762
Doing business DTF	-0.126533	0.035422	-3.572164
Inflation	0.447330	0.179960	2.485720
Literacy rate, adult	-0.083233	0.058140	-1.431589
REER	0.020906	0.017702	1.181047
GDP	0.227109	0.268642	0.845397
AR(2)	0.794941	0.240782	3.301501
R-squared	0.530795		
F-statistic	1.696900		

**Table 6** Robustness check

Variable	Coefficient	Std. error	t-Statistic
Doing business ranking index	0.032587	0.013376	2.436225
Literacy rate, adult	-0.004318	0.019576	-0.220593
REER	0.007301	0.013201	0.553067
Inflation	-0.139344	0.175126	-0.795678
R-squared	0.262881		

**Table 7** Regression result on some individual DB indicators (procedures of enforcing contracts)

Variable	Coefficient	Std. error	t-Statistic
Constant	7.547464	7.980399	0.945750
Procedures of enforcing contracts	0.825895	0.383748	2.152181
Inflation	0.108281	0.278112	0.389343
Literacy rate, adult	-0.022786	0.074370	-0.306391
REER	0.015107	0.019608	0.770462
GDP	-0.919059	0.294623	-3.119448
AR(2)	-0.618428	0.301716	-2.049699
R-squared	0.370115		
F-statistic	0.881388		

Regression results on some individual indicators of Doing Business differ; we test two indicators: Procedures of Enforcing Contracts and Time required to start a business. T-statistics for the enforcing contract is statically significant but it is not significant for starting business. These results suggest that we cannot rely on individual indicators of DB for affecting economic growth (Tables 6, 7 and 8).

**Table 8** Regression result on some individual DB indicators (time required to start a business)

Variable	Coefficient	Std. error	t-Statistic
Constant	11.44625	11.14650	1.026891
Time required to start a business	0.000605	0.086470	0.006998
Inflation	-0.111001	0.391708	-0.283378
Literacy rate, adult	-0.017564	0.100233	-0.175231
REER	0.003557	0.029073	0.122359
GDP	-0.702780	0.483775	-1.452701
AR(2)	-0.211243	0.478428	-0.441536
R-squared	0.182441		
F-statistic	0.334730		

## 6 Conclusion and Discussion

What are determinants of economic growth? Hall and Jones (1999), Acemoglu et al. (2001) and Djankov et al. (2006) show that institutions are major determinants of long-term growth. Aghion et al. (2010) suggest that improving the investment climate increases growth figures. According to Collier (2000) the poor business environment leads to misallocation of resources and high transactions cost. Bigsten and Soderblom (2006) find that the poor business environment limits the export growth of manufacturing firms. Porter and van der Linde (1995) suggests that more severe environmental regulation may have a positive effect on firms' performance by stimulating innovations.

According to institutional approach, institutional quality has strong effect on economic growth. Theoretical framework of institutional approach have been presented in the works of North (1990), Knack and Keefer (1995), Acemoglu et al. (2001, 2002) and Hall and Jones (1999) in the best ways.

Many important empirical studies, emphasize the important role of institutions in economic growth of countries, particularly, of the Third—world countries (Glaeser et al. 2004; Acemoglu et al. 2001).

In recent researches, the development of empirical studies have been oriented to introduce new indicators for measuring the institutional quality. Djankov et al. (2006) is the leader in this era. Other researches have extended their model. In fact, he has introduced business regulation as an indicator for measuring the institutional quality. For example, according to Tetlow and Hanusch (2012), some Doing Business indicators, such as credit and the enforcement of contracts, have the largest potential to foster growth. Haidar (2012) concludes that there is statistically significant evidence, across 172 countries, for economic growth response to business regulatory reforms.

In this research, following the basic model, we have tested the effect of business regulation on economic growth of MENA countries. The regression results show the positive relation between regulatory reforms, in terms of Doing Business indicators, and the GDP per capita growth. Although, we cannot reliably measure the effect of individual indicators on growth.

## 7 Implications for Iran

All results is compatible to Iran's institutional arrangements. So, we can conclude that there is a positive and significant relation business environment and the economic growth of Iran. This main result of this is consistent with Djankov et al. (2006) findings. But, we think that there are some deficits in their model:

First, they choose the business regulation as a proxy for measuring institutions. This proxy is very simple and does not represent the comprehensive scope of

institutions. According to mainstream definitions, institutions include formal and informal rules of the society. Informal institutions are not measurable. Regulation is a kind of formal institution but they are not the same.

Second, the Doing Business indicators do not measure business regulations, but they only represent the effect of reforms in regulations on doing easily business. So, that is not indicator for business regulation.

Third, the model doesn't recognize the institutional difference between countries. For example, in Iran, the main institutional problem is property right. The model is silent about property.

## References

- Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). The colonial origins of comparative development: An empirical investigation. *American Economic Review*, 91(5), 1369–1401.
- Acemoglu, D., & Robinson, J. A. (2012). *Why nations fail: The origins of power*. Profile Book: Prosperity and Poverty.
- Acemoglu, D., & Johnson, S. (2005). Unbundling institutions. *Journal of Political Economy*, 113, 949–995.
- Bah, M., & Fang, L. (2011). *Impact of the business environment on output and productivity in Africa*, MPRA Paper No. 32517. Online at <http://mpra.ub.uni-muenchen.de/32517>
- Barone, G., & Cingano, F. (2008). *Regolamentazione dei servizi e crescita*, Roma: Pubblicazioni Banca d'Italia, Roma.
- Barro, R. J. (1991). Economic growth in a cross-section of countries. *Quarterly Journal of Economics*, 106(2), 407–443.
- Bigsten, A., & Soderbom, M. (2006). What have we learned from a decade of manufacturing enterprise surveys in Africa? *The World Bank Research Observer*, 21(1), 241–265.
- Collier, P. (2000). Rebellion as a Quasi-Criminal Activity. *Journal of Conflict Resolution*, 44(1), 839–853.
- Djankov, S., Hart, O., McLiesh, C., & Shleifer, A. (2006). *Debt Enforcement around the World*. Working Paper no. 12807 (December), NBER, Cambridge, MA.
- Dougherty, C., & Jorgenson, D. W. (1996). International comparisons of the sources of economic growth. *American Economic Association Papers and Proceedings*, May 1996, 86, 25–29.
- Glaeser, E. L., LaPorta, R., López-de-Silanes, F., & Shleifer, A. (2004). Do institutions cause growth? *Journal of Economic Growth*, 9, 271–303.
- Gørgens, T., Paldam, M., & Würtz, A. (2003). *How Does Public Regulation Affect Growth?* University of Aarhus Denmark, Working Paper No. 2003–14, ISSN 1396-2426.
- Hall, R., & Jones, C. I. (1999). Why do some countries produce so much more output per worker than others? *Quarterly Journal of Economics*, 114(1), 83–116.
- Haidar, J. I. (2012). The impact of business regulatory reforms on economic growth. *Journal of The Japanese International Economies*, 26, 285–307.
- Knack, S., & Keefer, Ph. (1995). Institutions and economics performance: Cross-country tests using alternative institutional measures. *Economics and Politics*, 7, 590–602.
- Mankiw, N. G., Romer, D., & Weil, D. N. (1992). A contribution to the empirics of economic growth. *The Quarterly Journal of Economics*, 107(2), 407–437.



- North, D. C., & Thomas, R. P. (1973). *The rise of the western world a new economic history*. Cambridge: Cambridge University Press.
- North, D. (1990). *Institutions, institutional change, and economic performance*. New York: Cambridge University Press.
- Nicoletti, G., & Scarpetta S. (2003). *Regulation, productivity and growth: OECD evidence*, OECD Economics Department Working Papers, No. 347, OECD Publishing: <http://dx.doi.org/10.1787/078677503357>
- Ogilvie, Sh., & Carus, A. W. (2014). Institutions and economic growth in historical perspective, In P. Aghion & S. N. Durlauf (Eds.), *Handbook of economic growth*, vol. 2A, Elsevier.
- Porter, M. E., & van der Linde, C. (1995). Toward a new conception of the environment-competitiveness relationship. *The Journal of Economic Perspectives*, 9(4) (Autumn, 1995), 97–118.
- Rodrik, D. (1999). Democracies pay higher wages. *Quarterly Journal of Economics*, CXIV: 707–738.
- Shirley, M. M. (2009). *Institutions and development*. Cheltenham: Edward Elgar.
- Siddiqui, K., & Ahmad, R. (2013). Impulse buying behavior among young children. *Asian Journal of Research in Marketing*, 2(4), 25–32.
- Siddiquia, D. A., & Ahmedb, Q. A. (2013). The effect of institutions on economic growth: A global analysis based on GMM dynamic panel estimation. *Structural Change and Economic Dynamics*, 24, 18–33.
- Sloman, J. (2008). *Economics and the business environment*, Pearson Education Limited, Second edition.
- Tetlow, M., & Hanusch, M. (2012). Strategic environmental assessment: The state of the art. *Impact Assessment and Project Appraisal*, 30(1), 15–24.
- World Bank. (2014). Doing business database: <http://www.doingbusiness.org>

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# Business Startup in Iran: Entrepreneurial Skills, Personality, and Motivation of Iranian Nascent Entrepreneurs

Mohammad Reza Zali and Atieh Sadat Chaychian

**Abstract** Nowadays, numerous businesses are annually started up by the Iranian nascent entrepreneurs who have the required entrepreneurial skills, personality, and motivation. According to the Global Entrepreneurship Monitor (GEM) 2013 data, 75% of Iranian early stage entrepreneurs are nascent entrepreneurs whose average age is 32 and 73% of them are male. Most of nascent entrepreneurs (approximately 66%) are opportunity-based entrepreneurs versus 34% of them who are necessity-based entrepreneurs. Furthermore, 43% of Iranian nascent entrepreneurs believe that there will be good opportunities for starting a business in the next six months in the area where you live; meanwhile 83% of them have the knowledge, skill and experience that is necessary to start a new business. Accordingly, 67% of Iranian nascent entrepreneurs are risk takers (no fear of failure) and 48% of them know someone personally who started a business in the past two years. However, multi-regression results show that the entrepreneurial skills of Iranian nascent entrepreneurs, and not their personality, can affect the entrepreneurial motivation (19%). It means that nascent entrepreneurs who have more entrepreneurial skills start up their businesses based on entrepreneurial opportunities recognition rather than a necessity option. Therefore, entrepreneurship education programs should be formed to empower entrepreneurial skills such as capabilities of entrepreneurial opportunity recognition and business startup on potential entrepreneurs.

## 1 Introduction

It is often said that without playing a game the win would not be reachable. In the entrepreneurship context, this remark suggests that success depends on people's willingness to become entrepreneurs. Moreover, due to the evolutionary process of

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entrepreneurial opportunity in which people select many steps along the way, decisions made after the discovery of opportunities—to positively evaluate opportunities, to pursue resources, and to design the mechanisms of exploitation—also depend on the people’s willingness to “play” the game. In this chapter, we argue that people’s decisions are influenced by motivations and there are some factors which affect motivations as well.

Entrepreneurship represents planned, intentional, and conscious behavior clearly (Bird 1988; Katz and Gartner 1988). An entrepreneur’s behavior is affected by his motivation exactly as others. Establishment of a new enterprise is one of the most important outcomes of entrepreneurial efforts, and the effort exerted is closely related to the individual’s motivation (Davidsson et al. 2002). People have various motivations for becoming an entrepreneur. Naffziger et al. (1994) stated that answering questions about why people start businesses and how they differ from those who do not ... may be useful in understanding the ‘motivation’ that entrepreneurs exhibit during start-up as a link to the sustaining behavior exhibited later.

While there are a number of entrepreneurial motivation models, research on this topic often reveals “push” and “pull” factors as motivators for business start-ups (Gilad and Levine 1986; Watson et al. 1998). “Pull” factors are the motivations which can make starting a business attractive (e.g. controlling one’s own time at work), and encourage people to start businesses—such as seeing an opportunity. “Push” factors are those that force a person to start a business in order to avoid some undesirable conditions (e.g. an abusive boss). Push factors are characterized by personal or external factors (including a marriage break-up, or being passed over for promotion), and often have negative connotations. Generally, pull factors have been found to be more prevalent than push factors (Segal et al. 2005; Shinnar and Young 2008). This is significant because businesses started by entrepreneurs with push motivation experience are less successful (financially) than those built upon pull factors (Amit and Muller 1995).

Due to competing definitions of entrepreneurship, the stimulating forces which affect people to become entrepreneurs are widely deemed important, but poorly understood. For example, the economic sociologist Schumpeter coined entrepreneurship as change-oriented and innovative behavior. In contrast, alertness to opportunity recognition was the economist Kirzner’s (1974) definition. Although there seems to be no generally accepted definition of entrepreneurship, many assessments are unified by the notion that entrepreneurship is about creating something new (Reynolds et al. 2005). A key focus for modern academic researchers is nascent entrepreneurship. Nascent entrepreneurship is the initiation of activities that are intended to culminate in a viable new firm. As startup process is the subject of the current project, all references to entrepreneurship henceforth will refer to nascent entrepreneurship.

Due to the fact that nascent entrepreneurs are motivated by different life circumstances, Reynolds et al. (2002) make an explicit conceptual distinction between “opportunity-based” and “necessity-based” entrepreneurship as contextual motivations. As we can see in the Fig. 1 in 2010 1.6% of all entrepreneurial motivations of entrepreneurs were opportunity-based against 25.40% necessity ones. Accordingly, in 2011 3% of entrepreneurs were opportunity-based and 24.30%

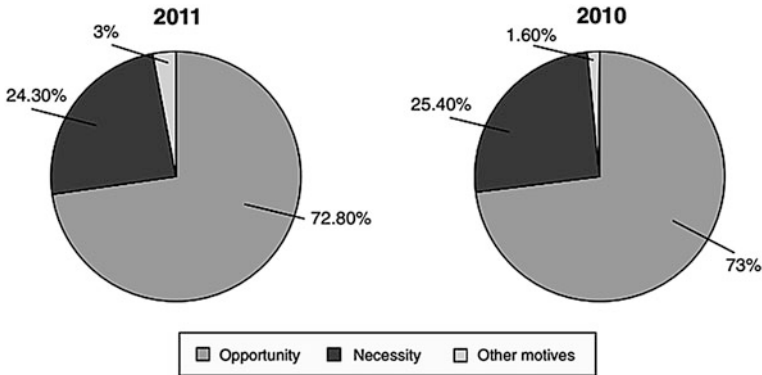


Fig. 1 Types of entrepreneurial motivations

were necessity-based. Contextual motivation is the influence of social, economic, and political environments that shape individual behaviors, and thus may impact the likelihood of new firms founded by nascent entrepreneurs. The reality is the entrepreneur’s perception of the environment which plays a key role in a firm’s chances of success (Bruno and Tyebjee 1982).

Necessity-based entrepreneurship includes a situation in which people start a business because other employment options are either absent or unsatisfactory. In contrast, opportunity-based entrepreneurship involves starting a business by taking advantage of an identified entrepreneurial opportunity. Global assessments show that about two-thirds of entrepreneurs classify themselves as opportunity- motivated while one-third regard themselves as necessity-motivated (Reynolds et al. 2002). There are many research conducted by GEM (Global Entrepreneurship Monitor) on impressive factors of motivation all over the world. In this paper we are trying to investigate the factors influencing motivations of Iranian nascent entrepreneurs and trying to find out whether entrepreneurial skills and personality have influenced motivation.

We use the GEM data which were gathered via questionnaires in the Islamic Republic of Iran in 2013. For analyzing the data we use SPSS software by the multi regression method which has controlling data as age and gender.

## 2 Literature Review

### 2.1 Entrepreneurial Motivation

Entrepreneurship motivations have been the focus of many studies over time (DeMartino and Barbato 2003; Segal et al. 2005; Taormina and Lao 2007). We can conclude from related literature review that an individual’s motivation to become an

entrepreneur is often complicated and multi-factored (Marlow and Strange 1994; Shane et al. 1991) as well as the start-up process taking a wide range of different timeframes depending on the entrepreneur (Freimann et al. 2005). Kuratko et al. (1997) argue that in order to understand the entrepreneurial process, one must understand an entrepreneur's motivation to start and sustain his/her venture. Some researchers believe innate personality traits are the basic motivators, while others believe external/situational factors (push-pull) are more important. Personality traits, such as the need to achieve, a tolerance for ambiguity, a desire to innovate, a propensity for risk-taking, role model and a preference for locus of control all have been evidential influences on entrepreneurial activity (Collins et al. 2004; Ginsburg and Buchholtz 1989; Johnson 1990; Shaver and Scott 1991; Stewart et al. 1996).

Testing these factors, Birley and Westhead (1994) found that people initiate businesses mostly because of pull factors. In a more recent motivation examination to start a business, Segal et al. (2005) suggested that the motivation to start a business should be driven by the desirability for self-employment outweighing the desirability of working for others, which they called the net desirability for self-employment (NDSE). Segal et al.'s empirical findings supported this idea, while on the other hand indirectly supports the importance of "pull" factors. Work-related motivations to become an entrepreneur are usually considered to be push factors and are often key factors that can affect the readiness for an entrepreneurial career (Dobrev and Barnett 2005; Winn 2004).

According to researchers, individuals can be "pushed" into initiating a business by external negative conditions such as curtailment and unemployment, a low income job with little upward mobility and/or a desire to escape control (Curran and Blackburn 2001; Moore and Buttner 1997). At the same time, "pull" factors, such as the desire to be one's own boss, change lifestyle or use one's experience and knowledge, increase wealth, have ability to attract an individual to entrepreneurship field (Birley and Westhead 1994).

Since different life circumstances motivate entrepreneurship, Reynolds et al. (2002, p.16) differentiate between "opportunity-based" and "necessity-based" entrepreneurship explicitly in their every year effort (Global Entrepreneurship Monitor) to assess the rate of entrepreneurial activity across different countries. Opportunity-based entrepreneurship includes people who choose to start their own business by taking advantage of an entrepreneurial opportunity. Necessity-based entrepreneurship involves people who initiate a business in absence of other employment options.

The report of GEM 2004 shows that there is great unevenness in the relative distribution of necessity and opportunity entrepreneurship across the 34 countries in the GEM sample. The opportunity entrepreneurs are more common in high-income countries (such as France, the United Kingdom and the United States), while necessity entrepreneurs are more common in the low-income countries (such as Hungary and Poland). Accordingly, it may be argued that in developed countries economic growth is linked to opportunity entrepreneurship, while in most developing countries economic necessity entrepreneurship exists because of low growth. It may be that because richer countries are characterized by a more developed labor

market or access to stronger safety nets (social welfare), there is a lower need for starting up a business and therefore these countries exhibit lower necessity-based entrepreneurial activity rates (Reynolds et al. 2002).

Cross-country studies of developed countries have found that even motivations differ across countries. According to Scheinberg and MacMillan (1988) entrepreneurs in the US and Australia are highly motivated by the need for independence. In contrast, Italian and Chinese entrepreneurs are strongly motivated by communitarianism. Portuguese and Chinese entrepreneurs establish businesses to fulfill a need for approval. Shane et al. (1991) provided a cross-country comparison of entrepreneurs in Great Britain, Norway and New Zealand. According to their results fourteen motivation items loaded on four factors: recognition, independence, learning and something they call “roles”. Shane et al. (1991) found that the desire for recognition is stronger in New Zealand and Great Britain than in Norway. Further, Norwegian business persons are more likely to start a firm to “develop an idea for a product” and “continue learning”. Theories of motivation during the 1950s and early 1960s, was the hearth of the organizational psychology research focused on developing and testing content (i.e. need) theories of motivation. Generally speaking, focusing on personality profiles of people to explain behaviors, their logical perspective, has fallen out of favor. For more than 30 years, psychologists have accepted Mischel’s (1968) explanation that behavior originated from the interaction between the person and the situation which is a dynamic process (Shaver and Scott 1991). Early entrepreneurial research followed a similar path, focusing on identifying traits and features that distinguished entrepreneurs from the common population, rather than developing process-based models. Beginning with McClelland (1961) who argued that a high need for achievement was a personality trait common to entrepreneurs, a great deal of research has focused on characteristics of entrepreneurs (Shaver and Scott 1991). Oddly enough, in spite of the large number of studies examining personality traits of entrepreneurs, results are still mixed and inconclusive (Shaver and Scott 1991). Yet studies continue. Policy makers believe that education and especially entrepreneurship education can increase levels of entrepreneurship motivation (European Commission 2006). Hence, such education is designed and implemented into school curricula in many of the European member countries (European Commission 2006) and the United States. A key belief underlying these programs is that entrepreneurship skills can be taught and are not fixed personal characteristics. Indeed, it has been shown that the effect of general education as measured in years of schooling on entrepreneur performance is positive (Van der Sluis et al. 2005; Van der Sluis and Praag 2007).

Educational background and work experience as two of many dimensions of human capital may give necessary skills and qualifications to potential entrepreneurs. Formal education can affect the likelihood of entrepreneurial entry through (1) the skill acquisition (2) authorization, and (3) sorting people by ambition and decisiveness. General business and technical skills can guide nascent entrepreneurs in setting up basic necessary business functions and avoiding common mistakes; potential entrepreneurs are more likely to learn these lessons in specialized courses

and training rather than in typical high school and college courses. Certain courses, such as vocational programs will enable students to learn specific trade and business skills. In other courses, students develop critical thinking, communication, teamwork, and other general skills that will be necessary as an entrepreneur. Formal education, as a certification, can also provide access to certain social networks (e.g., alumni network) or serve as a positive signal for nascent entrepreneurs when evaluated by capital providers (e.g., venture capitalists). The acquisition of skills and certifications may create valuable opportunities for individuals to work for others, rather than pursue a new business venture. As the U.S. labor market has become increasingly service- and information-based, education has played an increasingly important role in facilitating new business formation motivation in some but not necessarily all industries.

Formal education thus allows individuals to gain knowledge and skills, earn credentials valued by others in the business community as well as sorting people by ambition and assertiveness. However, people who start small businesses in trades such as construction or carpentry have little need for advanced formal education to enhance their motivation.

## ***2.2 Entrepreneurial Personality***

The belief that entrepreneurs have distinctive personality traits, motivations and values has a long tradition in entrepreneurship studies. Academic researchers, venture capitalists, journalists, and whoever writes about entrepreneurs, have devoted much time and text to predicting who will succeed in entrepreneurship path and who will not, emphasizing that personality along with other personal features as cultural background and demographics will predict who will be an entrepreneur and which one will be successful in this way. Most of the researches in the field of Entrepreneurship investigated the concept of entrepreneurial personality.

Thirty-two researches were conducted in the field of entrepreneurship characteristics during the Gartner's study (Gartner 1989). Different aspects of an entrepreneur's personal characteristics have been investigated in the past researches. McClelland and Rotter discussed the control focus, psychological characteristics of the need for achievement, risk-taking propensity, and personal values. Rauch and Frese have distinguished two categories of personality traits which can be linked to business success: general personality traits (extroversion, emotional stability, openness to experience, agreeableness, and conscientiousness) and specific personality traits (the need for achievement, risk-taking, innovativeness, autonomy, focus of control and self-efficacy) (Antoncic 2009). One of the perceptions resulted from recent researches is that entrepreneurship in developing countries is distinct from developed ones. For example, Davey et al. (2011) research results indicated that students in developing countries are more likely to imagine becoming an entrepreneur in future and are more positive towards entrepreneurship than their industrialized European counterparts.

Risk taking and role model, two dimensions of personality, as assumed influencers on motivation, are reviewed in details in subsequent parts.

### 2.2.1 No Fear of Failure (Risk Taking)

As we have already mentioned, risk taking is one of the personality traits of an entrepreneur (McClelland and Rotter). McClelland noted that persons with a high need of achievement would have moderate tendency to take risk. McClelland's claim is specifically interesting for entrepreneurship research because of the entrepreneurial process done in the face of uncertainty. An entrepreneurial culture or enterprise defines a socio-economic field where entrepreneurial behavior and attitudes are praised and motivated (Johannsson 1993; Mason 1991). To advance and foster such attitudes and attributes resulting in entrepreneurship activity a proper environment is needed. One of these attributes is risk taking (Cannon 1991). A series of psychological attributes have been identified of which risk-taking propensity (e.g. Begley and Boyd 1987; Brockhaus 1980; Carland et al. 1984) has remained at the forefront. Brockhaus (1980, 513) defined risk taking propensity more adequately as "the perceived possibility of receiving the rewards associated with success of a proposed situation, which is required by an individual before he will subject himself to the consequences associated with failure, the alternative situation providing less reward as well as less severe consequences than the proposed situation".

In line with motivation theory of McClelland, It is suggested that entrepreneurs' achievement motivation toward new businesses establishment may be an important predictor of entrepreneurs' tendency to take or avoid risks of acting in the face of uncertainty. That is, entrepreneurs with higher motivations will show higher levels of risk-taking tendency due to their desire to fulfill their need for self-actualization even if the situation is full of uncertainty and unpredictability.

Liles (1974) argued that most of the times entrepreneurs have to accept uncertainty issues as financial well-being, psychic well-being, career security, and family relations. Moreover, several theories view entrepreneurship as bearing residual uncertainty Venkataraman,. A research conducted by Venture shows that four of ten entrepreneurs are interested in taking some chances. As the study of Moor and Gergen (1985) shows risk taking often happens after analyzing the situation carefully. Bird (1989) has divided risks into five categories, four of which are clearly related to any potential entrepreneur: economic risk, risk in social relations, risks in career development, plus psychological and health risks. Patzelt and Shepherd (2011) hypothesized that entrepreneurs accept the negative emotional consequences of their employment choice more readily and learn to handle these emotional consequences, including fear of failure. Using a sample of 2700 US citizens, they found that entrepreneurs report less negative emotions than employees, but this is contingent on their self-regulatory coping behaviors. Much empirical evidence resulted from researches toward "fear of failure" as an emotional experience influencing motivational process "leads to similar conclusions to the previous



literature, in contrast with these outcomes". In addition, based on the literature review, Carsrud and Krueger (1995) indicated that need for achievement (McClelland 1965), risk-taking propensity (Brockhaus 1980), and internal locus of control (Sexton and Bowman 1986) are the wrong traits for empirical study.

### 2.2.2 Role Model

Any decision making to engage in a specific type of behavior is often influenced by the opinions and actions of others, the way in which others show their identities and examples; (Ajzen 1991; Akerlof and Kranton 2000; Bosma et al. 2012) such "others" are often referred to as "role models".

The availability of role models can positively impact on the desire to become an entrepreneur and entrepreneurial motivation. Through his/her legitimization, advice, professional and personal feedback, insight and encouragement of entrepreneurial ambitions turn into actual reality (Arenius and de Clercq 2005; BarNir et al. 2011; Koellinger et al. 2007; Mueller 2006). The entrepreneurial spirit projected by an entrepreneurial role model can set the terms of support or pressure for the start of a new business and thus create a deeper motivation. In a study of a large group of Norwegian students and employees, for example, Reitan (1997) found having an entrepreneurial role model positively influence a student's motivation to being an entrepreneur. According to Bosma et al. a role model is "a common reference to individuals who set examples to be emulated by others and who may stimulate or inspire other individuals to make certain (career) decisions and achieve certain goals." Drawing on the concepts of "role" and "modeling," the term "role models" implies that individuals have the tendency to identify with other people whom they perceive as similar and inspirational (Bell 1970), and they observe them in order to learn new skills, behaviors, and norms (Bandura et al. 1961). Role models not only provides motivation, learning, and inspiration but also helps individuals to define their own concept (Gibson 2004, p. 149), mainly when role models are evaluated as reliable, expert, dependability and/or esteemed persons (Gist and Mitchell 1992). To sum it up, modeling can be "one of the most powerful ways of transmitting values, attitudes and models of reflection and action" (Bandura 1986), but only if there is identification with the role model.

It has long been acknowledged that role models may have a profound influence on career decisions (e.g. Krumboltz et al. 1976). Hence, role models may also enhance the desire to become an entrepreneur (Van Auken et al. 2006a; 2006b), which may, in turn, positively influence entrepreneurial motivation, intentions and ultimately entrepreneurial activity (Krueger et al. 2000). With reference to both traits of personality, the following hypothesis can be raised:

H<sub>1</sub>: personality has impact on entrepreneur motivation.

### **2.3 Entrepreneurial Skill**

The specific skills considered in our study have been taken from the literature (Boyd and Vozikis 1994; Chen et al. 1998; Denoble et al. 1999; Delmar and Davidsson 2000). Possessing these skills could make individuals feel more able to start a firm (Denoble et al. 1999). Similarly, an entrepreneur can exercise these specific entrepreneurial skills more easily. Thus, they could be associated with higher personal attraction and subjective norms (Scherer et al. 1991; Carsrud 1992; Boyd and Vozikis 1994). Formal education is one component of human capital that may assist in the accumulation of explicit knowledge that may provide useful skills to an entrepreneur's motivation. Empirical research has demonstrated a range of results regarding the relationship between education, entrepreneurship and success with education frequently producing non-linear effects in supporting the probability of becoming an entrepreneur, or in achieving success (Bellu et al. 1990; Davidsson 1995; Evans and Leighton 1989; Gimeno et al. 1997; Honig 1996; Reynolds 1997).

H<sub>2</sub>: Having entrepreneurial skills has a positive impact on entrepreneurial motivation.

## **3 Research Methodology**

For the purposes of this study, we have used the GEM questionnaire from GEM database of Iran in 2013. GEM was initially conceived in 1997 which its first report was published in 1999. There have been many changes since it started. First, the initial title of GEM was the World Enterprise Index, and then renamed the Global Entrepreneurship Monitor. The first report encompassed 10 countries, all of which were members of the OECD. GEM is now a truly global entity, as originally conceived, and the present report covers approximately three quarters of the world's population and 90% of the world's GDP. Each region in the world is now represented, and GEM, which in 2013 encompassed 70 economies, has since its inception involved more than 100 countries in total. The second major change is that GEM, originally conceived by London Business School and Babson College, restructured itself in 2004 in recognition of its growth. The Global Entrepreneurship Monitor (GEM) constitutes the single largest program to systematically research the prevalence, determinants, and consequences of entrepreneurial activity on an international level focused on a major driver of economic growth: entrepreneurship. To secure international comparability, GEM collects primary empirical data in a standardized way. There are three main data sources: First, the Adult Population Survey (APS) provides standardized data on entrepreneurial activities and attitudes within each country. Second, the National Expert Survey (NES) investigates the national framework conditions for entrepreneurship by means of standardized questionnaires and, third, qualitative face-to-face interviews (National Expert Interviews) are being conducted to get a deeper understanding of strengths, weaknesses and major issues

**Table 1** Reliability and item-total statistics

Questions	Variable name	Scale variance if item deleted	Corrected item-total correlation	Cronbach's alpha if item deleted
Qi1. Do you know someone personally who started a business in the past 2 years?	Role model	5.381	0.433	0.557
Qi2. In the next six months, will there be good opportunities for starting a business in the area where are you living?	Perceived opportunity	5.636	0.313	0.585
Qi3. Do you have the knowledge, skill, and experience required to start a new business?	Perceived capability	6.046	0.279	0.598
Qi4. Would not fear of failure prevent you from starting a business?	No fear of failure	5.402	0.350	0.573
Q1K1. Are you involved in this start-up to take advantage of a business opportunity or because you have no better choices for work?	Startup reason	4.734	0.191	0.670
Q1K2. Which do you feel, is the most important motive for pursuing this opportunity?	Motive of pursuing opportunity	6.488	-0.041	0.660
Entrepreneurial personality (Role model and No fear of failure)		4.165	0.613	0.469
Entrepreneurial competencies (Startup reason and Motive of pursuing opportunity)		4.970	0.586	0.514
Total reliability				0.615

regarding entrepreneurship in the respective country (for a detailed description of data collection methods, see Reynolds et al. 2005). The sample size of surveyed adults of Iran is 3633 respondents between 18–64 years old of which 715 people were selected due to the survey aim focused on nascent entrepreneurs.

Table 1 shows variables measurement along with their reliability. The dependent variable entitled “entrepreneurial motivation” is formed by “Startup reasons” and “motive of pursuing opportunity”. According to the table, reliability (Cronbach’s Alpha) of “startup reasons” and “motive of pursuing opportunity” are 0.670 and 0.660 respectively. In general, total reliability of research variables is 0.615 which is acceptable.

Moreover, in order to analyze construct validity, we have used factor analysis techniques. As Table 2 shows, the two recognized components have explained more than 65% of variances. Similarly, Kaiser-Meyer-Olkin Measure of Sampling Adequacy is 0.62 which is greater than 0.50. It means that the analysis results are reliable.

**Table 2** Construct validity based on factor analysis results

Rotating component matrix	Components	
	Entrepreneurial competencies	Entrepreneurial personality
Role model	0.771	0.019
Perceived opportunities	0.700	-0.143
Perceived capabilities	0.716	0.030
No fear of failure	-0.035	0.992
Total	1.598	1.007
% of variance	39.947	25.168
% cumulative	39.947	65.115
Kaiser-Meyer-Olkin measure of sampling adequacy	0.623	

**Table 3** Motive for nascent entrepreneurs

Motive	Frequency	%
Purely opportunity motive	99	39.3
Partly opportunity motive	69	27.4
Necessity motive	84	33.3
Total	252	100.0

However, the perceived opportunities, and capabilities have been located in the first component named “Entrepreneurial competencies”. The second component has just one variable entitled “No fear of failure”. Although the variable of the role model with 0.771 loading factor has been located in the first component, the nature of this variable is related to the second component. Therefore, we have considered the variable of the role model as the second component entitled “entrepreneurial personality”.

## 4 Results

The sample includes 252 Iranian nascent entrepreneurs trying to “start a new business” and participate in GEM Iran research program. The average month of their business startup is 11.2 months whose business categories mostly are in the fields of service (0.43) and manufacturing sectors (0.14). The average age of respondents is 32.6 out of which 73.2% were men and 26.8% were women.

As Table 3 shows 168 out of 254 respondents are opportunity-based entrepreneurs (purely opportunity and partly opportunity-based entrepreneurs); Meanwhile 44% of them were necessity based entrepreneurs.

Although the motive of 33% nascent entrepreneurs is achieving greater independence at work, 61.8% of them have economic goals (to increase personal income or just maintain income).

**Table 4** Types of reasons for pursuing entrepreneurial opportunity

Opportunity motive types	Frequency	%
Greater independence	27	33.3
Increase personal income	45	55.6
Just maintain income	5	6.2
Other/DK	4	4.9
Total	81	100.0

**Table 5** Multi regression results

Model	Unstandardized coefficients		Standardized coefficients Beta	t	Sig.
	B	Std. error			
(Constant) control variable	1.262	0.326		3.869	0.000
A. gender	0.193	0.133	0.092	1.457	0.146
B. age independent variables	0.007	0.006	0.074	1.154	0.250
Entrepreneurial personality	0.047	0.089	0.034	0.530	0.597
Entrepreneurial skills	0.197	0.088	0.141	2.227	0.027

Finally, for testing hypotheses we have used multiregression analysis with motivation index as its independent variable, gender and age were its controlling variables. Table 1 shows the results of the regression analysis. In this table gender and age are controlling variables which their effects on motivation of nascent entrepreneurs are not important to us. Accordingly we could not find support for  $H_1$ . It means that there is no coefficient relation between personality and entrepreneurial motivation ( $\text{Sig } 0.597 \geq 0.05$ ). It shows that personality traits have no effect on motivation for becoming a nascent entrepreneur (Table 4).

However, according to Table 5, the data show support for  $H_2$  asserting that entrepreneurial skills have positive effects on entrepreneurial motivation ( $\text{Sig } 0.027 \leq 0.05$ ).

## 5 Discussion and Conclusion

Our research was motivated by two questions: first whether personality has positive impact on entrepreneurial motivation. We have argued that having entrepreneurial role model and no fear of failure as two traits of personality have no positive influence on entrepreneurial motivation.

The origin of these negative correlations can be rooted in Iranian culture. The weak influence of having a role model in Iran mostly is due to domination of family and family relationships on individual's total life, (Gable 1959), in-group and out-group special behavior of Iranians (Javidan and Dastmalchian 2003) and lack of truth among them. Along with Scott and Twomey (1988) who found that the existence of entrepreneurial role models weakly predicts future entrepreneurial

activity, we concluded that role modeling is an accepted strategy for transmitting professional attitudes and behaviors especially from instructor to students and mentoring mostly occurs among non-educated nascent entrepreneurs. Well educated entrepreneurs are influenced mostly by personal instead of external factors and prefer to rely on their own education and prior experiences instead of having a role model in their entrepreneurial experience.

Special atmosphere of Iranian business accompanied by Iranian specific culture and attitude as being a performance-oriented nation with a short time horizon (Javidan and Dastmalchi) and religious beliefs of Iranian people in general weakens the effect of no fear of failure trait on entrepreneurship motivation.

However, our empirical study indicates that entrepreneurial skills have positive impact on entrepreneurial motivation. It is evident that there are a set of baseline skills which young people acquire through education and then build upon through experience and training. These skills are for life, employability and entrepreneurial/innovative capability. Thus the implications of this are that skills can be learnt; through policy making an appropriate framework should be provided at all education level, and training to help people to enhance their skills.

When conducting empirical studies in entrepreneurship one of the most important variables is the skill to perceive economic opportunities of the new business (Shane 2003:105; Lundström and Stevenson 2005); this is because the core of entrepreneurship usually is related with the focus on the market opportunities. Thus, an individual on the base of prior skills will be encouraged to set up a new company if he or she detects that there is a business opportunity that can be exploited (Shane 2003). This skill can be learnt through education.

Entrepreneurial education plays an important role in both equipping the students with skills and knowledge necessary to start-up or run a business and entrepreneurial mindset as well as affecting their attitudes towards entrepreneurship and overall entrepreneurial propensity. Entrepreneurial education focuses on a portfolio approach to maximizing benefits, embedding three inter locking types of skills into entrepreneurial learning: personal awareness skills; business know-how skills; and social skills.

Policies promoting entrepreneurship should focus on developing entrepreneurial skills. In a survey on the base of GEM data printed in Neira et al. (2013), in *Investigaciones Regionales journal*, more than a half of respondents believe to have knowledge and skills to start a business (50.8%), the fear of failure is present in a high percentage of them (50.7%) but lower than having entrepreneurial skills. With regard to this information, policy makers, as the facilitators, expected to support the potential entrepreneurs by attentively guiding them through the courses and helping them to amplify their latent entrepreneurial skills, to plan a small business, to recognize opportunities and to realize that they can play a significant role in their community's economy. They are also expected to provide participants (potential entrepreneurs) with all the relevant literature available locally on starting a small business. The policy makers' role, as the facilitators includes helping participants to understand that they must develop attitudes conducive to generating independent initiatives drawing on technical education to build livelihoods for themselves.

In conclusion, this chapter highlights the need for considerably more research to identify the nature of motivation and its persuaders in the entrepreneurial process; to test theory exhaustively for the benefit of training and educating entrepreneurs of the future.

## 6 Limitations and Further Studies

The proposed framework in this study has several limitations which need to be addressed in future studies. We have focused only on two traits of personality, as we know personality is one of the impressive factors on entrepreneurial motivation which has some other traits that we did not deal with in this study. We could use some more regressions to conclude more precise outcomes. These regressions could be other impressive personality traits on motivation or on other dimensions of entrepreneurial skills. As to our second hypothesis, we investigated the effect of skills on motivation. We focused on opportunity recognition which can be enhanced through education. Our study did not examine the other dimensions of skills which can have/have not any impact on motivation.

## References

- Amit, R., Muller, E., & Cockburn, I. (1995). Opportunity costs and entrepreneurial activity. *Journal of Business Venturing*, 10(2), 95–106.
- Antonicic, B., Bratkovic, T., & Ruzzier, M. (2009). Strategic utilization of entrepreneur's resource-based social capital and small firm growth. *Journal of Management and Organization*, 15(4), 486–499.
- Begley, T. M., & Boyd, D. P. (1987). Psychological characteristics associated with performance in entrepreneurial firms and small businesses. *Journal of Business Venturing*, 2, 79–83.
- Bhola, R., Verheul, I., Thurik, A. R., & Grilo, I. (2006). Explaining engagement levels of opportunity and necessity entrepreneurs. EIM bv, Zoetermeer. Retrieved from <http://hdl.handle.net/1765/9705>.
- Birley, S., & Westhead, P. (1994). A taxonomy of business start-up reasons and their impact on firm growth and size. *Journal of Business Venturing*, 9(1), 7–31.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13(3), 442–453. Retrieved from <http://www.jstor.org/stable/258091>.
- Bosma, N., Hessels, J., Schutjens, V., Van Praag, M., & Verheul, I. (2012). Entrepreneurship and role models. *Journal of Economic Psychology*, 33(2), 410–424.
- Bruno, A. V., & Tyebjee, T. T. (1982). The environment for entrepreneurship. *Encyclopedia of Entrepreneurship*, 2(4), 288–315.
- Brockhaus, R. (1980) Risk taking propensity of entrepreneurs, *Academy of Management Journal*, 23(3), 509–520.
- Cannon, T. (1991). Enterprise: Creation. *Development and Growth*, Butterworth-Heinemann, Oxford.

- Carsrud, A. L., & Krueger, N. F., Jr. (1995). Entrepreneurship and social psychology: Behavioral technology for the new venture initiation process. In J. A. Katz & R. H. Brockhaus, Sr. (Eds.), *Advances in entrepreneurship, firm emergence, and growth* (pp. 73–96). Greenwich, CT: JAI Press.
- Carland, J. W., Hoy, F., Boulton, W. R., & Carland, J. A. C. (1984). Differentiating entrepreneurs from small business owners. *Academy of Management Review*, 9(2), 354–359.
- Collins, K. A., Furuyama, S., & Biggins, S. (2004). Proteolysis contributes to the exclusive centromere localization of the yeast Cse4/CENP-A histone H3 variant. *Current Biology*, 14(21), 1968–1972.
- Curran, J., & Blackburn, R. (2001). *Researching the Small Enterprise*. Sage Publications, 195.
- Davidsson, P., & Henrekson, M. (2002). Determinants of the prevalence of start-ups and high-growth firms. *Small Business Economics*, 19(2), 81–104.
- Davey, T., Plewa, C., Struwig, M. (2011). Entrepreneurship perceptions and career intentions of international students, *Emerald insight* ISSN: 0040-0912.
- DeMartino, R., & Barbato, R. (2003). Differences between women and men MBA entrepreneurs: exploring family flexibility and wealth creation as career motivators. *Journal of Business Venturing*, 18(6), 815.
- Dobrev, S. D., & Barnett, W. P. (2005). Organizational roles and transition to entrepreneurship. *Academy of Management Journal*, 48(3), 433–449.
- Freimann, S., Scheinowitz, M., Yekutieli, D., Feinberg, M. S., Eldar, M., & Kessler-Ickson, G. (2005). Prior exercise training improves the outcome of acute myocardial infarction in the rat. *Journal of the American College of Cardiology*, 45(6), 931–938. doi:10.1016/j.jacc.2004.11.052.
- Gartner, W. B. (1989). Some suggestions for research on entrepreneurial traits and characteristics. *Entrepreneurship Theory and Practice*, 14(1), 27–37.
- Gilad, B., & Levine, P. (1986). A behavioral model of entrepreneurial supply. *Journal of Small Business Management*, 24, 45.
- Ginsberg, A., & Buchholtz, A. (1989). Are Entrepreneurs a breed apart? A look at the evidence. *Journal of General Management*, 15(2), 32–40.
- Johnson, B. (1990). Toward a multidimensional model of entrepreneurship: The case of achievement motivation and the entrepreneur. *Entrepreneurship Theory and Practice*, 14, 39–54.
- Johnson, B. T. (1990). Gender and Leadership Style: A Meta-Analysis. *CHIP Documents*. 11.
- Katz, J., & Gartner, W. B. (1988). Properties of emerging organizations. *Academy of Management Review*, 13(3), 429–441.
- Kuratko, D. F., Hornsby, J. S., & Naffziger, D. W. (1997). An examination of owner's goals in sustaining entrepreneurship. *Journal of Small Business Management*, 35(1), 24–33.
- Liles, P.R., (1974) *New Business Venture and the Entrepreneur*. Homewood: Irwin.
- Marlow, S., & Strange, A. (1994). Female entrepreneurs—success by whose standards? In M. Tanton (Ed.), *Women in management: A developing presence* (172–184). London: Routledge.
- Mason, G. J. (1991). Stereotypes: a critical review. *Animal Behaviour*, 41(6), 1015–1037. doi: 10.1016/S0003-3472(05)80640-2. (June with 149 Reads).
- McClelland, D. C. (1961). *The Achieving Society*. Princeton, NJ: Van Nostrand.
- McClelland, D. C. (1965). N achievement and entrepreneurship: A longitudinal study. *Journal of Personality and Social Psychology*, 1(4), 389–392.
- Moore, M., & Gergen, P. (1985). Risk Taking and Organizational Change. *Training and Development Journal*, 39(6), 72–76.
- Moore, D. P., & Buttner, E. H. (1997). *Women entrepreneurs: Moving beyond the glass ceiling*. Thousand Oaks: Sage Publications.
- Naffziger, D. W., Hornsby, J. S., & Kuratko, D. F. (1994). A proposed research model of entrepreneurial motivation. *Entrepreneurship: Theory and Practice*, 18(3), 29–43.
- Neira, I., Portela M., Cancelo, M. & Calvo, N. (2013). Social and human capital as determining factors of entrepreneurship in the Spanish Regions. *Investigaciones Regionales*, 26, 115–139.
- Patzelt, H., & Shepherd, D. A. (2011). Recognizing opportunities for sustainable development. *Entrepreneurship Theory and Practice*, 35(4), 631–652.



- Pragg et al. (2007). *Comparing the returns to education for entrepreneurs and employees*. Tinbergen Institute.
- Reynolds, P. D., Bygrave, W. D., Autio, E., Cox, L. W., & Hay, M. (2002). *Global Entrepreneurship Monitor 2002 Executive Report*. Babson College, Ewing Marion Kauffman Foundation, London Business School.
- Reynolds, P., Bosma, N., Autio, E., Hunt, S., De Bono, N., Servais, I et al. (2005). Global entrepreneurship monitor: Data collection design and implementation 1998–2003. *Small Business Economics*, 24(3), 205–231.
- Scheinberg, S., & MacMillan, I. C. (1988). *An 11 country study of motivations to start a business*. Babson College.
- Shane, S., Kolvereid, L., & Westhead, P. (1991). An exploratory examination of the reasons leading to new firm formation across country and gender. *Journal of Business Venturing*, 6(6), 431–446.
- Shaver, K. G., & Scott, L. R. (1991). Person, process, choice: The psychology of new venture creation. 1042-2587-91-162 1991.
- Shinnar, R. S., & Young, C. A. (2008). Hispanic immigrant entrepreneurs in the Las Vegas metropolitan area: motivations for entry into and outcomes of self-employment. *Journal of Small Business Management*, 46(2), 242–262.
- Stewart, M. J., Berry, C. O., Zilberman, F., Thomas, G., & Kozma, S. C. (1996). The Drosophila p70s6k homolog exhibits conserved regulatory elements and rapamycin sensitivity. *Proceedings of the National Academy of Sciences*, 93(20), 10791–10796.
- Segal, G., Borgia, D., & Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International Journal of Entrepreneurial Behavior & Research*, 11(1), 42–57.
- Taormina, R. J., & Kin-Mei Lao, S. (2007). Measuring Chinese entrepreneurial motivation: Personality and environmental influences. *International Journal of Entrepreneurial Behavior & Research*, 13(4), 200–221.
- Tolentino, L. R., Sedoglavich, V., Lu, V. N., Garcia, P. R. J. M., & Restubog, S. L. D. (2014). The role of career adaptability in predicting entrepreneurial intentions: A moderated mediation model. *Journal of Vocational Behavior*, 85(3), 403–412.
- Van der Sluis, J., Van Praag, M., & Vijverberg, W. (2005). Entrepreneurship selection and performance: A meta-analysis of the impact of education in developing economies. *The World Bank Economic Review*, 19(2), 225–261.
- Watson, K., Hogarth-Scott, S., & Wilson, N. (1998). Small business start-ups: success factors and support implications. *International Journal of Entrepreneurial Behavior & Research*, 4(3), 217–238.
- Winn, J. (2004). *Making it big*. doi: [10.1111/j.1540-6520.2004.00059.x](https://doi.org/10.1111/j.1540-6520.2004.00059.x).

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# Novice Entrepreneurs' Entrepreneurial Self-efficacy and Passion for Entrepreneurship

Afsaneh Bagheri and Javad Yazdanpanah

**Abstract** The critical importance of entrepreneurial passion in the whole process of entrepreneurship has been emphasized by previous research. Specifically, prior research has provided empirical evidence for the influence of passion on personal capabilities of entrepreneurs such as creativity, opportunity identification and exploitation and persistence in dealing with problems as well as their task performance and behavior. The significant impact of entrepreneurial self-efficacy on entrepreneurial passion has also been explored. However, there is little knowledge on the impact of entrepreneurial self-efficacy on entrepreneurial passion and its dimensions particularly among novice entrepreneurs in Iran. Utilizing a quantitative research method, this chapter examines the effects of novice entrepreneurs' self-efficacy on their entrepreneurial passion and its dimensions including passion for inventing, passion for founding and passion for development. This study involved 254 novice food industry entrepreneurs in Mashhad, one of the biggest provinces of Iran. Structural equation modeling was used to analyze the data. The results suggested a strong influence of entrepreneurial self-efficacy on entrepreneurial passion. Furthermore, entrepreneurial self-efficacy had the greatest effect on passion for inventing followed by passion for development and founding. Implications of the findings for theory development, research and practice are discussed in this chapter.

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## 1 Introduction

Passion, the strong deliberate feelings and emotions to fulfil a specific task, has recently explored as to be influential in the whole process of entrepreneurship ranging from the personal capabilities of entrepreneurs such as creativity (Baron 2008; Ward 2004), effective decision making and problem solving (Baron 2008), entrepreneurial idea creation and intention (Hayton and Cholakova 2011), entrepreneurial opportunity identification and exploitation (Foo et al. 2013; Cardon et al. 2012; Foo 2011; Baron 2008), persistence in the face of challenges and tolerance of extreme stresses (Cardon and Kirk 2013; Cardon et al. 2009; Baron 2008), to entrepreneurs' task performances such as efforts to successfully perform entrepreneurial tasks (Cardon et al. 2009; Foo et al. 2009), attainment of the required human and financial resources (Baron 2008) and entrepreneurial behavior (Murnieks et al. 2014). The impact of entrepreneurs' passion goes beyond individuals' favorable feelings and emotions about entrepreneurship and the process of a new venture creation. It also permeates to the collective affect toward entrepreneurship (Cardon et al. 2012) and employees' motivation and commitment to entrepreneurial ventures (Breugst et al. 2012; Cardon 2008). Particularly, in the early stages of a new venture creation and growth, a strong passion enables entrepreneurs to deal with the challenges, uncertainties and turbulences of the business environment and successfully perform the various complex and changing roles they have to play in the process of entrepreneurship (Baron 2008). Entrepreneurial passion has also a great influence on nascent entrepreneurs' success in acquiring the financial resources at the early stages of launching a high-technology venture (Galbraith et al. 2014). Therefore, exploring the factors that construct such strong and intense passion for entrepreneurship is of great importance specifically for novice entrepreneurs (Cardon et al. 2009).

Recent research has identified the significant influence of entrepreneurial self-efficacy on entrepreneurial passion (Cardon et al. 2013; Cardon and Kirk 2013). However, in general our knowledge is limited about the factors that shape entrepreneurial passion (Cardon et al. 2009). Particularly, as highlighted by previous researchers (Cardon et al. 2013; Cardon and Kirk 2013), there is no study on the association between entrepreneurial self-efficacy and passion in other contexts than the U.S where the nature of the entrepreneurial activities, economic environment and challenges and difficulties that entrepreneurs encounter at different phases in their venture founding, growth and development may differ. Furthermore, previous works were mostly conceptual and few empirical studies have been conducted with a sample of entrepreneurs who directly experienced different challenges and problems of establishing and running a new venture (Cardon and Kirk 2013; Cardon et al. 2013; Baron 2008). Of the prior research on entrepreneurial passion at the early stage of the entrepreneurship process, only few examined the factors that shape the strong positive feelings for creating a business idea and running a new venture (Cardon et al. 2012). Most of the previous studies have also focused on the impact of entrepreneurial passion on opportunity recognition and evaluation

(Foo 2011; Cardon et al. 2009). To narrow the gaps, this study aims to examine the effects of entrepreneurial self-efficacy on entrepreneurial passion and its components among novice entrepreneurs in Iran.

Our findings provide contributions to the few studies on passion that novice entrepreneurs experienced in the process of opportunity recognition, launching and developing their new ventures in an economic climate rather than the developed countries (Cardon et al. 2009; Cardon and Kirk 2013). This study also contributes to the scarce literature on entrepreneurial self-efficacy by measuring different dimensions of the variable (Karlsson and Moberg 2013; McGee et al. 2009) and examining its association with the components of entrepreneurial passion (Cardon et al. 2013; Cardon and Kirk 2013). Particularly, this study contributes one of the first empirical evidences on the factors that shape entrepreneurial passions of Iranian novice entrepreneurs in food industries. This chapter is organized in four main sections. The first section presents the definition and dimensions of entrepreneurial passion and its impact on different aspects of the entrepreneurship process and behavior. The next section is allocated to the current literature on self-efficacy in entrepreneurship domain and reviews the studies on the relationship between entrepreneurial self-efficacy and passion for entrepreneurship. Then, we test the hypothesized relationships between the constructs with a sample of novice entrepreneurs and discuss the implications of our findings for future entrepreneurship theory development, research and practice.

## 2 Entrepreneurial Passion

Recent research has constantly examined affect in general and entrepreneurial passion in particular to explain entrepreneurial motivation, cognition and behavior (e.g., Chen et al. 2009; Baron 2008). This is because “affect, emotions, moods and/or feelings” of individual persons, groups and corporations function as the “antecedent to, concurrent with, and/or a consequence of the entrepreneurial process” and motivate and enable entrepreneurs to explore, evaluate and exploit entrepreneurial opportunities (Cardon et al. 2012, p. 1). Indeed, the risks, uncertainties, turbulences, challenges and difficulties involved in the process of a new venture creation as well as the intense emotional attachments between the entrepreneur and his/her venture makes entrepreneurship an extreme emotional “journey” (Cardon et al. 2012; Baron 2008). Entrepreneurial passion has been defined as the “consciously accessible intense positive feelings experienced by engagement in entrepreneurial activities associated with roles that are meaningful and salient to the self-identity of the entrepreneur” (Cardon et al. 2009, p. 517). Therefore, entrepreneurial passion encompasses two main elements including (a) great constant favorable feelings toward specific entrepreneurial tasks and (b) centrality of these tasks for entrepreneurs' self-identity (Cardon and Kirk 2013; Cardon et al. 2009, 2013). Entrepreneurial behavior is also a result of interactions

between the two elements that shape entrepreneurs' passion for a specific entrepreneurial task and role (Cardon et al. 2009).

Importantly, it is involvement of entrepreneurs in the significant tasks to their identity and dealing with the challenges of successfully performing the tasks, rather than only their innate characteristics that develops their passion for entrepreneurship (Cardon et al. 2009; Baron 2008). The more entrepreneurs involve in and think about specific entrepreneurial tasks and activities central to their self-identity, the higher their passion develops toward the domain of entrepreneurship (Cardon and Kirk 2013). Scholars argue that entrepreneurial passion is task specific, context related (Cardon et al. 2009) and highly associated with entrepreneurs' background and experiences (Cardon et al. 2013). Meaning that, entrepreneurs are different in their passion for a particular task and may have high passion for one entrepreneurial task in a stage of establishing and growing their venture while low passion for other tasks in other stages (Cardon et al. 2009, 2013). Cardon et al. (2009) identified three types of related identities for entrepreneurs including inventor identity, founder identity and developer identity. Entrepreneurs who are stimulated by passion for inventing involve in activities such as searching for novel business ideas, exploring entrepreneurial opportunities and creating new products or services. While those who aroused by founder identity involve in activities such as marshaling the essential human, financial and social resources and launching new ventures and those with high developer identity are more likely to engage in activities such as exploring new markets and expanding their venture. Despite the robust literature on the nature of entrepreneurial passion, there are many unanswered questions on how passionate entrepreneurs in other countries than the U.S are in each dimension of their entrepreneurial passion? And whether the pattern of entrepreneurial passion emerged from prior research (Cardon and Kirk 2013) is universal and entrepreneurs in other economic conditions experience passion for inventing and developing more than passion for founding? (Cardon and Kirk 2013; Cardon et al. 2009). This study seeks to address these questions by measuring Iranian novice entrepreneurs' perceived entrepreneurial passion and its dimensions.

### **3 Entrepreneurial Self-efficacy and Passion for Entrepreneurship**

From the three past decades when Scherer et al. (1989) conceptualized self-efficacy for the first time in entrepreneurship domain, the notion has been constantly examined as an influential factor that affects entrepreneurial intention and behavior (e.g., Bagheri and Lope Pihie 2014; Lope Pihie and Bagheri 2013; Tyszka et al. 2011). In general, self-efficacy reflects individuals' perceived degree of confidence in their capabilities to successfully execute specific intended tasks and roles (Bandura 1997). Entrepreneurial self-efficacy is defined as one's confidence in their own abilities to successfully perform the tasks and roles needed for starting, running

and growing a new venture (Chen et al. 1998). Individuals' beliefs of self-efficacy when choosing to perform challenging and new roles such as the tasks and activities involved in the process of entrepreneurship highly take shape when they compare their abilities and outcomes of the task accomplishment to the task requirements (Bandura 2012). Therefore, entrepreneurial self-efficacy is highly task and context related (McGee et al. 2009; Bandura 1997), meaning that it is highly associated with the particular entrepreneurial tasks and goals in different phases of the entrepreneurship process. Scholars argue that entrepreneurial self-efficacy also includes "the valence of the beliefs (positive or negative control beliefs)" or the beliefs about desirability of entrepreneurial tasks' outcomes that highly influences the relationship between entrepreneurs' perceived efficacy in a particular task and in a specific phase of a new venture creation (Drnovšek et al. 2009, p. 330). Thus, entrepreneurial self-efficacy also regulates the emotional mechanisms that drive one's decision to involve in entrepreneurial tasks and roles.

Entrepreneurial self-efficacy not only affects individuals' efforts to start a new venture, but it also influences entrepreneurs' persistence in the face of challenges and obstacles and their performance in managing and growing their new venture (Cardon and Kirk 2013; Cardon et al. 2013; Barbosa et al. 2007; McGee et al. 2009). Entrepreneurial self-efficacy is so impactful in the process of entrepreneurship because it affects entrepreneurial motivation, intention and behavior both directly and indirectly through its impact on the regulatory mechanisms and factors (Lope Pihie and Bagheri 2013; Bandura 2012; Cardon et al. 2009). Recently, researchers suggested the direct association between entrepreneurial self-efficacy and behavior (e.g., creativity and persistence) as well as its indirect impact through passion for entrepreneurship (Cardon and Kirk 2013; Baron 2008). Cardon and Kirk (2013) proposed three main reasons for the positive association between entrepreneurial self-efficacy and entrepreneurial passion. First, entrepreneurs have strong positive feelings toward and involve in the tasks and roles that they perceive themselves as highly efficacious in successfully performing them. Second, entrepreneurs have a strong identity of the tasks and roles that they feel more confident in successfully accomplishing them. Finally, entrepreneurs enjoy the domains of their identity that meet their needs of self-efficacy. Although both self-efficacy and passion have influential impact on entrepreneurial behavior and only highly efficacious and passionate individuals engage in the complex and challenging entrepreneurial tasks meaningful to their self-identity (Cardon et al. 2013; Chen et al. 1998), empirical research on the relationships between entrepreneurs' self-efficacy and different dimensions of entrepreneurial passion has recently emerged in the literature. Using a sample of 129 entrepreneurs in different stages of their venture creation and growth, Cardon and Kirk (2013) provided empirical evidence for the significant influence of entrepreneurial self-efficacy on entrepreneurial passion. More specifically, their findings suggested the mediating role that entrepreneurial passions (passion for inventing and passion for founding) play in carrying the impact of self-efficacy on entrepreneurial persistence. The authors concluded that entrepreneurial passion functions as a mechanism through which self-efficacy drives entrepreneurial behavior and called for further research

on the relationship between the two variables in other contexts and with larger samples. Accordingly, this study aims to examine the association between novice entrepreneurs' self-efficacy and their overall entrepreneurial passion as well as their passion for inventing, passion for founding and passion for developing.

## **4 Method**

### **4.1 Participants**

The target population for this study involved all the novice entrepreneurs, those who have started their business venture in food industries in or after February, 2011 (less than 42 months), in Mashhad, one of the biggest provinces of Iran. Food industry is one of the biggest industries that plays key roles in the growth and development of the province (Industry, Mine and Trade Organization of Mashhad, 2014). We concentrated only on novice entrepreneurs because entrepreneurial passion and self-efficacy vary in different stages of the new venture creation and growth (Cardon et al. 2009; Cardon and Kirk 2013). Furthermore, entrepreneurs at the early stages of their venture creation and growth have been recently one of the main focuses of researchers in order to explain the role that affect and efficacy play in entrepreneurship (Drnovšek et al. 2009). At the time of data collection for this study (August to September, 2014), the number of novice entrepreneurs in different food industries in Mashhad province was 746 (Industry, Mine and Trade Organization of Mashhad, 2014). The participants were randomly selected from these firms and consisted of 254 novice entrepreneurs. From the entrepreneurs, 138 (54.3%) were male and 116 (45.7%) were female (Table 1). Majority of the participants ranged in age from 41 to 50 (65%) years old and had bachelor degrees (141, 55.5%). Most of the respondents represented the firms producing beverages (60, 23.6%) followed by dried fruits (59, 23.2%) and dairy products (58, 22.8%), launched the firm in 1 to 3 years ago (115, 45.3) and had between 1 and 6 employees (169, 66.5%).

### **4.2 Instruments**

#### **4.2.1 Entrepreneurial Passion**

Ten items of the entrepreneurial passion questionnaire developed by Cardon et al. (2013) were utilized to measure the novice entrepreneurs' entrepreneurial passions. The questionnaire measures entrepreneurs' intense positive feelings in three dimensions which are: passion for inventing using four items, passion for founding using three items and passion for development by three items. Previous research



**Table 1** The participants' details

Participants	Frequency	Percentage
<i>Gender</i>		
Male	138	54.3
Female	116	45.7
<i>Age</i>		
20–30	53	20.9
31–40	47	18.5
41–50	65	25.6
51–60	54	21.3
61 and above	35	13.8
<i>Educational qualification</i>		
Masters	51	20.1
Bachelors	141	55.5
Diplomas	59	23.2
<i>Firm type</i>		
Dairy products	58	22.8
Beverages	60	23.6
Dried fruits	59	23.2
Beef products	22	8.7
Precooked meals	17	6.7
Food packing	38	15.0
<i>Firm age</i>		
Less than 1 year	48	18.9
1–3 years	115	45.3
Higher than 3 years	91	35.8
<i>Number of employees</i>		
1–6	169	66.5
7–12	52	20.4
12–18	33	13.1

showed that the questionnaire is highly valid and reliable to measure entrepreneurs' passion for entrepreneurship and its dimensions in different stages of their venture establishment and growth (Cardon et al. 2013; Cardon and Kirk 2013). In order to avoid response range constrains as suggested by Cardon et al. (2013), the novice entrepreneurs were asked to indicate the extent to which agreed or disagreed with each item on a seven-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*).

**4.2.2 Entrepreneurial Self-efficacy (ESE)**

A multi-dimensional questionnaire that measures entrepreneurs' perceived efficacy in performing the required tasks for starting and running a new business was

employed in this study to better explore the impact of entrepreneurial self-efficacy on entrepreneurial passion of novice entrepreneurs (Drnovšek et al. 2009). We measured the participants' entrepreneurial self-efficacy using 19 items of the Entrepreneurial Self-efficacy Questionnaire (ESEQ) devised by McGee et al. (2009). The questionnaire measures entrepreneurs' self-efficacy in terms of their perceptions toward their abilities to successfully perform the specific tasks in the process of a new venture creation including searching for new ideas and entrepreneurial opportunities (by three items), planning to change the ideas into a real business (by four items), marshaling the required resources for running a new business (by three items), implementing people by managing relationships and solving problems effectively (by six items) and implementing finances of the venture (by three items). Previous studies have also shown the high validity and reliability of the questionnaire to measure entrepreneurial self-efficacy in different contexts (Karlsson and Moberg 2013; McGee et al. 2009). Participants were asked to indicate how efficacious they are in their abilities to perform each task in the process of entrepreneurship (1 = *completely inefficacious*, 5 = *completely efficacious*).

### 4.2.3 Research Design

The entrepreneurs voluntarily participated in this study and the questionnaires were administered in the entrepreneurs' business location. Of the 300 questionnaires distributed, 254 were used in the final analysis (response rate = 84.6%). The participants completed the questionnaire anonymously in order to ensure the common method biases do not affect the results (Podsakoff et al. 2003, 2012). Furthermore, to avoid the possible influences of the common method biases the information on novice entrepreneurs' firm age were taken from Industry, Mine and Trade Organization of Mashhad database, rather than asking the participants to report the data and we mixed the order of the independent and dependent variables in the survey. We also used previously validated questionnaires to reduce the possibility of social desirability biases. Data collection was conducted during August to September, 2014 and the entrepreneurs were also asked to provide demographic information such as age, gender, education, age of their business and previous business experience.

## 5 Findings

### 5.1 Data Analysis

To examine the multivariate nature of the proposed relationship between entrepreneurial self-efficacy and passion for entrepreneurship as well as the need to simultaneously assess the validity and structure of the relationship between the two

variables and their dimensions, structural equation modeling (SEM) was employed using AMOS 20.0, and Maximum Likelihood Estimation (MLE) techniques (Boomsma 2000). We conducted the data analysis using the two-step technique of SEM proposed by Hair et al. (2010). In the first step, the structure and loadings of the factors to each of the eight constructs in the model (searching, planning, marshaling, implementing people, implementing finance, passion for invention, passion for founding, and passion for development) were assessed by performing confirmatory factor analysis (CFA) for each construct. Our sample size was appropriate to conduct CFA because the ratio of sample size to the number of variables (31) was higher than the range suggested by previous researchers (MacCallum et al. 1999). In general, the respondents had strong entrepreneurial passions (Mean = 47.0, SD = 9.9) and perceived themselves as efficacious to perform the tasks required in the process of entrepreneurship (Mean = 68.6, SD = 12.6). Then, the measurement model was tested with all the latent variables and the items included in one measurement model. In the second step, we examined the structural model and proposed relationships among the variables.

## 5.2 Measurement Model

The model fit for each of the eight constructs in our model was examined to ensure the relationships among the latent and observed variables were supported by the data. CFA was performed for each of the eight measurement models in order to test factor loadings and model fit indices for each construct. Table 2 presents the statistics obtained for the scale constructs and items. All of the items had loadings higher than the 0.50 threshold (Hair et al. 2010). Therefore, no item was deleted from the measurement model. Analysis of the measurement model developed with all constructs in this study (Fig. 1) showed that the model fits the data well because  $\chi^2/df$  was less than 3, all of the goodness of fit indices were also higher than 0.90 (Byrne 2010) and RMSEA was less than the 0.06 threshold (Hu and Bentler 1999), ( $\chi^2 (349) = 608.460, p = <0.001, \chi^2/df = 1.743, CFI = 0.94, TLI = 0.93,$  and  $RMSEA = 0.05$ ). The Cronbach's  $\alpha$  for the whole scale and each of the constructs also showed good scale reliability ( $\alpha > 0.70$ ). To analyze the convergent validity, the portion of the construct variance explained by its indicators, the average variance extracted (AVE) was measured for each construct in our measurement model. All of the constructs scored higher than 0.50 (see Table 2) indicating that majority of the variance in each construct was explained by its items (Hair et al. 2010).

In addition, we examined discriminant validity of the constructs by maximum shared squared variance (MSV) and average shared squared variance (ASV) to ensure the items in the scale measured different constructs (Hair et al. 2010). Analysis of the indices obtained in this study indicated that the ASV and MSV scores for entrepreneurial passion were less than the AVE. But MSV for planning and implementing people were higher than the AVEs ( $0.55 > 0.58, 0.50 > 0.60$  respectively). This indicates the items on entrepreneurial passion had the highest

**Table 2** Validity and reliability statistics for entrepreneurial passion and self-efficacy

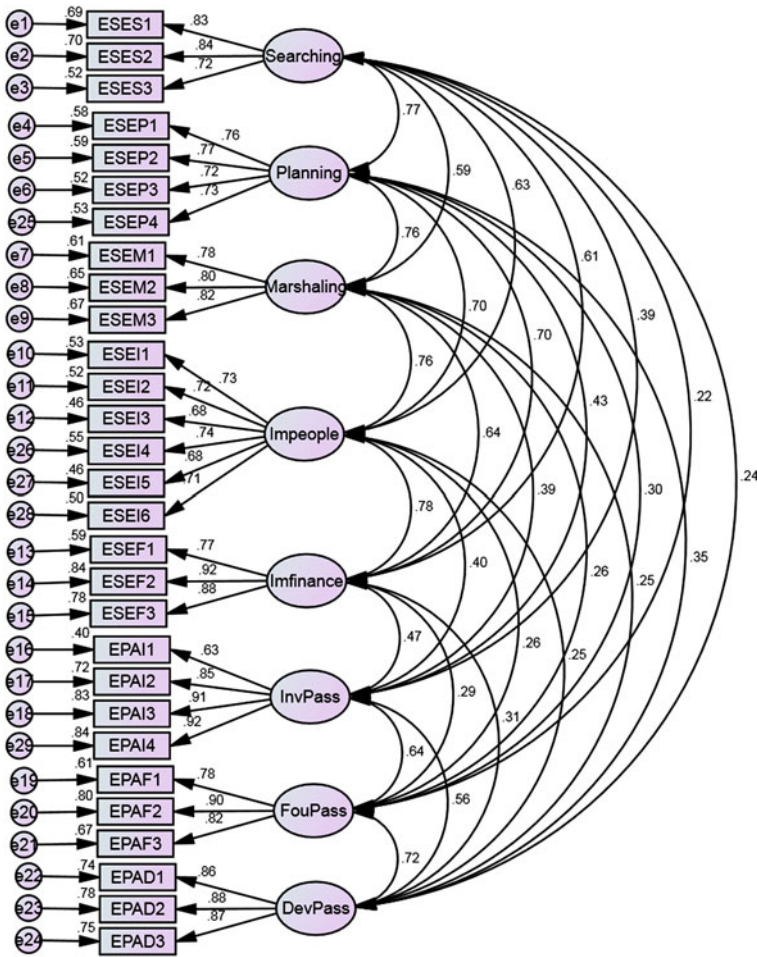
Constructs	Items	Mean	SD	Factor loadings	Cronbach's <i>a</i>	C.R	AVE	MSV	ASV
Innovating passion	EPAI1	5.32	1.3	0.63	0.89	0.90	0.69	0.40	0.22
	EPAI2	5.27	1.4	0.84					
	EPAI3	5.07	1.4	0.91					
	EPAI4	5.11	1.3	0.91					
Founding passion	EPAF1	5.29	1.5	0.78	0.86	0.87	0.69	0.52	0.184
	EPAF2	4.76	1.4	0.89					
	EPAF3	4.72	1.4	0.81					
Development passion	EPAD1	5.47	1.3	0.85	0.90	0.90	0.75	0.52	0.177
	EPAD2	5.48	1.4	0.88					
	EPAD3	5.22	1.5	0.86					
Searching	ESES1	4.19	0.99	0.82	0.83	0.83	0.63	0.58	0.28
	ESES2	4.26	0.96	0.83					
	ESES3	4.19	10.0	0.72					
Planning	ESEP1	4.01	1.0	0.75	0.83	0.83	0.55	0.58	0.36
	ESEP2	3.88	1.0	0.77					
	ESEP3	3.93	1.0	0.71					
	ESEP4	3.90	0.99	0.73					
Marshaling	ESEM1	3.82	1.0	0.78	0.84	0.84	0.64	0.58	0.31
	ESEM2	3.53	1.0	0.80					
	ESEM3	3.59	1.0	0.81					
Implementing people	ESEI1	3.57	1.0	0.72	0.85	0.85	0.50	0.60	0.33
	ESEI2	3.43	1.0	0.71					
	ESEI3	3.46	1.0	0.67					
	ESEI4	3.71	1.0	0.74					
	ESEI5	3.61	1.0	0.68					
	ESEI6	3.56	1.0	0.70					
Implementing finance	ESEF1	3.93	1.0	0.76	0.89	0.89	0.73	0.60	0.32
	ESEF2	3.87	1.1	0.91					
	ESEF3	3.72	1.0	0.88					

*CR* critical ratio; *AVE* average variance extracted; *MSV* maximum shared squared variance; *ASV* average shared squared variance

loadings to their own constructs and items on planning and implementing people were highly correlated. This high correlation between the two constructs should be considered in future studies in order to improve the discriminant validity of the items in each construct.

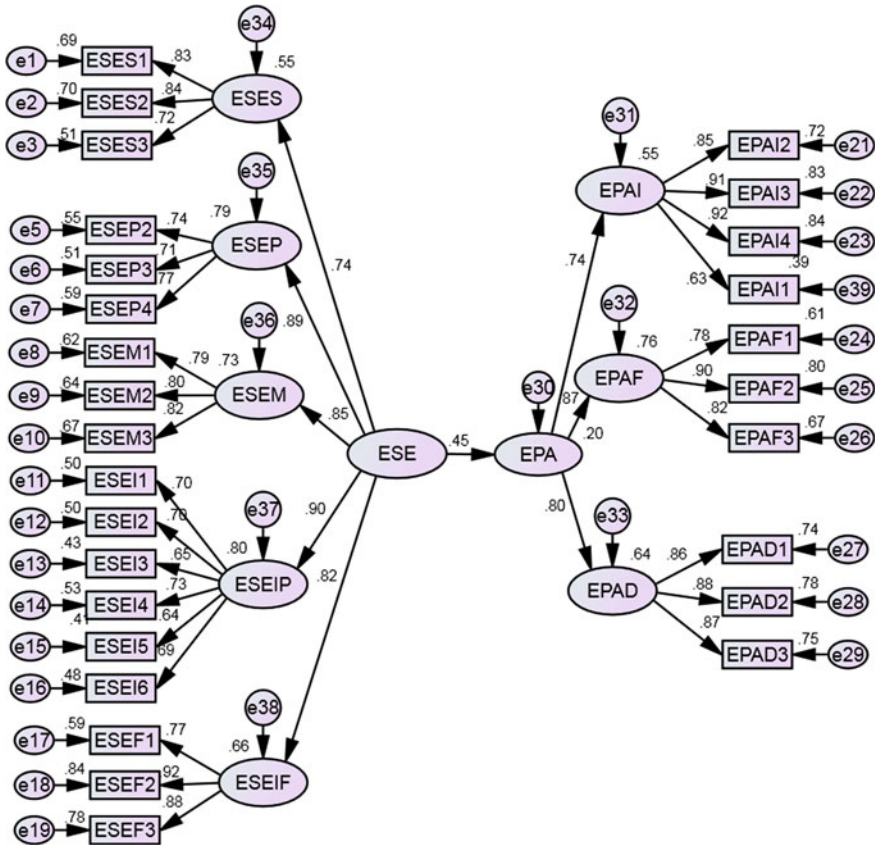
### 5.2.1 Model Fit for Structural Model

In this step of model fit analysis, we first tested the direct effect of entrepreneurial self-efficacy as a construct with five components (searching, planning, marshaling, implementing people, and implementing finance) on entrepreneurial passion



**Fig. 1** Measurement model for research constructs with standardized coefficients estimates and observed variables

(passion for invention, founding and development) and a maximum likelihood technique was used to perform the analysis (Schreiber et al. 2006). The model fit indicators for the direct effect of the two variables supported a good model fit ( $\chi^2(341) = 598.78, p < 0.001, \chi^2/df = 1.75, CFI = 0.94, TLI = 0.93, IFI = 0.94;$  and  $RMSEA = 0.5$ ). More specifically, entrepreneurial self-efficacy explained 45% of the entrepreneurial passion variance (Fig. 2). Therefore, perceived efficacy in successfully performing different tasks in the process of a new venture creation influences novice entrepreneurs' entrepreneurial passion. Then, we tested whether entrepreneurial self-efficacy affects the dimensions of entrepreneurial passion by incorporating entrepreneurial self-efficacy and its dimensions as a construct and



**Fig. 2** Structural equation model for the effect of entrepreneurial self-efficacy on entrepreneurial passion with standardized coefficients estimates and observed variables

components of entrepreneurial passion into a full structural model. The model fit indices for the structural model supported a good model fit ( $\chi^2 (292) = 678.76$ ,  $p < 0.001$ ,  $\chi^2/df = 2.32$ , CFI = 0.90, TLI = 0.89, IFI = 0.90; and RMSEA = 0.5). Figure 3 depicts the association between entrepreneurial self-efficacy and passion for inventing (51%), passion for developing (40%), and passion for founding (37%). Therefore, entrepreneurial self-efficacy has the highest influence on the novice entrepreneurs' passion for inventing followed by their passion for developing and founding. This confirms the findings of Cardon and Kirk's (2013) study that entrepreneurial self-efficacy has the greatest impact on passion for inventing (42%), passion for developing (23%) and passion for founding (16%).

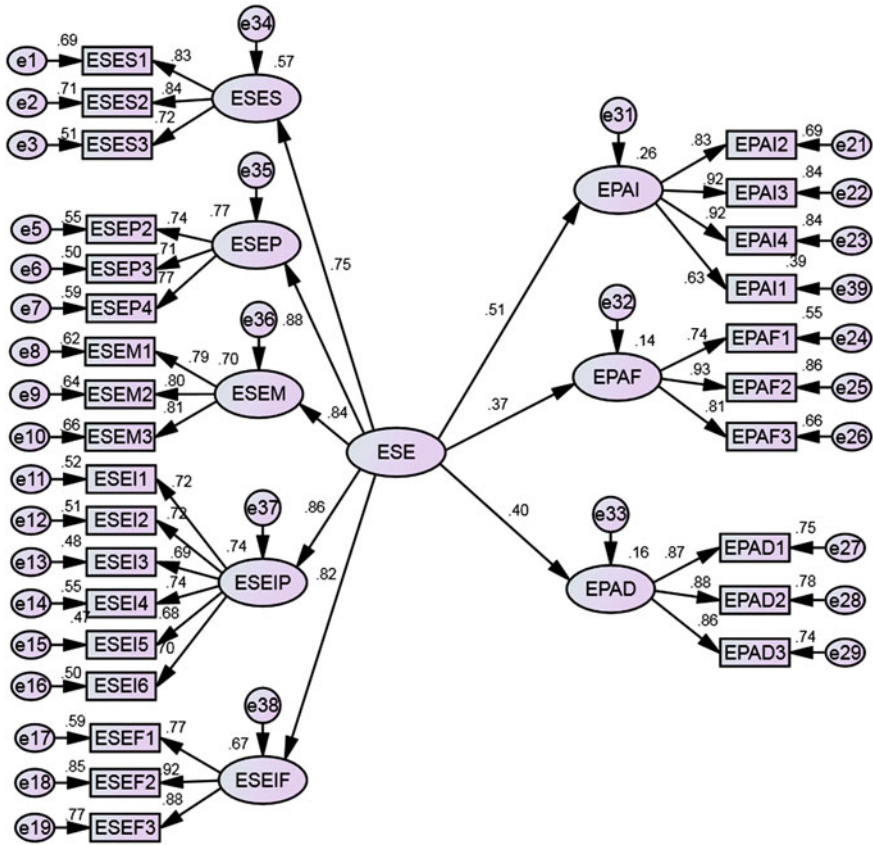


Fig. 3 Structural equation model for the effect of entrepreneurial self-efficacy on dimensions of entrepreneurial passion with standardized coefficients estimates and observed variables

## 6 Discussion

Despite the key importance of passion and self-efficacy in entrepreneurship, empirical evidence on the relationships between different aspects of entrepreneurial self-efficacy and entrepreneurial passion is scarce (Cardon and Kirk 2013; Cardon et al. 2009). The lack of research is more serious particularly in the early stages of the new venture creation and growth where entrepreneurs essentially require high efficacy and passion to successfully overcome the challenges and difficulties of the entrepreneurship process (Cardon and Kirk 2013; Cardon et al. 2009; Baron 2008). This study was an attempt to examine the impact of novice entrepreneurs' self-efficacy on their passion for entrepreneurship and its dimensions including passion for inventing, passion for founding and passion for developing. Our finding confirmed the direct impact of entrepreneurial self-efficacy on entrepreneurial

passion (Cardon and Kirk 2013; Cardon et al. 2012, 2013) in the economic and business environment of Iran. Therefore, perceived efficacy in successfully performing the tasks involved in establishing and managing a new venture highly shapes entrepreneurs' sense of passion for entrepreneurship. More specifically, novice entrepreneurs' self-efficacy has significant positive effects on their strong positive feelings for inventing followed by passion for developing and founding (Cardon and Kirk 2013).

These findings indicate regardless of the instrument used to measure entrepreneurial self-efficacy and the stage of the firms' growth, entrepreneurial self-efficacy plays a key role in building entrepreneurial passion and has more influential impact on entrepreneurs' passion for inventing than passion for developing and founding. Since high positive feeling of passion for inventing is highly associated with entrepreneurs' strong identity for the particular domain of entrepreneurship (Cardon and Kirk 2013; Cardon et al. 2013), novice entrepreneurs are expected to have a strong identity of inventing and involve in activities such as creating new business ideas, designing novel products and services, creating new solutions for their problems and persisting in the face of challenges (Cardon et al. 2009, 2013). Therefore, entrepreneurial self-efficacy highly affects novice entrepreneurs' positive feelings and strong identity for inventing. Given the importance of creating novel ideas and new entrepreneurial opportunities in the process of entrepreneurship (Foo et al. 2013; Baron 2008), more attention should be given to cultivating and improving the passion for inventing in nascent entrepreneurs and entrepreneurship students. The lower passion for founding and developing in our sample may be because the novice entrepreneurs have mobilized the essential resources and launched their ventures and have less extreme feelings toward founding and expanding their venture and consider the founder and developer identity as less important to their self-identity and venture at this stage (Cardon and Kirk 2013; Cardon et al. 2009).

The findings of the current study have several theoretical, methodological and practical implications. First, by highlighting entrepreneurial self-efficacy as one of the factors that affects entrepreneurial passion, this study assists researchers to develop theories on the nature and origins of passion in entrepreneurship (Cardon et al. 2009, 2013; Baron 2008), specifically in the early stages of a new venture establishment and growth (Cardon and Kirk 2013; Cardon et al. 2012, 2013). As far as we know, this study is one of the first researches on the association between entrepreneurs' self-efficacy and passion in Iran. Second, treating entrepreneurial self-efficacy and passion for entrepreneurship as multi-dimensional constructs and using the entrepreneurial passion (Cardon et al. 2013) and entrepreneurial self-efficacy (McGee et al. 2009) scales specifically devised for the tasks and roles in the process of entrepreneurship (Drnovšek et al. 2009), this study provided empirical evidence for validity and reliability of the scales to measure novice entrepreneurs' self-efficacy and passion. Future research investigating the relationship between the two constructs can use the scales validated in this study. Finally, entrepreneurs can use the findings of this study to understand the importance of their affect and feelings in successfully performing their tasks and



achieving their goals and cultivate their sense of passion for and efficacy in entrepreneurship by engaging in entrepreneurial tasks and roles central to their identity (Cardon and Kirk 2013; Cardon et al. 2009, 2013; McGee et al. 2009).

### ***6.1 Limitations and Agendas for Future Research***

This study has some limitations that should be acknowledged. First, we only explored the impact of entrepreneurial self-efficacy on entrepreneurial passion as the two factors that influence entrepreneurs' affect toward entrepreneurial tasks and roles and their persistence in dealing with challenges (Cardon and Kirk 2013; Cardon et al. 2013). Future research should examine if other factors such as cognition and creativity influence entrepreneurs' entrepreneurial passion (Cardon et al. 2012, 2013; Baron 2008). Future studies should also explore if these factors interact with self-efficacy in shaping entrepreneurs' passion for entrepreneurship and whether the interactions among the variables affect entrepreneurs' sense of passion as well as their success in growing their ventures. Further research can also explore the mediating and moderating factors in the relationship between entrepreneurs' self-efficacy and entrepreneurial passion. Second, this study measured the dimensions of entrepreneurial passion using Cardon et al.'s (2013) measurement model. As suggested by the authors, there may exist other dimensions of entrepreneurial passion that future studies need to explore. Third, building on previous studies (Cardon and Kirk 2013; Cardon et al. 2013), we only investigated the relationship between entrepreneurial self-efficacy and passion of individual entrepreneurs rather than groups and teams who collectively explored the opportunity and managed a new venture. Future research can examine if entrepreneurial self-efficacy significantly influences entrepreneurial passion of groups and organizations (Cardon et al. 2012; Drnovšek et al. 2009).

Furthermore, this study only asked the participants to express their feelings toward entrepreneurial tasks and roles because it is both theoretically and empirically "possible that an entrepreneur would experience intense positive feelings for some activities without these activities being necessarily central to his or her identity" (Cardon et al. 2013, p. 380). Further studies need to include entrepreneurs' feelings as well as their central identity of a particular domain of entrepreneurship in order to provide a clearer picture of passion in entrepreneurship. Finally, we only included entrepreneurs who have started their ventures less than 42 months ago. Since entrepreneurs' positive feelings and strong identity may differ in different stage of their venture growth and development (Cardon et al. 2009) and there is no evidence if the relationships emerging from this study would be found with a sample of firms having higher age, further longitudinal studies can explore if the relationship between entrepreneurial self-efficacy and passion differs in different stages of a new venture growth and if firms' age can affect the relationship. Future studies can also examine the relationship between entrepreneurial self-efficacy and passion among nascent and habitual entrepreneurs.

## References

- Bagheri, A., & Lope Pihie, Z. A. (2014). The moderating role of gender in shaping students' entrepreneurial intentions. *International Journal for Educational and Vocational Guidance, 14*, 255–273.
- Bandura, A. (1997). *Self-efficacy: The exercise of self-control*. New York: NY, Freeman.
- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management, 38*, 9–44.
- Barbosa, S. D., Gerhardt, M. W., & Kickul, J. R. (2007). The role of cognitive style and risk preference on entrepreneurial self-efficacy and entrepreneurial intentions. *Journal of Leadership and Organizational Studies, 13*, 86–104.
- Baron, R. (2008). The role of affect in the entrepreneurial process. *Academy of Management Review, 33*, 328–340.
- Boomsma, A. (2000). Reporting analyses of covariance structures. *Structural Equation modeling: A Multidisciplinary Journal, 7*, 461–483.
- Breugst, N., Domurath, A., Patzelt, H., & Klaukien, A. (2012). Perceptions of entrepreneurial passion and employees' commitment to entrepreneurial ventures. *Entrepreneurship Theory and Practice, 36*(1), 171–192.
- Byrne, B. M. (2010). *Structural equation modeling with AMOS* (2nd ed.). New York: Routledge.
- Cardon, M. S. (2008). Is passion contagious? The transference of entrepreneurial emotion to employees. *Human Resource Management Review, 18*, 77–86.
- Cardon, M. S., Foo, M. D., Shepherd, D. A., & Wiklund, J. (2012). Exploring the heart: entrepreneurial emotion is a hot topic. *Entrepreneurship Theory and Practice, 36*, 1–10.
- Cardon, M. S., Gregoire, D. A., Stevens, C. E., & Patel, P. C. (2013). Measuring entrepreneurial passion: Conceptual foundations and scale validation. *Journal of Business Venturing, 28*, 373–396.
- Cardon, M. S., & Kirk, C. P. (2013). Entrepreneurial passion as mediator of the self-efficacy to persistence relationship. *Entrepreneurship Theory and Practice, 39*(5), 1–24.
- Cardon, M. S., Wincent, J., Singh, J., & Drnovsek, M. (2009). The nature and experience of entrepreneurial passion. *Academy of Management Review, 34*(3), 511–532.
- Chen, C., Greene, P., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing, 13*, 295–316.
- Chen, X. P., Yao, X., & Kotha, S. (2009). Entrepreneur passion and preparedness in business plan presentations: A persuasion analysis of venture capitalists' funding decisions. *Academy of Management Journal, 52*(1), 199–214.
- Drnovšek, M., Wincent, J., & Cardon, M. S. (2009). Entrepreneurial self-efficacy and business start-up: Developing a multi-dimensional definition. *International Journal of Entrepreneurial Behaviour & Research, 16*(4), 329–348.
- Foo, M. D. (2011). Emotions and entrepreneurial opportunity evaluation. *Entrepreneurship Theory and Practice, 35*(2), 375–393.
- Foo, M. D., Uy, M. A., & Baron, R. A. (2009). How do feelings influence effort? An empirical study of entrepreneurs' affect and venture effort. *Journal of Applied Psychology, 94*(4), 1086–1094.
- Foo, M. D., Uy, M. A., & Murnieks, C. (2013). Beyond affective valence: Untangling valence and activation influences on opportunity identification. *Entrepreneurship Theory and Practice, 39*(5), 1–25.
- Galbraith, C. S., McKinney, B. C., DeNoble, A. F., & Ehrlich, S. B. (2014). The impact of presentation form, entrepreneurial passion, and perceived preparedness on obtaining grant funding. *Journal of Business and Technical Communication, 28*(2), 222–248.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). USA: Pearson Prentice Hall.
- Hayton, J. C., & Cholakova, M. (2011). The role of affect in the creation and intentional pursuit of entrepreneurial ideas. *Entrepreneurship Theory and Practice, 36*(1), 41–68.

- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria vs new alternatives. *Structural Equation Modeling*, 6, 1–55.
- Karlsson, T., & Moberg, K. (2013). Improving perceived entrepreneurial abilities through education: Exploratory testing of an entrepreneurial self-efficacy scale in a pre-post setting. *The International Journal of Management Education*, 11, 1–11.
- Lope Pihie, Z. A., & Bagheri, A. (2013). Self-Efficacy and entrepreneurial intention: The mediation effect of self-regulation. *Vocations and Learning: Studies in vocational and professional education*, 36, 385–401.
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, 41(1), 84–99.
- McGee, J. E., Peterson, M., Mueller, S. L., & Sequeira, J. M. (2009). Entrepreneurial self-efficacy: Refining the measure. *Entrepreneurship Theory and Practice*, 33, 965–988.
- Murnieks, C. Y., Mosakowski, E., & Cardon, M. S. (2014). Pathways of passion: Identity centrality, passion, and behavior among entrepreneurs. *Journal of Management*, 40(6), 1583–1606.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 65, 539–569.
- Scherer, R. F., Adams, J. S., Carley, S. S., & Wiebe, F. A. (1989). Role model performance effects on development of entrepreneurial career preference. *Entrepreneurship Theory and Practice*, 13, 53–71.
- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modelling and confirmatory factor analysis results: A review. *The Journal of Educational Research*, 99, 323–338.
- Tyszka, T., Ciešlik, J., Domurat, A., & Macko, A. (2011). Motivation, self-efficacy, and risk attitudes among entrepreneurs during transition to a market economy. *The Journal of Socio-Economics*, 40, 124–131.
- Ward, T. B. (2004). Cognition, creativity, and entrepreneurship. *Journal of Business Venturing*, 19, 173–188.

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# How Do Iranian SMEs Utilize External Knowledge Flows for Corporate Entrepreneurship? The Role of Externally Oriented Capabilities

Kamal Sakhdari

**Abstract** Externally oriented capabilities have gained increasing attention because of their significant potential to stimulate innovative activities in companies. Yet, there is little understanding of these capabilities in relation to corporate entrepreneurship, in particular in the context of developing countries. The findings from a sample of 126 small and medium supplier companies providing products and services to the mining industry in Iran indicate that a firm's absorptive capacity enhances the level of corporate entrepreneurship. Moreover, firms with greater knowledge search can more effectively utilize their absorptive capacity for corporate entrepreneurship. The main contribution of this research is connecting externally oriented capabilities to corporate entrepreneurship and showing the way SMEs in developing countries can fill their knowledge gaps to proceed to corporate entrepreneurial purposes.

## 1 Introduction

In the face of globalisation and rapid technological changes, the traditional thought that corporate competitive advantages are sustainable has been replaced with the new premise that companies need to continuously renew their competitive advantages (Covin and Miles 1999; Kuratko and Audretsch 2009; Tushman and O'Reilly 1996). The considerable potential for corporate entrepreneurship to renew companies through innovation-based initiatives (Zahra 1996) has led to increasing interest in how corporate entrepreneurship can be perpetuated within established companies (Corbett et al. 2013; Phan et al. 2009). Corporate entrepreneurship refers to innovation, venturing and strategic renewal within existing firms (Zahra 1996). Studies indicate that corporate entrepreneurship can play an important role in achieving higher levels of corporate performance (Yiu and Lau 2008; Zahra 1995),

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growth (Zahra 1993; Zahra and Covin 1995), profitability (Covin and Slevin 1991) and competitive advantage (Covin and Miles 1999; Kuratko and Audretsch 2009). Given these contributions, scholars have increasingly sought to identify factors stimulating corporate entrepreneurship (Heavey et al. 2009; Simsek and Heavey 2011; Yiu and Lau 2008).

One of the main challenges firms face in undertaking corporate entrepreneurship is the generation of *new knowledge* (Teng 2007; Zahra et al. 2009). Corporate entrepreneurship relies on new knowledge for doing things differently, or doing different things, manifesting in the forms of innovation in products and services, processes, systems, strategies and markets (Teng 2007). Scholars have traditionally focused on internal development of knowledge (Brouwer et al. 1993; Hoskisson and Hitt 1988). However, internal development of new knowledge is accompanied by high resource and development expenses, high levels of risk and timing issues (Eisenhardt and Schoonhoven 1996; Teng 2007). Recently scholars have suggested sourcing new knowledge from other players in the market such as suppliers, customers, research centres and competitors as a complementary and effective approach for companies pursuing corporate entrepreneurship (Simsek et al. 2003; Teng 2007; Zahra et al. 2009). This is in particular important for Small and Medium Enterprises (SMEs) facing the scarcity of internal resources challenge (Cooper 2002). This research stream, which has recently gained more prominence, posits that innovative activities are mainly a function of firms' capabilities to effectively combine *internal* and *external* knowledge resources (Chesbrough 2003; Grant 1996; Kogut and Zander 1992). Such capabilities can be labelled *externally oriented capabilities* since they are mainly focused externally to facilitate sourcing new knowledge and blending it with a firm's current knowledge base (Sarkar et al. 2009).

Externally oriented capabilities, such as absorptive capacity (Cohen and Levinthal 1990; Lane et al. 2006), have gained increasing attention because of their significant potential to stimulate innovative activities in companies. Yet, there is little understanding of these capabilities in relation to corporate entrepreneurship. The corporate entrepreneurship literature is mainly dominated by the investigation of governance and structural modes that facilitate entrepreneurial activities in companies (Burgers et al. 2009; Hayton 2005; Heavey and Simsek 2013; Ling et al. 2008; Simsek 2007; Zahra 1996; Zahra et al. 2000). A core underpinning of these studies is the ability to acquire, leverage and use knowledge which suggests a key role for externally oriented capabilities in stimulating corporate entrepreneurial activities (Teng 2007; Zahra et al. 2009). Yet, there is a surprising lack of investigation into the externally oriented capabilities-corporate entrepreneurship relationship. Examining externally oriented capabilities as key drivers of corporate entrepreneurship can provide new understanding of why some firms are able to generate higher levels of corporate entrepreneurship than others. This can open new directions for more capabilities-oriented research in the corporate entrepreneurship literature, reinforced in recent reviews and studies (Phan et al. 2009; Yang et al. 2009).

Establishing the externally orientated capabilities-corporate entrepreneurship connection can be particularly informative in developing countries and emerging

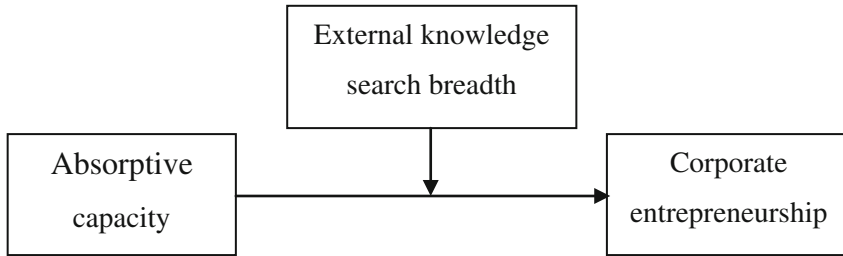
economies to contextualize entrepreneurial behaviour and outcomes (Zahra 2007; Bruton et al. 2008; Welter 2011). Institutional voids such as underdeveloped intellectual property rights protection in such contexts reduce firms' incentives to invest in the development of new knowledge (Shinkle and McCann 2014; Zhao 2006) or cause them resort to isolating mechanisms to protect their knowledge-based discoveries (Zahra and George 2002). Firms operating in such contexts are likely to have less exposure to new knowledge, and, hence, may need firm mechanisms to effectively exploit their externally oriented capabilities.

In this vein, this research aims to advance our understanding of the way SMEs' externally oriented capabilities affect their engagement in corporate entrepreneurship in the developing context of Iran. It draws on survey data from a sample of SMEs which supply products and services to the Iranian mining industry. In the following sections I first provide theoretical background and hypotheses, followed by the methodology section. I conclude by discussing theoretical and practical implications.

## 2 Theoretical Background and Hypotheses

The term corporate Entrepreneurship refers to entrepreneurial activities within established firms. These entrepreneurial activities entail innovation, venturing and strategic renewal (Zahra 1996). Innovation concerns the development of new products and services. Venturing refers to the birth of new businesses within existing companies through expanding operations in current or new markets. Firms tend to create new ventures when opportunities in new markets are not attainable with current resources and structures, or they put out of the purview of their current base businesses such as entering new technological spaces or areas (Teng 2007; Verbeke et al. 2007). Strategic renewal means the redefinition of the scope of a business or significant changes in its competitive strategy, leading to new positions in the market (Sharma and Chrisman 1999; Zahra 1996). These activities are complementary and mutually supportive. For example, renewing the competitive approach may enhance the benefits of venturing activities, and new product development may make strategic renewal activities more beneficial (Heavey et al. 2009; Simsek 2007; Simsek and Heavey 2011; Simsek et al. 2007). As such, "treating individual components of corporate entrepreneurship as independent ignores their potential complementarity" (Simsek and Heavey 2011, p. 83).

A key feature of corporate entrepreneurship is its knowledge intensity or knowledge orientation (Agarwal et al. 2007; Teng 2007; Zahra et al. 2009). Indeed, corporate entrepreneurship relies on generating new knowledge for developing new products and services, processes, systems, and strategies (Teng 2007). Internal development of knowledge is not often feasible due to competitive and economic reasons. It is accompanied by high resource and development expenses, high levels of risk and timing issues (Eisenhardt and Schoonhoven 1996; Teng 2007). As such, firms have lately adopted external knowledge sourcing as an effective approach to



**Fig. 1** Research framework

more effectively fill their knowledge gaps for corporate entrepreneurial purposes (Simsek et al. 2003; Teng 2007; Zahra et al. 2009).

The so-called absorptive capacity aides firms to successfully assimilate and exploit new external knowledge (Cohen and Levinthal 1990; Lane et al. 2006). This concerns a firm's capability to recognise the value of new external knowledge, assimilate and exploit it in its operations or for commercial purposes (Lane et al. 2006). However, a firm's ability to utilise its absorptive capacity for innovative activity is conditional on the extent to which firms are exposed to external new and complementary knowledge (Audretsch and Keilbach 2007; Qian and Acs 2013; Zahra and George 2002). Scholars have lately posited that a firm's exposure to new knowledge depends on how widely the firm has decided to search for external knowledge or the extent to which it would like to engage external knowledge resources in its value creation processes (Chesbrough 2007; Drechsler and Natter 2012; Laursen and Salter 2006). The more widely they search, the greater the probability of gaining knowledge leading to a valuable innovation (Laursen and Salter 2006; Leiponen and Helfat 2010). *External knowledge search breadth* has been recently defined by Laursen and Salter (2006, p. 134) as "the number of external sources or search channels that firms rely upon in their innovative activities". As depicted in Fig. 1, I suggest external knowledge search breadth as a corporate mechanism enabling firms to more effectively benefit from their absorptive capacity for corporate entrepreneurship. The following sections elaborate mechanisms underlying the hypothesized relationships.

### 3 Absorptive Capacity and Corporate Entrepreneurship

One of the most significant externally oriented capabilities is absorptive capacity. Absorptive capacity allows firms to absorb and utilise external knowledge through exploratory, transformative and exploitative learning (Lane et al. 2006). In their seminal article, Cohen and Levinthal (1990) argue that some firms are able to value, understand and apply new external knowledge with less cost and effort than others, because they have already invested in cultivating their absorptive capacity and prior

related knowledge. Cohen and Levinthal (1989, p. 570) posit that “unlike learning-by-doing which allows firms to get better at what they already do, absorptive capacity allows firms to learn to do something different.” Making sense of new external knowledge and combining it with pre-existing knowledge, companies reach new insights about markets, technologies, customers and competition. This provides firms with options for innovative activities and filling their knowledge gaps for proceeding to corporate entrepreneurship (Qian and Acs 2013; Teng 2007; Zahra et al. 2009). Indeed, absorptive capacity helps firms make sense of new external knowledge and mitigates the barriers of knowledge transfer such as tacitness or embeddedness (Cummings and Teng 2003). Part of a firm’s absorptive capacity is the capability to store and reactivate prior knowledge (Garud and Nayyar 1994; Jansen et al. 2005). New assimilated knowledge may need to be maintained due to temporal lags in the development of complementary knowledge or markets (Garud and Nayyar 1994). These capabilities enable a firm to absorb new knowledge that can be subsequently used for corporate entrepreneurship. Finally, creating corporate entrepreneurship relies on the combinative capabilities of absorptive capacity to combine new and existing knowledge towards innovative outcomes (Zahra and George 2002). This requires capabilities for the combination of new and existing knowledge and work on the tangible applications of new knowledge such as new product and services ideas, patent application and new prototypes. Together, these complementary learning processes facilitate the attraction and injection of new external knowledge in a firm’s value-creation processes, and can hence raise the level of corporate entrepreneurship.

**Hypothesis 1** Absorptive capacity is positively associated with corporate entrepreneurship.

#### **4 The Moderating Role of External Knowledge Search Breadth**

Laursen and Salter (2006, p. 134) define external knowledge search breadth as “the number of external sources or search channels that firms rely upon in their innovative activities.” It is considered as a strategic approach, reflecting a firm’s tendency to search widely and engage more external knowledge sources in its value-creation processes (Chesbrough 2007; Drechsler and Natter 2012; Laursen and Salter 2006). Laursen and Salter (2006) contend that gaining knowledge from different sources can be challenging for companies, as approaching each of the search channels may require different corporate practices. Nevertheless, firms may miss opportunities due to lack of openness or focus only on a narrow range of sources. They suggest that companies can more effectively benefit from their absorptive capacity through adopting a search approach focusing on leveraging knowledge from diverse sources of knowledge (Grimpe and Sofka 2009). Laursen and Salter (2006) also explain that the external knowledge search breadth approach



is different from absorptive capacity which is related to a firm's capability to value, assimilate, and exploit new external knowledge. External knowledge search breadth, however, reflects how broadly a company searches external knowledge.

Following Laursen and Salter's suggestion, I argue that firms can better exploit their absorptive capacity for corporate entrepreneurship by adopting an external knowledge search approach. First, searching widely enhances the likelihood of obtaining the required knowledge for filling knowledge gaps. Leiponen and Helfat (2010, p. 225) contend that "by accessing a greater number of knowledge sources, the firm will improve the probability of obtaining knowledge that will lead to a valuable innovation output." Second, researchers posit that external search breadth increases the *amount* and *variety* of knowledge entering in the process of value of creation (Leiponen and Helfat 2010, 2011; Nieto and Santamaria 2007). This enables firms with higher levels of absorptive capacity to pursue corporate entrepreneurship through recombination of external complementary knowledge (Kogut and Zander 1992). Zahra et al. (2009) argue that obtaining varied knowledge from diverse sources increases options for corporate entrepreneurship. As such, it is expected that firms will better utilise their absorptive capacity for corporate entrepreneurship by searching widely to obtain new options for innovation (Leiponen and Helfat 2010; Zahra et al. 2009), fill their knowledge gaps (Teng 2007), or create new knowledge through recombination of external knowledge (Kogut and Zander 1992). Conversely, companies with a narrow search breadth may not be able to exploit their knowledge-based discoveries due to less potential to fill their knowledge gaps or may miss many potential entrepreneurial opportunities due to closeness (Laursen and Salter 2006). In particular, in developing countries with less market-oriented institutional contexts institutional voids such as weak intellectual property rights diminish firms' incentive to develop new knowledge (Shinkle and McCann 2014; Zhao 2006). As such, sources with new and complementary knowledge are scarcer. Moreover, firms may act more tightly (vs. openly) to safeguard their knowledge discoveries (Escribano et al. 2009; Zahra and George 2002). Accordingly, firms in such contexts should undertake a wide knowledge search to gain access to new and complementary knowledge to effectively exploit their absorptive capacity for corporate entrepreneurship. It follows then that:

**Hypothesis 2** Firms' breadth of external knowledge search positively moderates the [positive] association between absorptive capacity and corporate entrepreneurship.

## 5 Sample and Data Collection

The sample comprises supplier companies providing products and services to the Iranian mining industry. We focused on a single industry to confine the extraneous variation of heterogeneous industry factors (Davidsson 2008; Wales et al. 2012). The selection of the mining industry also suits the theoretical arguments as mining

industries in developing countries like Iran are under pressure to become more entrepreneurial due to increasing attention and competition from foreign firms. Moreover, the supplier sector is considered technologically-advanced (Tedesco and Haseltine 2010). This makes it a suitable context for studying the effects of absorptive capacity on corporate entrepreneurship, as absorptive capacity is more related to assimilating and utilizing technological knowledge (Cohen and Levinthal 1990). Collaborative activities are also important in this industry for creating new knowledge and undertaking innovative and entrepreneurial initiatives in a timelier and more effective manner (Dodgson and Vandermark 2000; Upstill and Hall 2006).

We collected quantitative data through a questionnaire survey to test the strength of relationships between the variables in the model. The survey instrument was pre-tested and modified based on feedback from a panel of fifteen scholars familiar with the literature and six practitioners from companies, consultants and associations in the industry. To identify the research sample, we organized a database of these firms using publicly available databases. Each database added unique entries as well as overlapped with the other databases, enhancing validity and reducing biases based on single-source information. We first identified around 800 supplier firms in the Iranian context. Since some of the firms in the sample were not contactable and some did not exist or were irrelevant, the sample finally reduced to 598 companies.

The survey was conducted from mid-September to mid-November 2012. Following Dillman's (2000) proposed introductions for boosting participation, a letter was first sent to the firms, explaining the project. The letter promised the provision of a management report upon completing the survey, and indicated that the firms would be followed up by telephone. The firms were subsequently contacted seeking their participation and asking their preferable method of receiving the survey, either by email or postal mail. In some cases trained members of the research group were sent to firms to meet top administrators, explain the project and determine a date for collecting the completed questionnaires. This method is one of the most common and effective ways of boosting response rate and obtaining valid and high quality data in developing countries (cf. Luk et al. 2008; Zhou and Li 2012).

To minimize the potential common method bias in cross-sectional studies, the questionnaire was divided into two parts, one comprised independent variables and the other, dependent variables; and, two informants in each company were asked to fill out the questionnaires, one for independent variables and one for the dependent variable (Podsakoff et al. 2003). We finally received completed and usable double-respondent questionnaires from 126 companies, accounted for by consulting services (1.6%), contracting (18%), equipment manufacturer (63.9%), supplies and consumables (13.1%), support and services (3.3%), amounting to an effective response rate of 21%.

We compared early and late respondents (identified as those returning the survey after the second reminder) (cf. Simsek et al. 2007) in terms of size and key variables in the model. No statistically significant differences were detected, suggesting that non-response bias is not a concern in our study.

## 6 Measures

*Corporate entrepreneurship:* The extent to which companies pursue corporate entrepreneurial activities was measured based on scales developed by Zahra (1996). The scale captures the dimensions of *innovation*, developing new products and services, *venturing*, the birth of new business within existing companies and entering new markets, and *renewal*, redefining the business scope or strategy (Yiu et al. 2007; Yiu and Lau 2008). Respondents were asked to rate 15 items, based on a five-point Likert scale, with scores ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). Following the literature (Heavey et al. 2009; Simsek 2007; Simsek and Heavey 2011; Simsek et al. 2007), we used corporate entrepreneurship as a meta-construct, as it better captures synergies between the dimensions. This model outperforms a first-order model with the individual dimensions as supported by a significant chi-square difference ( $\Delta\chi^2(4) = 117, p < 0.001$ ). The coefficient alpha for the overall scale was 0.83.

*Absorptive capacity:* Absorptive capacity was measured through the three learning processes of *exploratory learning*, comprising acquisition and assimilation dimensions; *transformative learning*, encompassing maintenance and reactivation dimensions; and *exploitative learning*, capturing transmutation and exploitation dimensions (Biedenbach and Müller 2012; Schleimer and Pedersen 2013; Tranekjer and Knudsen 2012). Absorptive capacity was used as a three-dimensional meta-construct represented by 20 items rated on a five-point Likert scale, ranging from 1 (“strongly disagree”), to 5 (“strongly agree”). The coefficient alpha for the overall scale was 0.89.

*External search breadth:* To measure external search breadth, consistent with the approach adopted by Laursen and Salter (2006) and Leiponen and Helfat (2010), seven important sources of technological knowledge in the industry were identified, including customers, suppliers, competitors, investors, other companies, industry associations and councils, universities and research centers. Respondents were asked to answer whether or not they have acquired new and important knowledge about technologies from each of the sources. Firms received 0 for not using and 1 for using the source. Then, their scores were summed such that the company not gaining knowledge from any sources scored 0, while one that acquired knowledge from all of the sources scored 7.

*Control variables:* To control for possible confounding effects and extraneous variation, a number of variables were included in this study as control variables. *Firm size* is an important factor in explaining firm behaviour (Liao et al. 2003) as larger companies may have more resources, but less flexibility, for corporate entrepreneurial activities (Burgers et al. 2009). We therefore controlled for the number of full time employees. Firm size was measured through a categorical scale such that “5–19” as small, “20–199” as medium and “over 200” as large business (We excluded micro firms from analysis because it is less likely that firms with, for example, one person to undertake venturing activities. We also did not have any large firms among respondents). The literature also acknowledges that

*environmental dynamism* affects corporate entrepreneurial activities (Heavey et al. 2009). As such, environmental dynamism, capturing the rate of changes in the competitive environment, was controlled through a four-item scale, used in the literature (Jansen et al. 2005). The coefficient alpha for this scale was .69. Finally, additional *industry* effects were controlled by using five industry dummies: consulting services, contracting, support and services, supplies and consumables, and equipment and manufacturer.

## 7 Measurement Validity Tests

Apart from adopting the measures from the literature for increasing validity (DeVellis 2003), the following steps were taken to minimize concerns about the common method bias. To mitigate the common method bias, two respondents were asked to complete the survey instrument, one for the dependent variable and one for independent variables (Podsakoff et al. 2003). Two post hoc statistical tests were also conducted to assess the effect of method bias. First, Harman's single factor test was conducted to test the presence of the common method bias among the whole sample. As multiple factors emerged from the solution, and the first factor did not account for the majority of the explained variance (it was less than 20%), it was considered that common method bias should not be a major concern in this research (Podsakoff and Organ 1986). We also followed the partial correlation procedure proposed by Lindell and Whitney (2001) to more precisely assess the method bias in the data. We added an unrelated item to the instrument as a marker variable. We checked whether or not the partial correlation coefficients for all correlated variables were still statistically significant after controlling for the marker variable or not. As the original correlations between all correlated variables still remained significant while controlling for the marker variable, the method bias did not appear to pose a major issue for the data.

## 8 Analysis and Results

Hierarchical regression analysis was used to test the hypotheses. Predictors were all mean-centred (Cohen et al. 2003). Table 1 presents the means, standard deviations and correlations for the variables in this study. Since the correlations between each pair of the variables are all below the suggested cut off of 0.70 (Tabachnick and Fidell 1996) and the calculated variance inflation factor (VIF) for each regression equation is well below the recommended level of 10, it was expected that multi-collinearity should not bias the results. Table 2 also shows regression results for corporate entrepreneurship. Model 1 tested the relationship between the control variables and corporate entrepreneurship. This model contained one of the two size

Table 1 Means, standard deviations and correlations

	Mean	S.D.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Corporate entrepreneurship	3.40	0.52	(0.83)									
2. Environment dynamism	3.59	0.68	08									
3. Support	0.04	0.17	0.04									
4. Supplies	0.12	0.33	0.22*									
5. Contracting	0.19	0.38	0.04	0.03								
6. Consulting	0.02	0.12	-0.13	0.02	-0.02							
7. Manufacturing	0.63	0.48	-0.17	-0.01	-0.23**							
8. Small	0.48	0.50	10	-0.17	0.19*	0.11						
9. Medium	0.52	0.50	-0.10	0.17	-0.19	-0.11	-0.10					
10. Absorptive capacity	3.53	0.53	0.24**	0.20*	-0.09	0.009	0.12	-0.01	-0.06	-0.03	0.03	(0.89)
11. External search breadth	4.65	1.90	0.29**	0.19*	-0.01	0.15	0.13	0.01	-0.22**	0.08	-0.08	0.022

$N = 126$ . Numbers in parentheses on the diagonal are Cronbach's coefficient alphas of the composite scales

\*\*Correlation is significant at the 0.001 level (2-tailed)

\*\*Correlation is significant at the 0.01 level (2-tailed)

\*Correlation is significant at the 0.05 level (2-tailed)

**Table 2** Regression results for corporate entrepreneurship

	Model 1	Model 2	Model 3
<b>Control variables</b>			
<i>Industry dummies<sup>a</sup></i>			
Consulting	-0.0508 (0.358)	-0.491 (0.348)	-0.502 (0.333)
Contracting	0.047 (0.119)	0.009 (0.116)	-0.017 (0.111)
Supplies and consumables	0.284* (0.140)	0.271* (0.130)	0.270* (0.130)
Support and service	0.161 (0.261)	0.211 (0.254)	0.308 (0.244)
<i>Organizational size dummies<sup>b</sup></i>			
Small	0.043 (0.094)	0.044 (0.092)	-0.007 (0.089)
Environmental dynamism	0.037 (0.068)	0.00 (0.067)	-0.037 (0.065)
External knowledge search breadth	0.068** (0.025)	0.071** (0.024)	0.059* (0.023)
<b>Main effect</b>			
Absorptive capacity		0.239** (0.083)	0.281*** (0.081)
<b>Moderating effect</b>			
Absorptive capacity * external knowledge search breadth			0.141*** (0.041)
F-change	2.77**	8.17**	11.61***
Adjusted R <sup>2</sup>	0.096	0.142**	0.214***

N = 126. Unstandardized regression coefficients are displayed in the table

\*\*\* $P < 0.001$ , \*\* $P < 0.01$ , \* $P < 0.05$

<sup>a</sup>Manufacturing served as reference group in regression analyses

<sup>b</sup>Medium size served as reference group in regression analyses

dummies, as medium was used as the reference group and four of the five industry dummies because manufacturing was considered as the reference group. Absorptive capacity also entered as main effect in Model 2. Finally, Model 3 included the two-way interaction of absorptive capacity and external knowledge search breadth.

Model 1 in Table 2 indicates the impact of a firm’s absorptive capacity on corporate entrepreneurship is significant ( $\beta = 0.239, p < 0.05$ ), providing support for hypothesis 1. The interaction term of absorptive capacity and corporate entrepreneurship in model 3 is significant ( $\beta = 0.141, p < 0.01$ ), indicating that the variance explained by this two way interaction is significant (see Table 2). To interpret the significant interaction effect, Aiken and West’s (1991) plotting technique was used in which the effects of independent variables on the dependent variable in the low (one standard deviation below the mean) and high (one standard deviation above the mean) levels of moderator variables are depicted.

As shown in Fig. 2, the link between absorptive capacity and corporate entrepreneurship is much stronger for firms with higher levels of relational governance, supporting hypothesis 2 (see Fig. 2).

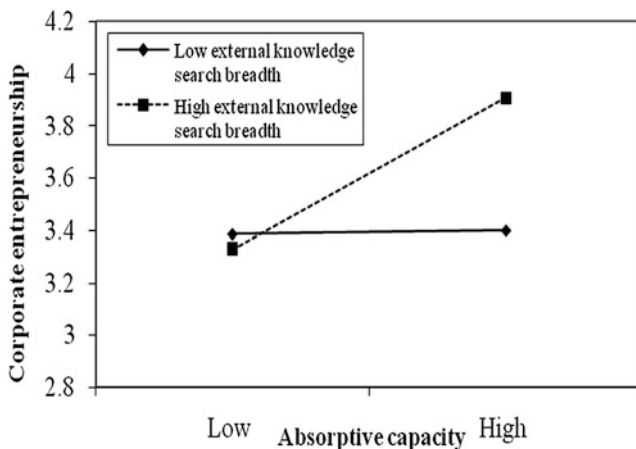


Fig. 2 Interaction of absorptive capacity and external knowledge search breadth

## 9 Discussion

The overarching theme of corporate entrepreneurship literature is to understand why some firms are able to generate higher levels of corporate entrepreneurship than others. In this vein, this research aimed to provide more insights into why some firms in Iran are more entrepreneurial than others. Since corporate entrepreneurial outputs are knowledge-intensive, companies need to develop new knowledge for pursuing corporate entrepreneurship. Recent studies have proposed external knowledge sourcing as an effective approach for firms to deal with this challenge in a timelier and more effective manner. Companies need externally oriented capabilities to facilitate gaining access to, successfully transferring and exploiting new external knowledge. These capabilities, however, are less understood in relation to corporate entrepreneurship, in particularly in developing countries like Iran. As such, this research was dedicated to investigating the impact of externally oriented capabilities on corporate entrepreneurship.

The findings indicate that firms with higher levels of absorptive capacity have more engagement in corporate entrepreneurship, providing support for hypothesis 1. This is consistent with prior studies contending that absorptive capacity should contribute to innovative activities in firms through enriching their stocks of knowledge (Cohen and Levinthal 1990; McKelvie et al. 2007). Prior studies have mainly focused on top management team characteristics and actions (Heavey and Simsek 2013; Ling et al. 2008; Simsek 2007), structural factors (Burgers et al. 2009; Zahra 1991) and business environment (Simsek et al. 2007; Zahra 1993). This literature, however, has paid less attention to organisational *capabilities*. The findings of this research indicate that organisational capabilities can also be as well important in explaining why some firms are more entrepreneurial than others. Specifically, the data suggests that firms with higher levels of absorptive capacity

have more engagement in the pursuit of corporate entrepreneurship. The importance of absorptive capacity in removing knowledge transfer barriers and exploiting new external knowledge for pursuing corporate entrepreneurship has been argued in recent studies (Teng 2007; Zahra et al. 2009). The current study, however, extends the literature by empirically testing the relationship between absorptive capacity and corporate entrepreneurship on a sample of Iranian companies.

The findings also add to the literature of absorptive capacity by linking a firm's absorptive capacity to corporate entrepreneurship. Previous research indicates that absorptive capacity positively impacts innovative activities in firms through enriching their stocks of knowledge (Cohen and Levinthal 1990; McKelvie et al. 2007). The results extend this literature by establishing a connection between absorptive capacity and organizational outputs other than innovation in products and services (Lane et al. 2006) such as business venturing and strategic renewal activities. Scholars suggest that the output of absorptive capacity for companies can be any commercial ends to which knowledge is applied (Cohen and Levinthal 1990; Zahra and George 2002).

Regarding the moderating impact of external knowledge search breadth, the findings support hypothesis 2. Zahra et al. (2009) have lately suggested boards of directors as a complementary mechanism for more effective utilization of absorptive capacity for corporate entrepreneurship. This study suggests that greater exposure to new and complementary knowledge can also be achieved through broader external searches of knowledge (Laursen and Salter 2006; Leiponen and Helfat 2010; Love, Roper, and Vahter 2013). The findings show that companies with higher levels of absorptive capacity can generate more corporate entrepreneurship through searching widely. Broader external search of knowledge is more likely to provide companies with knowledge leading to a valuable innovation (Laursen and Salter 2006; Leiponen and Helfat 2010). The increased amount and diversity of knowledge provides firms with more options for entrepreneurial activities (Burt 1992, 1997; Zahra et al. 2009), and enhances their potential for filling their knowledge gaps and solving their internal problems (Teng 2007).

These results also echo the general proposition in the institution-based theory that a network-based approach and reliance on others' resources is more prevalent among companies in low market-oriented institutional contexts due to the institutional voids in such contexts (Khanna and Palepu 1997; Peng 2003; Peng and Heath 1996; Peng et al. 2009). In seminal articles, Peng and Heath (1996) and Peng (2003) contend that in transitioning economies or less market-oriented economies, where formal institutions, including rules and regulations supporting free-market policies, are underdeveloped, institutional voids restrain companies from effectively benefiting from their capabilities. Such voids include a lack of specialised intermediaries for providing sophisticated services such as market research, lack of legal and financial infrastructure for acquisitions, and higher risk of innovation and uncertainty. In the absence of such formal institutions, companies can adopt approaches to offset the voids in such contexts. They propose a network or relation-based approach emphasising "inter-organisational relationships with various players" for effective utilisation of their capabilities (Peng 2003, p. 283).



Sourcing knowledge from external sources, firms, for example, can reduce the risk of innovation, which is associated with weak intellectual property rights and the institutional uncertainty, through reducing their resource commitment (Hoskisson et al. 2000; Peng 2003; Peng and Heath 1996). The findings echo this suggestion by showing that companies with more diverse external sources of knowledge in Iran more effectively exploit their absorptive capacity for entrepreneurial activities.

Apart from the theoretical implications, the findings of this research also hold practical implications for managers and practitioners. Managers seeking to raise the level of corporate entrepreneurship should invest in absorptive capacity to assimilate and exploit external knowledge flows for entrepreneurial purposes. Moreover, companies should be exposed to new and complementary knowledge to effectively utilise their absorptive capacity for corporate entrepreneurship. The data indicates that firms with higher levels of absorptive capacity have more engagement in pursuit of corporate entrepreneurship when they broadly search external sources of knowledge. As such, firms should more widely search external sources of knowledge to increase their exposure to new knowledge and generate more corporate entrepreneurship from their absorptive capacity. In particular, firms in contexts with less institutional market orientation can compensate for the suppressive effects of their institutional voids, and, accordingly, be less exposed to new and complementary knowledge, adopting an external knowledge search breadth approach. Practically speaking, absorptive capacity in tandem with wider and broader external knowledge search lead to more corporate entrepreneurial outputs in developing countries like Iran.

Overall, this research provides valuable insights into the antecedents and causes of corporate entrepreneurship in a developing country and in the novel context of mining industry, and hopefully has inspired academics to further develop knowledge of this value-creating phenomenon in emerging economies.

## References

- Agarwal, R., Audretsch, D., & Sarkar, M. (2007). The process of creative construction: Knowledge spillovers, entrepreneurship, and economic growth. *Strategic Entrepreneurship Journal*, 1(3–4), 263–286.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Audretsch, D. B., & Keilbach, M. (2007). The theory of knowledge spillover entrepreneurship. *Journal of Management Studies*, 44(7), 1242–1254.
- Biedenbach, T., & Müller, R. (2012). Absorptive, innovative and adaptive capabilities and their impact on project and project portfolio performance. *International Journal of Project Management*, 30(5), 621–635.
- Brouwer, E., Kleinknecht, A., & Reijnen, J. O. (1993). Employment growth and innovation at the firm level. *Journal of Evolutionary Economics*, 3(2), 153–159.
- Bruton, G. D., Ahlstrom, D., & Obloj, K. (2008). Entrepreneurship in emerging economies: Where are we today and where should the research go in the future. *Entrepreneurship Theory and Practice*, 32(1), 1–14.

- Burgers, J. H., Jansen, J. J., Van den Bosch, F. A., & Volberda, H. W. (2009). Structural differentiation and corporate venturing: The moderating role of formal and informal integration mechanisms. *Journal of Business Venturing*, 24(3), 206–220.
- Burt, R. S. (1992). The social structure of competition. In N. Nohria & R. Eccles (Eds.), *Networks and organizations: Structure, form, and action* (pp. 57–91). Cambridge, MA: Harvard Business School Press.
- Burt, R. S. (1997). The contingent value of social capital. *Administrative Science Quarterly*, 42(2), 339–365.
- Chesbrough, H. W. (2003). *Open innovation: The new imperative for creating and profiting from technology*. Boston, MA: Harvard Business School Publishing.
- Chesbrough, H. W. (2007). Why companies should have open business models. *MIT Sloan Management Review*, 48(2), 22–28.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioural sciences*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Cohen, W. M., & Levinthal, D. A. (1989). Innovation and learning: The two faces of R & D. *The Economic Journal*, 99(397), 569–596.
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128–152.
- Cooper, A. C. (2002). *Networks, alliances, and entrepreneurship*. Blackwell: Oxford, UK.
- Corbett, A., Covin, J. G., O'Connor, G. C., & Tucci, C. L. (2013). Corporate entrepreneurship: State-of-the-art research and a future research agenda. *Journal of Product Innovation Management*, 3(5), 812–820.
- Covin, J. G., & Miles, M. (1999). Corporate entrepreneurship and the pursuit of competitive advantage. *Entrepreneurship Theory and Practice*, 23, 47–64.
- Covin, J. G., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behaviour. *Entrepreneurship Theory and Practice*, 16, 7–25.
- Cummings, J. L., & Teng, B.-S. (2003). Transferring R&D knowledge: The key factors affecting knowledge transfer success. *Journal of Engineering and Technology Management*, 20(1), 39–68.
- Davidsson, P. (2008). *The entrepreneurship research challenge*. Northampton: Edward Elgar Publishing.
- DeVellis, R. F. (2003). *Scale development: Theory and applications*. Newbury Park, CA: Sage.
- Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method*. New York, NY: Wiley.
- Dodgson, M., & Vandermark, S. (2000). The challenges and opportunities of globalization and innovation in the minerals industry. *Innovation: Management, Policy and Practice*, 3(4), 3–15.
- Drechsler, W., & Natter, M. (2012). Understanding a firm's openness decisions in innovation. *Journal of Business Research*, 65(3), 438–445.
- Eisenhardt, K. M., & Schoonhoven, C. B. (1996). Resource-based view of strategic alliance formation: Strategic and social effects in entrepreneurial firms. *Organization Science*, 7(2), 136–150.
- Escribano, A., Fosfuri, A., & Tribó, J. A. (2009). Managing external knowledge flows: The moderating role of absorptive capacity. *Research Policy*, 38(1), 96–105.
- Garud, R., & Nayyar, P. R. (1994). Transformative capacity: Continual structuring by intertemporal technology transfer. *Strategic Management Journal*, 15(5), 365–385.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(2), 109–122.
- Grimpe, C., & Sofka, W. (2009). Search patterns and absorptive capacity: Low- and high-technology sectors in European countries. *Research Policy*, 38(3), 495–506.
- Hayton, J. C. (2005). Competing in the new economy: The effect of intellectual capital on corporate entrepreneurship in high-technology new ventures. *R&D Management*, 35(2), 137–155.
- Heavey, C., & Simsek, Z. (2013). Top management compositional effects on corporate entrepreneurship: The moderating role of perceived technological uncertainty. *Journal of Product Innovation Management*, 46(8), 1289–1314.

- Heavey, C., Simsek, Z., Roche, F., & Kelly, A. (2009). Decision comprehensiveness and corporate entrepreneurship: The moderating role of managerial uncertainty preferences and environmental dynamism. *Journal of Management Studies*, 46(8), 1289–1314.
- Hoskisson, R. E., Eden, L., Lau, C. M., & Wright, M. (2000). Strategy in emerging economies. *Academy of Management Journal*, 43(3), 249–267.
- Hoskisson, R. E., & Hitt, M. A. (1988). Strategic control systems and relative R&D investment in large multiproduct firms. *Strategic Management Journal*, 9(6), 605–621.
- Jansen, J. J., Van Den Bosch, F. A., & Volberda, H. W. (2005). Managing potential and realized absorptive capacity: How do organizational antecedents matter? *The Academy of Management Journal*, 48(6), 999–1015.
- Khanna, T., & Palepu, K. (1997). Why focused strategies may be wrong for emerging markets. *Harvard Business Review*, 75(4), 41–48.
- Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science*, 3(3), 383–397.
- Kuratko, D. F., & Audretsch, D. B. (2009). Strategic entrepreneurship: Exploring different perspectives of an emerging concept. *Entrepreneurship Theory and Practice*, 33(1), 1–17.
- Lane, P. J., Koka, B. R., & Pathak, S. (2006). The re-identification of absorptive capacity: A critical review and rejuvenation of the construct. *Academy of Management Review*, 31(4), 833–863.
- Laursen, K., & Salter, A. (2006). Open for innovation: The role of openness in explaining innovation performance among UK manufacturing firms. *Strategic Management Journal*, 27(2), 131–150.
- Leiponen, A., & Helfat, C. E. (2010). Innovation objectives, knowledge sources, and the benefits of breadth. *Strategic Management Journal*, 31(2), 224–236.
- Leiponen, A., & Helfat, C. E. (2011). Location, decentralization, and knowledge sources for innovation. *Organization Science*, 22(3), 641–658.
- Liao, J., Welsch, H., & Stoica, M. (2003). Organizational absorptive capacity and responsiveness: An empirical investigation of growth-oriented SMEs. *Entrepreneurship Theory and Practice*, 28(1), 63–85.
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86(1), 114–121.
- Ling, Y., Simsek, Z., Lubatkin, M. H., & Veiga, J. F. (2008). Transformational leadership's role in promoting corporate entrepreneurship: Examining the CEO-TMT interface. *Academy of Management Journal*, 51(3), 557–576.
- Love, J. H., Roper, S., & Vahter, P. (2013). Learning from openness: The dynamics of breadth in external innovation linkages. *Strategic Management Journal*. doi:10.1002/smj.2170
- Luk, C.-L., Yau, O. H., Sin, L. Y., Tse, A. C., Chow, R. P., & Lee, J. S. (2008). The effects of social capital and organizational innovativeness in different institutional contexts. *Journal of International Business Studies*, 39(4), 589–612.
- McKelvie, A., Wiklund, J., & Short, J. C. (2007). The new venture innovation process: Examining the role of absorptive capacity. *Advances in Entrepreneurship, Firm Emergence and Growth*, 10, 159–185.
- Nieto, M. J., & Santamaria, L. (2007). The importance of diverse collaborative networks for the novelty of product innovation. *Technovation*, 27(6), 367–377.
- Peng, M. W. (2003). Institutional transitions and strategic choices. *The Academy of Management Review*, 28(2), 275–296.
- Peng, M. W., & Heath, P. S. (1996). The growth of the firm in planned economies in transition: Institutions, organizations, and strategic choice. *Academy of Management Review*, 21(2), 492–528.
- Peng, M. W., Sunny, L. S., Brian, P., & Hao, C. (2009). The institution-based view as a third leg for a strategy tripod. *The Academy of Management Perspectives*, 23(3), 63–81.
- Phan, P. H., Wright, M., Ucbasaran, D., & Tan, W.-L. (2009). Corporate entrepreneurship: Current research and future directions. *Journal of Business Venturing*, 24(3), 197–205.

- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management, 12*(4), 531–544.
- Qian, H., & Acs, Z. J. (2013). An absorptive capacity theory of knowledge spillover entrepreneurship. *Small Business Economics, 40*(2), 185–197.
- Sarkar, M. B., Aulakh, P. S., & Madhok, A. (2009). Process capabilities and value generation in alliance portfolios. *Organization Science, 20*(3), 583–600.
- Schleimer, S. C., & Pedersen, T. (2013). The driving forces of subsidiary absorptive capacity. *Journal of Management Studies, 50*(4), 646–672.
- Sharma, P., & Chrisman, S. J. J. (1999). Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. *Entrepreneurship: Theory and Practice, 23*(3), 11–27.
- Shinkle, G. A., & McCann, B. T. (2014). New product deployment: The moderating influence of economic institutional context. *Strategic Management Journal, 35*(7), 1090–1101.
- Simsek, Z. (2007). CEO tenure and organizational performance: An intervening model. *Strategic Management Journal, 28*(6), 653–662.
- Simsek, Z., & Heavey, C. (2011). The mediating role of knowledge-based capital for corporate entrepreneurship effects on performance: A study of small- to medium-sized firms. *Strategic Entrepreneurship Journal, 5*(1), 81–100.
- Simsek, Z., Lubatkin, M. H., & Floyd, S. W. (2003). Inter-firm networks and entrepreneurial behaviour: A structural embeddedness perspective. *Journal of Management, 29*(3), 427–442.
- Simsek, Z., Veiga, J. F., & Lubatkin, M. H. (2007). The impact of managerial environmental perceptions on corporate entrepreneurship: Towards understanding discretionary slack's pivotal role. *Journal of Management Studies, 44*(8), 1398–1424.
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics*. New York, NY: Harper Collins.
- Tedesco, L., & Haseltine, C. (2010). *An economic survey of companies in the Australian mining technology services and equipment sector, 2006–07 to 2008–09 (ABARE-BRS research report)*. Canberra: Australian Bureau of Agricultural and Resource Economics—Bureau of Rural Sciences.
- Teng, B. S. (2007). Corporate entrepreneurship activities through strategic alliances: A resource-based approach toward competitive advantage. *Journal of Management Studies, 44* (1), 119–142.
- Tranekjer, T. L., & Knudsen, M. P. (2012). The (unknown) providers to other firms' new product development: What's in it for them? *Journal of Product Innovation Management, 29*(6), 986–999.
- Tushman, M. L., & O'Reilly, C. A., III. (1996). Ambidextrous organizations: Managing evolutionary and revolutionary change. *California Management Review, 38*(4), 8–30.
- Upstill, G., & Hall, P. (2006). Innovation in the minerals industry: Australia in a global context. *Resources Policy, 31*(3), 137–145.
- Verbeke, A., Chrisman, J. J., & Yuan, W. (2007). A note on strategic renewal and corporate venturing in the subsidiaries of multinational enterprises. *Entrepreneurship Theory and Practice, 31*(4), 585–600.
- Wales, W. J., Parida, V., & Patel, P. C. (2012). Too much of a good thing? Absorptive capacity, firm performance, and the moderating role of entrepreneurial orientation. *Strategic Management Journal, 34*(5), 622–633.
- Welter, F. (2011). Contextualizing entrepreneurship—Conceptual challenges and ways forward. *Entrepreneurship Theory and Practice, 35*(1), 165–184.
- Yang, Y., Narayanan, V., & Zahra, S. (2009). Developing the selection and valuation capabilities through learning: The case of corporate venture capital. *Journal of Business Venturing, 24*(3), 261–273.
- Yiu, D. W., Lau, C. M., & Bruton, G. D. (2007). International venturing by emerging economy firms: The effects of firm capabilities, home country networks, and corporate entrepreneurship. *Journal of International Business Studies, 38*(4), 519–540.

- Yiu, D. W., & Lau, C. M. (2008). Corporate entrepreneurship as resource capital configuration in emerging market firms. *Entrepreneurship Theory and Practice*, 32(1), 37–57.
- Zahra, S. A. (1991). Predictors and financial outcomes of corporate entrepreneurship: An exploratory study. *Journal of Business Venturing*, 6(4), 259–285.
- Zahra, S. A. (1993). Environment, corporate entrepreneurship, and financial performance: A taxonomic approach. *Journal of Business Venturing*, 8(4), 319–340.
- Zahra, S. A. (1995). Corporate entrepreneurship and financial performance: The case of management leveraged buyouts. *Journal of Business Venturing*, 10(3), 225–247.
- Zahra, S. A. (1996). Governance, ownership, and corporate entrepreneurship: The moderating impact of industry technological opportunities. *Academy of Management Journal*, 39(6), 1713–1735.
- Zahra, S. A. (2007). Contextualizing theory building in entrepreneurship research. *Journal of Business Venturing*, 22(3), 443–452.
- Zahra, S. A., & Covin, J. G. (1995). Contextual influences on the corporate entrepreneurship-performance relationship: A longitudinal analysis. *Journal of Business Venturing*, 10(1), 43–58.
- Zahra, S. A., Filatotchev, I., & Wright, M. (2009). How do threshold firms sustain corporate entrepreneurship? The role of boards and absorptive capacity. *Journal of Business Venturing*, 24(3), 248–260.
- Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of Management Review*, 27(2), 185–203.
- Zahra, S. A., Neubaum, D. O., & Huse, M. (2000). Entrepreneurship in medium-size companies: Exploring the effects of ownership and governance systems. *Journal of Management*, 26(5), 947–976.
- Zhao, M. (2006). Conducting R&D in countries with weak intellectual property rights protection. *Management Science*, 52(8), 1185–1199.
- Zhou, K. Z., & Li, C. B. (2012). How knowledge affects radical innovation: Knowledge base, market knowledge acquisition, and internal knowledge sharing. *Strategic Management Journal*, 33(9), 1090–1102.

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# Women's Entrepreneurship in Iran

Zahra Arasti and Neda Bahmani

**Abstract** Women account for half of the population in Iran, but in the last five years, the number of employed women has dropped by 14.2%, resulting in total women's unemployment rate of 19.8%. According to the 2015 World Economic Forum report, Iran is among the countries with a high gender gap in economy ranking 141 in terms of women's economic participation among the 145 countries. In the other hand, women's entrepreneurship does not seem to be enjoying an appropriate status in Iran and despite increased entrepreneurial activities by women, the ratio of businesses run by women to business run by their male counterparts are 2–10. Both contextual and structural factors influence entrepreneurial process; some are strengthening and some others are debilitating. So, if women and entrepreneurship are two important factors for growth especially in developing countries, it is particularly noticeable to understand what factors mobilize or prevent them from starting new businesses. The main contribution of this study are helping better recognition and understanding of ignored subject of women's entrepreneurship in Iranian context with distinctive socio-cultural characteristics and its specific requirements.

## 1 Introduction to Women's Entrepreneurship

Entrepreneurship is a key factor in developing countries; so, many countries focus on entrepreneurship and entrepreneurs to promote and develop them in their countries. Women play an important role in entrepreneurial economy in terms of their ability to create jobs (Martins 2004).

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In 2012, an estimated 126 million women were starting or running new businesses in 67 economies around the world. In addition, an estimated 98 million were running established businesses (Kelley et al. 2012). Also, in 2012, French women created 38% of single-owner enterprises. In the same year in Italy, women fully owned or majority-controlled about a quarter of all companies—more than 1.4 million. In Canada, 16% of all SMEs were majority-owned by women and almost half had at least one female owner in 2007 (Piacentini 2013). While the MENA/Mid-Asia region reports the lowest average TEA (Total Entrepreneurship Activity) levels among women (4%). Developed Europe and Asia along with Israel also have low rates (5%). The highest regional female Total Entrepreneurial Activity (TEA) levels can be seen in Sub-Saharan Africa, where 27% of the female populations on average are engaged in entrepreneurship. Latin America/Caribbean economies show comparatively high levels as well (15%). In only seven economies (Panama, Thailand, Ghana, Ecuador, Nigeria, Mexico, and Uganda), women have equal to or slightly higher levels of entrepreneurship than men (Xavier et al. 2013).

Both contextual and structural factors influence entrepreneurial process; some of these factors are strengthening and some others are debilitating. Recognizing these factors could facilitate entrepreneurship development. On the other hand, cultural beliefs about women vary across countries (Shane et al. 1991), but the majority of studies on women business owners have been carried out in the USA and Canada (Arenius and Autio 2006). So, if women and entrepreneurship are two important factors for growth especially in developing countries, it is particularly noticeable to understand what factors mobilize or prevent them from starting new businesses. Failure to understand these factors may result in the underutilization of women's human capital and thus the perpetuation of lower living standards and implementation of costly and ineffective policies (Langowitz and Minniti 2007).

In Iran, women constitute 49.25% of the population (Iran's population was 75 million people in 2010), while only 17.4% of them are economically active; this rate is far from the average rate of the economic activity of women throughout the world (30%). Also, unemployment rate is 10.4% (8.6% for men and 19.8% for women) (Statistical Center of Iran 2014).

Entrepreneurial activities in the past few years have shown good growth in Iran. According to the latest GEM report in 2013, TEA index has reached 12.3% in Iran and, in terms of this index, Iran has ranked 21st (among 70 countries), while rate of this index in 2012 and 2011 was 14.5 and 12.4% and Iran ranked 10th and 18th, respectively (Xavier et al. 2013).

In recent years Iranian women have had higher tendency to make both economic and social contributions; particularly in higher education, women have preceded men (more than 60% of university students are girls); but, unemployment rate is very high among Iranian educated women and this potential labor has not been efficiently used yet (Arasti and Akbari Joker 2009), so, it is essential to develop women's share in national economics and influence their unemployment crisis (Arasti and Akbari Joker 2009; Mirghafoori et al. 2010). The goal that could be achieved through developing women's entrepreneurship.

It is evident that there are numerous obstacles and problems on the way of business creation by Iranian women; so, studying women's entrepreneurship and barriers of women-owned businesses in this context could help to identify the existing restrictions, reform the future path, and ultimately increase women's individual and social efficiency.

This chapter presents how women entrepreneurs are motivated to enter business, how they finance their businesses and what are their obstacles, how they network with others in the society and what is the benefit of these networking, how they grow their businesses and what are their problems, how the socio-cultural context of Iran influences women's entrepreneurship, and finally how we can promote women's entrepreneurship in Iranian context.

## 2 Iranian Women Entrepreneurs and Their Motivations

Motivation is a response to the situation of a particular stimulus (Mc Clelland 1961). In the recent century, some psychologists, such as David Mc Clelland, believe that human has three needs including: *Needs for achievement*, referring to dynamics and trying to gain achievement based on specific criteria; *Needs for power*, as impelling people to act contrary to usual behaviors; and *Needs for affiliation*, meaning tendency to make connection and behave friendly with others (Mc Clelland, 1961).

Shane et al. (2003) investigated the role of motivation in entrepreneurship process; they studied the role of motivation in numerous human behaviors such as locus of control, tendency toward independence, perceptions, etc. They believe entrepreneurship is a process which starts by identifying opportunity and then continuing to generating ideas, evaluating opportunities, creating products/services, implementing human and financial resources, designing organization, and pursuing customer. Some or all motivations affect moving people from one stage to other stages of entrepreneurship process (Shane et al. 2003).

Despite the similarities in the motivations of women and men for starting a business, researches have shown many differences in this regard (Manolova et al. 2008; Jaimie et al. 1998). Some studies about women's entrepreneurial motivation are conducted on the sample of women entrepreneurs and some others are comparative studies between men and women. Men enter entrepreneurship to improve social status and family income, while women choose entrepreneurship to fulfill their aspirations (Jaimie et al. 1998; Hisrich et al. 2005), Kirkwood (2009) indicated that the primary theory development around entrepreneurial motivations has been to classify motivations into categories of push and pull factors. Push factors are characterized by personal or external factors (including a marriage break-up, or being passed over for promotion), and often have negative connotations. Alternatively, pull factors are those that draw people to start businesses—such as seeing an opportunity. In general, pull factors have been found to be more prevalent than push factors and businesses started by entrepreneurs who experienced push motivations are less successful (financially) than those built upon pull factors. While



men start business as job career choice, women choose it as life career (Gelin 2005). Men follow entrepreneurship to achieve financial goals; on the contrary, women enter entrepreneurship to achieve self-achievement (Lavoie 1992). Some research has pointed out that men enter business for financial issues, while women are motivated by the fulfillment of family necessity (Hisrich et al. 2005). According to many studies, the first reason for starting a business by women is self-independence (Hisrich et al. 2005; Buttner and Moore 1997). Other reasons are needing a flexible schedule (because women must balance work and family) and then more income. Indeed, push factors motivate women more than men (Stokes et al. 1995).

Global Entrepreneurship Monitor report divided entrepreneurship motivations into two opportunity-driven and necessity-driven categories. Opportunity-driven entrepreneurship refers to exploring the existing opportunities, while the necessity-driven one is the necessity of people in seeking opportunities. Women in the countries with low and average levels of income start business, because there is no other option in career for them and they enter entrepreneurship in order to make income for themselves and their family; in contrast, in high-income countries, they consider entrepreneurship owing to the opportunities (Kelley et al. 2011).

In Iran, Arasti (2006) studied 105 academic women entrepreneurs and showed that the most important motivations of women entrepreneurs were self-satisfaction and needs for power. Financial needs and security needs came later. In this study, a few women entrepreneurs mentioned “dissatisfaction with previous job” and “lack of progress in previous situation” as their motivations to start a business, while the majority of these women mentioned “identifying new opportunities” as an effective motive. These results indicated that, for Iranian well-educated women, entrepreneurship is opportunity- rather than necessity-driven. Also, according to Gelard (2007), motivations of Iranian women entrepreneurs include meeting economic needs and reaching job satisfaction, prestige, and power in the society, among which achieving job satisfactions is the most effective motivational factor. In a qualitative study by semi-structured, face-to-face interviews with 10 women entrepreneurs, Arasti and Valinejad (2011) found the main motivational factors of Iranian women entrepreneurs include: need for an appropriate job, helping society, job independence, achieving aspiration, proving personal talents and abilities (self-proving), discovering opportunities, financial independence, providing better situation in personal life, needing progress, self-growth, need for flexible job because of family responsibilities, disease of a spouse or family member.

And finally in a comparative study on Iranian women and men entrepreneurs in the industrial sector in Golestan province,<sup>1</sup> Arasti et al. (2012a) investigated 24 women and 72 men and found that men enter to business for earning income, job creation, using opportunities, helping society, self-proving, inherent satisfaction, and independence, while for women, job creation, helping society, self-proving,

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<sup>1</sup>A northern province in Iran.

earning income, inherent satisfaction, independence, and using opportunities are respectively the main motivational factors Arasti et al. (2012a).

Although there are differences between motivations of men and women entrepreneurs, the group of women entrepreneurs is not a homogenous one (Hughes 2006; Shabbir and Gregorio 1996; Orhan and Scott 2001). Hughes (2006) categorized women entrepreneurs based on their motivation in starting business in three types including:

First, *classic entrepreneurs* with financial independence challenge: These women have more income and human capital, are active in traditional jobs, work out of home, and employ others.

Second, *work-family entrepreneurs*: They seek a work-family balance and flexibility. Unlike classic entrepreneurs, this group has low-time and less-income tasks and work alone in their house.

Finally, *forced entrepreneurs*: They are motivated by unemployment, loss of job, and lack of work opportunities. They work individually and are similar to work-family entrepreneurs in terms of income and classic entrepreneurs in terms of work time.

In another research performed by Shabbir and Gregorio (1996), motivation of women entrepreneurs was classified into three categories of:

First, *personal freedom seekers* as women with dissatisfaction and exhausted works, who tend to have freedom in choosing their work time, work place, and co-workers; so, they decide to create business.

Second, *security seekers*, as those women who start business because of personal issues like death or retirement of their husband. They try to improve themselves and their family situation. Flexibility in self-employment is the main reason which encourages these women to start business.

Third, *satisfaction seekers*, as women who seek satisfaction and are almost householders without any work experience. Their motivation is to prove their abilities.

In an Iranian study, Valinejad (2011) categorized women entrepreneurs based on their motivation in five groups of:

First, *idealist entrepreneurs*: for these women entrepreneurs, identifying and proving personal talents and abilities, more job independence, and making their aspiration are more important.

Second, *successful entrepreneurs*: For these women, the following factors are the most important motivations: need for development, more financial independence, achieving growth and development in the society, and needing an appropriate job. They follow entrepreneurship to prove their abilities and lack of progress in their previous job.

Third, *forced entrepreneurs*: The main reason for these women is the inappropriate economic situation of family forced by husbands' illness or death. Women start business to pursue their goals of providing the family.

Forth, *social entrepreneurs*: Women who use their creativity to solve social issues in the society, spread humanitarian activities, and increase social capital. The main motivation of these entrepreneurs is to help the society.

Finally, *flexible entrepreneurs*: Women who focus on their families and quit their work because of their family responsibilities and less flexibility in the work. These women follow entrepreneurship to have more flexibility and work–family balance.

This section presents motivations of women entrepreneurs, their similarities with and differences from their men counterparts, and some non-homogeneity in the group itself. The results could help policy makers to promote women's entrepreneurship considering these differences despite the similarities with men. Also, the group of women entrepreneurs is not a homogenous one and an accurate program is needed to promote women's entrepreneurship.

### **3 Iranian Women Entrepreneurs and Their Access Financial Resources**

One of the most important obstacles on the way of women entrepreneurs is capital access (Coleman and Robb 2009). Many empirical findings have demonstrated differences between men and women in terms of accessing financial resources. They discussed that women-owned businesses have lower capital to start their business (Rosa et al. 1994; Verheul and Thurik 2001). Some researchers have shown that women entrepreneurs are less likely to use external financial resources (Cole and Wolken 1995; Haynes and Haynes 1999; Coleman 2000) and others have pointed out that women-owned businesses utilize different financial resources compared to men-owned businesses (Hisrich and Brush 1987; Lerner et al. 1997). Many researches mentioned more difficulties of women in financing their businesses. They found that women believe it would be easier for them to borrow money if they were men (Hisrich and Brush 1984; Anna et al. 2000).

As indicated by Verheul and Thurik (2001), gender has direct and indirect effects on financing pattern. When women- and men-owned businesses with the same non-financial characteristics differ in terms of using financial services and bank shopping pattern, there is a direct effect; in contrast, indirect effect refers to the differences between women- and men-owned businesses considering non-financial business attributes; these differences in business attributes may lead to differences in business financing. Women start their business with different goals and different structures. For example, Arenius and Autio (2006) identified that women-owned firms tend to be both younger and smaller than men-owned companies and they are characterized with lower sale growth rates than those owned by men. Constantinidis et al. (2006) argued that entrepreneurship should not be studied from the perspective of the characteristics of firms and owners. He believed that financing women-owned business depends on two factors of attributes of female-owned firms (i.e. firms' characteristics and strategic choices) and characteristics of women owners and women approach in running their businesses (i.e. individual factors). He discussed that human capital (education, knowledge, and experience) is a determinant factor for investors' attitudes and decisions.

Carter et al. (2003a) found that having graduate education in any field is a significant predictor for firms' ability to secure equity financing. While, most women entrepreneurs have low level of education and are more likely to encounter problems in accessing financing than women with higher degrees of education; higher education and additional training help women run businesses mostly in traditionally male business sectors and it seem to be the most advantageous factor in terms of financing. In terms of experience, women business owners have less industrial experience than their male counterparts and investors may underestimate them and their work (Carter et al. 2003b). Women usually have less financial experience, which leads them to more difficulties than men business owners (Arenius and Autio 2006). Also, perception of less business management experience or less financial competence might lead bankers to reject the loan applications of women entrepreneurs (Constantinidis et al. 2006).

On the other hand, the success of women entrepreneurs in raising equity capital may also depend on who they know or their amount of social capital (Carter et al. 2003a). The overlap of the entrepreneur's network structure with that of venture capitalists is an important factor in determining the likelihood by which entrepreneurs will be able to find private equity funding. They have significantly fewer years of relationship with their financial institutions, reflecting that women have been deprived of strong financial networks (Orser et al. 2006). According to role investment theory, women's tendency to invest in household roles (parenting, homemaking, etc.) would imply gender differences in the investment of commercial activities and hence managerial experience, gender differences in social networks (thereupon, business relationships), and time allocations to business development (Orser et al. 2006), while gender discrimination causes differences between male and female business owners in terms of the availability of bank financing (Fabowale et al. 1995) and can impress the SME financing context in a variety of ways, including lower approval rates or differences in terms of financing and degree of difficulty presented in the application process (Orser et al. 2006).

In some cases, women-owned businesses are asked for higher collateral requirements and are charged with a higher interest rate than similar men-owned ventures when borrowing from banks or other financial institutions (Orhan and Scott 2001). Absence of collateral has been reported by women as important barriers to finding debt financing for their businesses (Constantinidis et al. 2006). Klapper and Parker (2011) discussed property laws and believe that married women may not be deemed creditworthy, since they do not possess the title to their land or house, which might be due to unequal laws of inheritance. Although women might not be legally prohibited from obtaining licenses required for accessing certain types of financing, evidence from Africa shows that, in many instances, only male heads of households are able to receive them successfully. Similarly, in many Middle Eastern and South Asian countries, women are required in practice to have a father or husband cosigns a loan, even though banking laws do not require it in principle.

Perceived discrimination, even if not founded, may result in "discouraged borrowers" syndrome in the equity equivalent and limit women owners' applications for, and access of, equity capital (Orser et al. 2006). Some studies have shown that

rejection rate is higher for women than men entrepreneurs. Canadian Bankers Association (CBA) in 1997 demonstrated that the rejection rate of bank loan applications amounted to 23 and 14% for women-owned businesses and men-owned ventures, respectively (Constantinidis et al. 2006), while Coleman and Robb (2009) indicated that women are no more likely to be turned down for loans compared to men. Orser et al. (2006) found that, in Canadian firms with controlled firm size and industrial sector, there are no differences between male and female loan applications. They discussed that there is no discrimination in terms of approval/turndown rates as to debt financing and differences in turndown rates can be accounted for by systemic differences between the characteristics of male- and female-owned businesses. Studies from industrialized countries including the United Kingdom, USA, Canada, and New Zealand and from certain developing countries, such as Ecuador and Peru, have found that women applying for funding generally do not face arbitrarily higher denial rates than men, suggesting that gender differences in the use of credit might be explained by differences in the demand for external financing (Klapper and Parker 2011). For example, women are less likely to apply for bank loans (Treichel and Scott 2006), they prefer to borrow using credit cards and thus avoid the necessity of dealing with banks or lending officers (Robb and Wolken 2002), they apply for significantly smaller amounts of capital than men and these loans are not enough capital to fund the growth of their firms (Alsos et al. 2006), and they tend to use internal rather than external sources of equity for their firms (Chaganti et al. 1995). Also, Carter et al. (2003a) used a sample of over 200 women business owners and found that only 17% of their sample had any type of equity investment. Also, in Diana Project, Brush et al. (2002) found that, between 1953 and 1998, less than 5% of total venture capital funding went to women-owned firms. They concluded that this low level of funding can be at least partially due to the relatively small number of women employed in the venture capital industry.

Constantinidis et al. (2006) found differences in both demand and supply side patterns when studying women entrepreneurs in Belgium. Ironically, although 86% of their loan requests were approved, almost 50% of the surveyed women indicated that they experienced barriers in their attempts to secure loans. When they categorized the firms by growth potential, the authors found that women in high growth or traditionally male-dominated lines of business encountered fewer gender-related barriers to borrowing than women in more traditional services or retail lines of business.

In an Iranian study on men and women entrepreneurs in the industry sector, Arasti and Kanani (2011) found that women apply for loan less than men. When asking about the priority of their reasons for lack of loan applications, *difficulties in process of loan application*, *long time to pay loans back*, *loan interest*, *heavy collateral*, and *fear of inability to pay back the debt* were respectively mentioned as the reasons. also, this study found there is no difference between men and women respondents about loan interest and time to pay back loans because of dependence on banking systems (which is equal for both genders); but rejection rate for women is more than men. 45.8% of women had their demands rejected at least once, while as for men, this percentage was 15.3%. However, in this study, there was no significant difference in education of men and women, while women had less

experience in industry and management than men. Also, women had less relationship with financial institutions and banks which led them to have a weak social capital compared to men.

In this section, the most important obstacles of women entrepreneurs are studied and gender differences are mentioned. These differences demand for an appropriate program to women's business financing which could decrease their difficulties in accessing financial resources.

#### **4 Iranian Women Entrepreneurs and Their Social Networks**

Network is defined as a special relationship between people, goals, or events which are related to each other (Seufert 2000). In entrepreneurship which is a social role, network is defined as "a supportive relationship by people in firms and organizations". Jack and Rose (2010) defined network building as "a system that enables entrepreneurs to access resources which s/he does not have control on it". O'Donnell et al. (2001) investigated networking in entrepreneurship studies and found two mainstream approaches: inter-organizational networks and personal networks. There are numerous definitions of personal networks; however, a comprehensive definition is: "In every competitive environment, each actor has a network of relationship which consists of people who know, are known, and those who know him/her, even s/he does not know them" (Širec and Crnogaj 2009).

In the process of value creation by identifying and exploring opportunities, entrepreneurs have to create social networking in order to access resources and information. Indeed, if entrepreneurs develop their social networks or could reach a better situation in the network, they will access more resources and opportunities which could then facilitate their business development (Hulsink et al. 2009).

Networks have a crucial role in increasing entrepreneurs' ability (Hulsink et al. 2009). American entrepreneurs, in the early start-up, allocate approximately half of their time to creating new relationships and networking with other entrepreneurs and the related firms (Aldrich and Zimmer 1986 cited by Arasti and Akbari Jokar 2007). Hampton et al. (2009) described network roles in entrepreneurial process as:

- Quickly providing information of precise and qualified opportunities
- Consulting in terms of evaluating and choosing ideas for exploitation
- Supporting entrepreneurs
- Motivating
- Decision making
- Role modeling
- Supporting entrepreneurs in providing resources.

Also, Gnyawali and Fogel (1994) cited by Arasti and Akbari Jokar (2007) mentioned four important effects of networks on entrepreneurship: motivating,

presenting role models, consulting with expert, and finally accessing opportunities, information, and resources. Networks have multiple effects on women business owners such as consulting, financing, accessing professional managers and employers, partnership, and relationship in a chain value (Kelley et al. 2011). Women entrepreneurs use information and guidance in their networks more than financial resource (Arasti and Akbari Jokar 2007). Although women and men entrepreneurs have different personal and social networks (Hampton et al. 2009; Dubini and Aldrich 1991), both join social networks in order to gather information and access resources. There is a difference in networking pattern between women and men entrepreneurs which is rooted in their differences in three life aspects of women including work environment, marriage and family, and finally social life (Renzulli et al. 2000; Rutashobya et al. 2009). Studies on women's entrepreneurship have shown that women entrepreneurs normally take their network members from spouse, male friends, and finally female friends (Renzulli et al. 2000). Most of the help that women entrepreneurs receive from their network is in terms of emotion, planning, daily assistance, physical and financial support, and introduction of proper people, and making new relationships (Kleyver 2008; Rustashobya et al. 2009). So, women entrepreneurs accept the people who have kinds of business skills lacking by the entrepreneurs as well as some experiences, especially in business (Hampton et al. 2011).

Hisrich and Brush (1987) found that participating in business associations and friend associations, especially with women members, is very important for emotional support and business guidance. While limited use of mentors by women entrepreneurs and their problems to penetrate into male entrepreneur networks are women's known barriers for developing successful businesses (Širec and Crnogaj 2009). A Canadian study found that women entrepreneurs knew the importance of membership in a business association; but, they did not have enough time to join these networks (Brush et al. 2004). Also, the 2011 GEM report showed that women in low-income countries have smaller networks with limited geographical access; so, they have more focus on personal, but strong, networks, while, membership of woman entrepreneurs in a larger group is important, because it enables woman to see more role models and access resources (Kelley et al. 2011). One of the reasons for less probability of entrepreneurship by women than men may be the weakness of women's networks in terms of presenting role models and helping access resources (Klyver et al. 2007).

An Iranian study on a sample of 105 educated women entrepreneurs found that spouse and children (for married) and parents (for singles), friends, business partners, consultants, potential customers, and relatives formed women entrepreneurs network (Arasti and Akbari Jokar 2007). Also, results showed that these women used networks respectively for emotional help, providing information and executive support, helping make proper relationships, long term planning, and finally financial help (Arasti and Akbari Jokar 2007). Although similar to previous researches, results of this Iranian study mentioned the importance of networks for women's entrepreneurship and its role in motivating, expert consulting, and accessing opportunities, information, and resources, but the important role of networks in providing role models was not

considered, which could be explained by the limited networks of Iranian women entrepreneurs to close relatives and inefficiency of existing networks of women entrepreneurs in providing information and proper support.

Another issue is the variation of women entrepreneurs' network based on the business lifecycle. For example, women, in the early start-up, mention the role of networks to access information and validate ideas, while women, in nascent businesses, emphasize the role of networks in avoiding isolation and create necessary support at the early stages of starting business. For established businesses, networks are important to develop business by providing customers through enhancing verbal credibility. However, at all the stages of business, networks have a considerable effect on time saving by providing information to decision making and validating their decisions (Hampton et al. 2009).

A qualitative Iranian study on a sample of 10 women entrepreneurs members of Tehran Chamber of Commerce investigated network of Iranian women entrepreneurs in terms of changes in four dimensions of network role, network combination, networking challenges, and perception of networking importance. This work tried to answer the following question: How do social networks of women entrepreneurs change over time from the early stage of business to establishment stage? Results of this study (Arasti and Tarzamani 2013) showed that role of networks in accessing opportunities, information, and resources is generally more emphasized in establishment phase than the early stage of business, while its role in motivating and supporting is more highlighted at the early start-up. Also, there is no difference in its role in terms of providing expert consulting in both business stages. Finally, its role in providing role models is marginal at both business stages.

Other findings of this research about the combination of women entrepreneurs' network showed that members of these networks are almost men at both business stages and the roles of family and relatives were reduced at the establishment stage; in contrast, more experts enter networks of women entrepreneurs. Results of this study showed that networking challenges of Iranian entrepreneurs at the early start-up were more caused by environmental-driven challenges with a gender discriminative outlook. Lack of positive attitude toward women, absence of credit for them and difficult nature of relationship with women entrepreneurs by men are the main environmental challenges. On the contrary, some barriers such as lack of motivation to communicate and difficulties in identifying expert people will appear at this stage. They also deal with individual challenges such as "lack of communicating skills" and "lack of trust in others" at both stages; "time limit" became more challenging at the establishment stage. Finally, the results of this study on the importance of networking for women entrepreneurs demonstrated that, over time, Iranian women entrepreneurs realized the importance of networking development for their businesses. Trying to have more internal and external relationships and communication from the early start-up to establishment stages could explain this finding. Also, women entrepreneurs' networks became more formal at the establishment stage (Tarzamy 2012).

In this section, networks of women entrepreneurs, their difference in networking pattern, and their difficulties in networking are discussed. This literature review



points out the importance of networking for the development of women entrepreneurship despite their barriers for networking. So, a concrete development program for women's entrepreneurship should consider these results to help women entrepreneurs to network more efficiently.

## 5 Iranian Women Entrepreneurs and Their Business Growth

Growth is one of the development business process stages which has never experienced by numerous businesses of women during their lifecycle (Morris et al. 2006). Although the number of women-owned businesses grows by three times more than men's, researches have shown that a major part of women's businesses is small and not developed (Buttner 1993; Reshmi 2002; Morris et al. 2006; Brush and Gatewood 2008; Roomi 2013). Morris et al. (2006) conducted a study entitled "Dilemma of Growth", in which they stated that lack of growth in women's businesses is a decisive choice of woman entrepreneurs. They debated the influence of entrepreneurs' growth orientation on business growth and believed that less growth orientation in women entrepreneurs could lead to less growth in their businesses (Morris et al. 2006).

Many individual and environmental factors affect women's business growth. Results of a qualitative study on a sample of Iranian experts on women's entrepreneurship (Arasti et al. 2012b) pointed out that growth orientation is a complex phenomenon which is affected by personal factors including goals (economic and non-economic), motives (push and pull factors), female identity (internal and external stakeholders), and individual characteristics (personality and demographic characteristics and personal attitudes and skills).

Business goals are the mental demand of entrepreneurs (Feizbakhsh and Dehghanpour 2002) related to organization or individual; individual goals refer to acquiring knowledge, skills, and potential abilities to improve operation. Research has shown that women with high growth orientation follow noble, real, and measurement goals (Gundry and Welsch 2001). Authors have believed that women make a balance between their economic goals such as sale and profitability and non-economic ones such as quality of products and creating social value. Most important non-financial goals for women entrepreneurs are *self-satisfaction*, *serenity*, and *helping others* (Morrison et al. 2003; Brush et al. 2006; Roomi et al. 2009; Brush and Gatewood 2008).

Motivations are the most important individual factors influencing women's growth orientation (Roomi et al. 2009). Women who are opportunity-driven have more growth orientation than necessity-driven ones. Indeed, internal motives affect growth orientation more than external ones (Morris et al. 2006). For example, Roomi et al. (2009) showed that motivations such as *earning sufficient income to support family*, *starting a successful firm*, *earning income with work-family balance*, *offering*

*a valuable service, and creating wealth* affect growth orientation of women entrepreneurs. Although entrepreneurial motivation is known as the predictor of success in entrepreneurship, there is no consensus on how motivations affect entrepreneurial efficiency (Arasti et al. 2012a). Roomi et al. (2009) found that pull factors motivate entrepreneurs for business growth. Also, motivations such as *tendency to be rich, long term financial security, and being in challenging* are related to business growth orientation and then affect business growth (Morris et al. 2006).

Arasti et al. (2012a) studied the influence of women's motivations on business growth. Results showed that the group of achieved entrepreneurs with strong motivations such as *social development, financial independence, and need for a proper job* attended to all aspects of business growth, while forced entrepreneurs whose major motivation for entrepreneurship was *making better family life* only had growth in sales, because they wanted to increase their income and help the family. Finally, the group of work-family entrepreneurs motivated by work and family balance controlled their businesses in terms of the number of employees and product diversity in order to balance work and family and increase market share and sales to make a better family situation.

Another Iranian study on a sample of 53 women business owners showed that pull motivations such as *self-proving, tendency toward being independent, wealth creation, work flexibility, better life, job creation for relatives, and internal stability* affect growth orientation, while push motivations including such as *death of spouse/divorce, dissatisfaction with previous job, unemployment, and being fired* are not effective (Panahi 2012).

Also, feminine identity affects the growth orientation of women entrepreneurs; it refers to how women business owners insist on relationship with feminine networks of customers, employees, partners, and business stakeholders in general. Morris et al. (2006) believed that the insistence of women business owners on relationship with the network of feminine stakeholders negatively influences growth orientation. The results of Panahi (2012) showed that tendency to attract women as internal stakeholders (employees and women partners) affects Iranian women's business growth orientation; but, it is not the same for external stakeholders (customers, suppliers, and investors). This study also showed that individual factors such as skills (technical and managerial), attitudes (attitude to growth and success and attitude to barriers), and personality (being energetic, self-devotion, risk taking, opportunity recognition ability, need for achievement, and moral commitment) influence women's business growth orientation.

On the other hand, environmental factors differently influence women's business growth orientation (McGregor and Tweed 2002; Brush et al. 2006). Results of a qualitative study on the growth orientation of Iranian women entrepreneurs concluded that growth orientation is affected by external factors including economic factors (conditions on the product market, conditions on the labor market, economic conditions, and accessing financial sources), socio-cultural factors (cultural norms and values, effects of social networks, and work-home conflict), and legal factors (banking rules and regulations, tax laws, and labor law) (Arasti et al. 2012a).

Another barrier in women's business growth is financial resources (Morris et al. 2006; Davidsson 1989). Morris et al. (2006) found that finding right partners, difficulty in accessing initial capital, liquidity guarantee, and lack of investors' trust in women's abilities are barriers on the way of women's business growth.

Also, socio-cultural issues could be important for women's business growth orientation. Stereotyping along with limited access of networks are barriers for managing women's business. Although some of these barriers are due to small businesses and their complexity rather than gender issues, women deal with special obstacles which are somehow personal or cultural (Morris et al. 2006). Some feminist theories confirm that growth orientation of women entrepreneurs is different from that of men; but, it is because of gender discrimination which women face over time. They believe that, if women have the same opportunities as men, they could have the same growth orientation (Cliff 1998). Some authors mention different responsibilities of women as an effective factor for their business growth (McGregor and Tweed 2002). McGregor and Tweed (2002) believed that conflicting roles of women business owners hinder them from growth and affect type of business and management.

The results of Rezayee (2012) on a sample of 53 Iranian women business owners showed that economic factors (product market situation, labor market, access of financial resources, and macroeconomic factors), socio-cultural factors (social networks, social beliefs and values, and conflict between work and family), and legal factors (rules of bank and taxation rules) are effective in women's business growth orientation.

This section on women's business growth shows some gender differences in growth orientation and some of the effective personal and environmental factors on it. So, women with different motivations for starting a business have different growth orientation, which is an important issue for policy makers in terms of promoting women's entrepreneurship.

## **6 Iranian Women Entrepreneurs and Their Socio-cultural Environment**

Socio-cultural factors influence women's entrepreneurship (Aldrich et al. 1989). Also, socio-cultural complexity such as ethnic diversity and religious value system are important factors for women's entrepreneurship in developing countries (Nilufer 2001).

It is important to note that social norms and traditional values are different in each region and country and acceptance of women's participation in entrepreneurship depends on expectations and their social values that are different in each country. For example, in South Africa, accepting male domination as well as considering house holding and children care as the first duty and responsibility of women hinders women from starting a business (Sekrun and Leong 1992). In the Philippines,

women have limitations in reaching high-level management posts because of the society's belief that they should marry and have family. This issue influences type of women's experience which is crucial to business success (Epstein 1993). Nilufer (2001) believes that generally in developing countries, women are exposed to traditions and socio-cultural issues that lead them to the lack of confidence and affect their decisions for starting a business, venture financing, bank's unwillingness to their projects, and disapproval of their decisions and loan guarantees.

Negative attitude of family and the society toward women has been usually mentioned as an obstacle for women entrepreneurs. For example, in the Indian society, women entrepreneurs state they have less support than their men counterparts (Shivani et al. 2006). Some older Iranian studies have mentioned negative reaction of the society to women's entrepreneurship, especially in governmental organizations, and some insecurity for women in the society related to traditional beliefs about women in Iranian society (Saber 2002). Moreover, Arasti (2006) found that educated women are supported by close friends and family members and this positive attitude is effective for women's decisions in terms of starting a business. Interestingly, women entrepreneurs could change some negative attitudes to positive ones by their performance in business over time. For example, only 60% of spouses support woman entrepreneur in the early start-up step, while this is changed to 82% after launching business. This issue may be due to time working flexibility in entrepreneurship compared with work as an employee that helps women balance work and family and bring more family satisfaction.

On the other hand, many researchers have referred to role model as an important factor in motivating women entrepreneurs (Brockhaus and Nord 1979; Reynolds et al. 2005). A survey in Canada showed that 33% of women entrepreneurs have their father in business (Hisrich and Brush 1984). Also, Hisrich and Brush (1984) studied 48 women entrepreneurs to show that 50% of respondents are first child and influenced by their parents as their role models. However, results of an Iranian study demonstrated that role model did not remarkably affect educated women entrepreneurs, because few women entrepreneurs had been recognized in the society at that time. Just 41% of the respondents had role models in their family and 52% knew an entrepreneur among their friends and relatives (Arasti 2006).

Work-family balance is another important issue for women entrepreneurs. Entrepreneurship could facilitate this balance by more time work flexibility. De Bruin et al. (2006) believes that the main reason women choose self-employment is flexibility in time working and possibility of work-family balance. However, social values and society's expectations often affect woman's lives. The social values which assign house holding and child caring as the first responsibility for women along with the importance that women give to the welfare of their family and children lead to the conflict between work and family values (Gelard 2007). A study on 220 Turkish women entrepreneurs showed that, despite the effective impact of entrepreneurship on their social and economic life, they encounter many problems and difficulties such as stress, high expectation of family members, and lack of work-family balance (Ufuk and Özgen 2001). The results of Arasti (2006) demonstrated that 36% of women entrepreneurs mentioned work-family balance as

a vital problem in starting business. It was noted that 46% of responders had the responsibility of taking care of children during the early step of starting business and 70% worked in business more than 40 h in week.

Also, social values and believes are normally a barrier for women's entrepreneurship in traditional societies. Most researches in the Iranian society have referred to socio-cultural factors as barriers to Iranian women entrepreneurs. For example, Gelard (2005) found that environmental factors including economic, socio-cultural, political, and technological factors in Iranian context do not support women entrepreneurs. Also, Javaheri and Ghozati (2004) showed family, training and education system, stereotype beliefs, mass media, and social norms are environmental barriers to women entrepreneurs. Mirghafoori et al. (2010) identified thirty barriers on women entrepreneurs and classified them into five categories of family, education system, personality traits, financial and socio-cultural dimensions. But, another Iranian study (Arasti 2006) on a sample of women entrepreneurs with higher education degrees showed different results. In this study, socio-cultural believes concerning women's entrepreneurship, women in management, and women's work were studied as follows:

- There is no need to women's work if the family does not need their salary.
- Work of young women in the society is not allowed.
- There are some gossip about entrepreneurs (they are ambitious, ...).
- Men's position in the family is attenuated if women work.
- House holding is the first responsibility of women.
- Women's work in some occupations is unacceptable.
- Women's work in male-dominated occupations is not allowed.
- Women's work as a manager is not taken seriously.
- Society does not trust in women's ability at management levels.
- Women need to get their spouse's permission to leave the country.
- There are some insecurities for women in the society.
- Staying lonely in a hotel is not permitted for women.

Results showed that these social believes did not affect educated women's decision to start a business. The majority of these women found a solution for crossing these barriers and proving their abilities.

Also, in an earlier Iranian study on women's entrepreneurship, Arasti et al. (2012a) investigated the environmental factors affecting women's business growth orientation. In this study, the role of social beliefs and role conflict was mentioned by women entrepreneurs. Women tried to make a balance between work and family. Despite the fact that family life is not considered to hinder the career development of women, family responsibilities are a part of culture in countries like Iran with religious and traditional beliefs and women are continued to be viewed in this nurturing role. They experience greater family work conflict and it is too difficult for them to be a complete mother, wife, and manager. Therefore, they use special strategies to merge both business and family lives and manage them both effectively and intentionally. So, they try to keep their business small, because they

know they would have more conflicts if they grow their businesses. One of the consistent influences on female entrepreneurs' growth orientation throughout this study was the importance of cultural norms and values. Many female entrepreneurs reported that they have to work harder to prove their competence as business owners to customers, suppliers, and other resource providers. Actually, stereotypes and gender-based discrimination can affect women's economic activities, directly or indirectly. Beliefs such as "women managers are not good enough for big capitals", "women's mind is limited", "women are emotional", "women may leave their work, because the family is their first priority" directly affect the growth orientation of women entrepreneurs. On the other hand, according to the results of this study, these social values could also affect other issues such as business financing, finding a business partner or investor, and recruiting appropriate work force. In addition, values can make the process of obtaining loans more complicated because of the society's lack of confidence in women's ability (Arasti et al. 2012a, b).

In this section, the socio-cultural factors influencing women's entrepreneurship are discussed and an imperative need is demonstrated for dealing with these barriers to increase women's contribution in social and economic development, especially as a self-employed person or entrepreneur.

## **7 Developing Women's Entrepreneurship in Iranian Context**

Women's entrepreneurship is on the rise everywhere in the world and female entrepreneurs are succeeding in every imaginable field, even the most "masculine" ones. Clearly, the growth of female enterprises is good for economies and beneficial for societies and women themselves through increasing their self-esteem, life quality, life expectations, and so on (Coughlin 2002); but, it differs from country to country, because societies differ in their perceptions and customs about working women and working in business. Overall, levels of education and development can influence societal beliefs. In addition, social acceptance about child care while pursuing a career and the cost and availability of childcare can be of utmost influence. Also, the cooperation and willingness of stakeholders, like investors, creditors, employees, suppliers, and customers are very important. When these factors act as impediments, society misses an opportunity to gain from the entrepreneurial energy of half of its population (Kelley et al. 2011). Women entrepreneurs are vital contributors to today's economy and entrepreneurial activities among women continue to gain attention worldwide. In the United States, more than 9.1 million firms are owned by women, which employ nearly 7.9 million people and generate \$1.4 trillion sales in 2014. Women-owned firms (50% or more) account for 30% of all privately-held firms and contribute to employment by 14% and revenues by 11% (NAWBO 2014). In Canada, the number of women entrepreneurs in the past 15 years has grown by 50%, annually contributing by more

than \$18 billion to Canada's economy (CIBC World Markets 2004). In Europe, women constitute 52% of the total population; but, they are only one-third of self-employment or all business starters in the EU. Women thus represent a large pool of entrepreneurial potential in Europe; but, when establishing and running a business, they face more difficulties than men, mainly in terms of access to finance, training, networking, and in reconciling business and family (European Commission 2013).

In other parts of the world, women's entrepreneurship development in Asian developing countries has also a tremendous potential in empowering them and transforming society in the region. Today, businesses owned by women contribute to 82,600 or 16% of total 548,267 businesses in Malaysia. Yet, in many countries, especially those in which level of economic development reflected by the level of income per capita and degree of industrialization is still low, this potential remains largely untapped. Less than 10% of the entrepreneurs in South Asia, including Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka, are women (Tambunan 2009).

Despite the growth number of women entrepreneurs all over the world, a significant gender gap exists in all countries for both early stage entrepreneurial participation and established business ownership. Compared to men, women's participation in entrepreneurship ranges from the ratio of 20:100 in Republic of Korea to 120:100 in Ghana. The lowest levels and ratios of women's participation can be found in the MENA countries, in which for every woman entrepreneur, there are about two to four men. Based on GEM data, Iran has a low level of female participation with 25–100 ratio (Allen et al. 2007).

The relatively low representation of women entrepreneurs can be attributed to many significant barriers that are still left for the women establishing and growing businesses; these barriers prevent or hinder the development and growth of firms (Sadi and Al-Ghazali 2012). One of the most important challenges of women entrepreneurs is in legal, traditional, custom, cultural, or religious terms which prevent them from opening their own businesses (Tambunan 2009).

Women entrepreneurs constitute only one-third of all entrepreneurs (Damwad 2007). An important question in entrepreneurship studies is whether women entrepreneurs face specific problems in setting up a business that are significantly different from those faced by male entrepreneurs or not. This question was discussed in the previous sections in this chapter. As indicated by Roomi and Parrott (2008), women entrepreneurs experience a number of problems and issues that are greater than those faced by small business people in general. However, there is a potential for enhancing the level of women's entrepreneurship (Damwad 2007) and, as indicated by Welter (2004), an integrated strategy for fostering female entrepreneurship needs to consider that there are shortcomings in the institutional (political and societal) environment, possibly restricting women's interest in entrepreneurship and thus determining the extent of female entrepreneurship.

In some Arabic Muslim countries, culture and attitudes may prevent women from playing a full economic role. It can be argued that the distinctive masculine-dominated culture of such countries is historically and religiously rooted

and thus strongly influences female participation. It seems that, in a general sense, while entrepreneurship is an attractive option for all young well-educated people, there remain considerable cultural constraints for females (El Harbi et al. 2009). Moreover, Westerners should be cognizant that Muslims, like Christians, Jews, or adherents to any religious or cultural group for that matter, are not a monolithic group. There are intra-group differences within Islamic countries. Without this understanding, the view of Muslim customs may become distorted. Although Islam is the shared religious base, not all Muslim countries are identical in terms of gender relations and conventions (Gray and Finley-Hervey 2005). The key point for consideration is that there is nothing in *Holy Quran* (Book for Muslims) which prevents women from working outdoors. *Holy Quran* cites the example of Bilqis (the Queen of Sheba) and reports her political skills, purity of her faith, and independent judgment. No specific Quranic injunction prohibits women from managing and owning an enterprise (Roomi and Parrot 2008). Muslim women were engaged in many kinds of trade and managed businesses. Prophet Mohammad (PBUH) himself promoted women in various spheres of activities, one of which was trade and commerce was one of them; his own wife as one of the biggest traders of that time was the testimony to this point (Abbas 2012 cited by Ullah et al. 2013). But in some Islamic societies, women are further discriminated and subjected due to socio-cultural values and traditions in the name of religion. Their restricted interaction with men apparently limits their opportunities to acquire business management and technical skills and consequently fully develop their entrepreneurial potential (Roomi and Harrison 2008).

A study in Middle Eastern countries has shown that socio-cultural norms in most of these Muslim countries restrict women's involvement in the market place and networking and limit their mobility. Also, the time involved in regular family work restricts women even in terms of thinking about other issues related to starting business. In this study, it is argued that social norms about women in all areas of life since their childhood create a timid mindset among them in general which can be seen in workplace or business. Apart from education, women lack guidance in selecting the career field and job and in other areas of life. Motivation among the women in the Middle East is low and various factors of motivation are few compared to other regions. Lack of education and suppressed conditions, combined with social norms, provides sympathetic corner toward women, which in turn creates dependency and lack of seriousness in undertaking work. Due to this reason, women in the Middle East are shying away from more responsibilities and the self-imposed duties needed for development and necessary for taking business activities in their life time. Also, lack of social networks in the society for housewives and working women acts as a barrier for motivating them in terms of undertaking entrepreneurial activities (Mathew 2010). The recently released gender GEDI (Global Entrepreneurship and Development Index) has found that, in nearly three quarters of the 30 examined countries, the conditions for female entrepreneurship and business growth are unfavorable. According to this report, the main weaknesses in the MENA region are low levels of women's equal rights, less favorable attitudes toward women in executive positions, and fewer women in



leadership positions. On average, only 11% of the managers and senior officials in these countries are women. Access to high-quality and affordable childcare is also relatively low (GEDI 2014).

Iran is an Islamic, but not Arabic, country. Recently, more and more Iranian women are entering the workforce to support economy of their families and are making gains through job opportunities (Gray and Finley-Hervey 2005). Women represent 49.1% of the 75 million people of Iran; but, only 11.7 of women are economically active. The number of young highly-educated women has increased in the past few years (women represent more than 60% of Iranian universities); yet, there are 205,000 unemployed highly-educated women in Iran; i.e. 43.6% of the young women aging 15–24 years old are unemployed (Iranian Annual Book of Statistics 2012). A number of initiatives have been recently taken by the government (Fourth Four-year Iranian Development Plan 2008; approved law of Iranian government 2005) to promote entrepreneurship in Iran; but, there is no supportive program specific to women entrepreneurs. As for women entrepreneurship in Iran, it is just beginning to interest the national community. According to GEM report of Iran, the 2012 indicator of total entrepreneurship activity (TEA) was 8.88 and Iran ranked 21st among 67 GEM member countries. This indicator was 6 for women and Iran ranked 21st in this regard (Xavier et al. 2013).

Like many societies, the Iranian society defines the role of women mainly through family and household responsibilities. Gender equality is codified in the Iranian constitution, but family's norm still favor the male breadwinner model. Research on women's entrepreneurship is very limited in the Iranian context. A case study on 20 Iranian women entrepreneurs has focused on different barriers for women entrepreneurs and presented the socio-cultural constraints in three aspects (Saber 2002): First, negative social reaction that causes barriers in women's presence in the society. The society does not believe in the managerial skills of women and most women entrepreneurs have suffered from this social attitude. Second, the improper behavior of related organizations; for many functionaries, it is so hard to accept that a woman could create a business without the help of a man. Third, social insecurity; social norms result in not only contradiction to women entrepreneurs, but also social insecurity of women in some aspects.

Meanwhile, studies on the Iranian context have demonstrated that the Iranian culture is complex. Hofstede (1980) pointed out that the Iranian culture is neither male- nor female-dominated; but, it is at the medium range, while 49% of entrepreneurs believe that the Iranian culture does not support personal success resulted from personal efforts (Zali and Razavi 2008).

Iranian women entrepreneurs, like other women entrepreneurs especially in developing countries, face many difficulties including access to financing (Arasti and Kanani 2011), networking, work-family balance, and gender discrimination (Javaheri and Ghazati 2004; Arasti 2006). However, they represent a large pool of entrepreneurial potential in Iran. The 2011 World Bank's report suggested that productivity and development could increase by as much as 25% in some countries if discriminatory barriers against women are removed. Removing barriers, such as discriminatory property and inheritance laws, cultural practices, lack of access to

formal financial institutions, and time constraints related to family and household responsibilities, will create greater opportunities for sustainable enterprises run by women. This issue in turn will contribute to women's economic empowerment and gender equality as well as helping to generate sustainable growth and jobs.

Different economies have different possibilities to solve such problems based on their economic, cultural, and political status. For example, the United States has solved this challenge by creating a governmental office of women's business ownership, with program delivery responsibilities such as women's business centers, informational seminars and meetings, and/or web-based information for women who want to start/grow a business. This activity also encourages the formation of a publicly-funded private-sector membership advisory group on the matters related to women's entrepreneurship, which provides women entrepreneurs and their organizations with an official voice in the policy and program development decisions affecting women's entrepreneurship. Canada has also chosen this solution (Storey 2004).

OECD countries have proposed to increase the ability of women to participate in the labor force by ensuring the availability of affordable childcare and equal treatment in the workplace. More generally, improving the position of women in the society and promoting entrepreneurship generally will have benefits in terms of women's entrepreneurship (European Commission 2013). In 2009, European Commission inaugurated the European Network of Female Entrepreneurship Ambassadors to serve as an inspirational role model for potential women entrepreneurs (European Commission 2013), which was followed in 2011 by the European Network of Mentors for women entrepreneurs, who voluntarily counsel women starting and running new business. Expanding networks of women entrepreneurship ambassadors and mentors was regarded important and creating/fostering female investors and networking among women entrepreneurs was deemed important (European Commission 2013). As indicated by Storey (2004), these networks are major sources of knowledge about women's entrepreneurship and valuable tools for its development and promotion. Cooperation and partnerships between national and international networks can facilitate entrepreneurial endeavors by women in global economy.

In another effort, European Commission launched an Entrepreneurship 2020 Action Plan and proposed actions at all levels (national, regional, and local) in 3 action pillars (European Commission 2013):

- Entrepreneurship education
- Environment where entrepreneurs flourish and grow
- Awareness and outreach to specific groups.

In this regard, Entrepreneurship platform for women entrepreneurs includes:

- Online mentoring, advisory, educational, and business networking platform for aspiring/women entrepreneurs
- Information on access to finance and markets and events, including stakeholders and private schemes

- Making online, deepening, and expanding the current networks of national ambassadors and mentors supports women entrepreneurship at national and regional levels by promoting the exchange of the best practices between Member State.

In Malaysia, MECD (Ministry of Entrepreneur and Cooperators Development) has specifically increased its training program and financial assistance for women. They are also given better access to new technology, modern methods, and potential economical activities. One of the MECD's agencies, INSKEN, functions to monitor training programs to all the working agencies involved in the entrepreneurship development. Furthermore, another agency, i.e. PNS, introduces franchise programs and monitoring schemes for women (European Commission 2013).

In 2012, European Commission made a proposal to improve the gender balance in boards of publicly-listed companies. Even though board membership requires different competences and skills from entrepreneurship, more women in senior management positions could serve as a role model for other women in general. The visibility of a bigger number of successful professional women will show other women that they have chances of success in the labor market (European Commission 2013).

Another American support for women's entrepreneurship is "The Women's Entrepreneurship in the Americas (WEAmericas) initiative and exchange" launched in April 2012 which leveraged public-private partnerships to increase women's economic participation and address four key barriers women confront when starting and growing small and medium enterprises: access to capital, markets, skills and capacity building, and women's leadership. The WEAmericas initiative includes an annual International Visitor Leadership Program (IVLP) exchange to the United States which allows women to explore a variety of mentorship, job shadowing, education, and skills development programs (ECA 2014). However, according to gender-global entrepreneurship development index (GEDI), the U.S. ranked 1st among 17 countries in terms of having the conditions that foster high potential female entrepreneurship (GEDI 2014). One of the other initiatives for promoting women's entrepreneurship is Global Entrepreneurship Week (17–23 Nov.), the world's largest international meeting of innovators and job creators. GEW was first started in 2007 with just 37 countries and today the week involves 150 countries, 25 million participants, and more than 115,000 activities throughout the week. This year, GEW helped drive a worldwide movement to engage and support female entrepreneurs with its partner organizations holding events in 150 countries that focused on celebrating and supporting female entrepreneurs. Female entrepreneurs took a center-stage this November as Women's Entrepreneurship was celebrated in 150 countries on November 19. The day provided an opportunity to celebrate, engage, and empower female entrepreneurs.

In the Iranian context, despite the recently growth of women's in business, many women experience internal and external barriers to start a business. Some of internal problems of women in business are related to their less self-confidence, less achievement motivation, more fear of failure, weakness in entrepreneurial networks,

and finally less knowledge and experience both in business and management. However, their external barriers are related to their access to financial and non-financial resources, social value about women's abilities in management and business, lack of role model in the society, and finally diversity of their responsibilities which cause difficulty in work-family balance.

Considering these diverse barriers of women entrepreneurs in the Iranian context, a holistic approach to women's entrepreneurship development is needed which could cover three action pillars including tailored entrepreneurship education to women, supportive environment to women's businesses start-up and growth, and finally development of entrepreneurial awareness among women.

Tailored entrepreneurship education for women should emphasize the development of their business leadership skills and improve their competencies in marketing, dealing with stakeholders, balancing work and family, etc. As women generally have lack of time to participate in education programs and networks, online education and mentoring have more efficiency in this matter.

In the second action pillar, a supportive environment to women's entrepreneurship should address first their access to financial resources. Simple process for loan access, developing business angels' network of women to serve women's businesses, and possibility of online networking with other women entrepreneurs at national, regional, and international level could help women in this regard. Also, improving social values about women in management position is essential which can be done by removing all forms of disparity and enforcing women's role in the society. Another supportive area is to help women entrepreneurs balance their work and family by providing more affordable childcare facilities and revising family's responsibilities in the favor of working women.

Finally, in the third action pillar, women's awareness about entrepreneurship could be developed by presenting more role models of successful women entrepreneurs in different fields from early age in schools to later in universities, media, books, etc. Also, Women Entrepreneur Day could provide an opportunity for improving social awareness about women's entrepreneurship.

In recent years, some women entrepreneurship communities have emerged to develop and promote women's entrepreneurship. For example, Association of Women Entrepreneurs was launched in 2004 by women entrepreneurs and women business owners/managers. They promote entrepreneurship, support to improve and alter policies to women entrepreneurs, help to organize related entrepreneurship activities, and help women entrepreneurs to make information and communication networks (Wenet 2004).

Also, national foundation of entrepreneurship development for women and youth for developing entrepreneurial culture and creative thinking and generating activities among women and youth supports some services in terms of educating and consulting (Founded 2008). Association of Women Entrepreneur Merchants is another active organization which tries to help women to have an effective role in developing business and economic areas (Ibwa 2008). Also, National Community of Women Entrepreneurship was established in 2006 to

empower women entrepreneurs, create a database of women entrepreneurs, and present consulting services for them (Nawe 2006). But, despite these activities, we are still beginning the way for the development of women entrepreneurship.

## References

- Aldrich, H., Reese, P. R., & Dubini, P. (1989). Women on the verge of a breakthrough: Networking among entrepreneurs in the United States and Italy. *Entrepreneurship and Regional Development*, 1(4), 339–356.
- Allen, I. E., Langowitz, N., & Minniti, M. (2007). Global entrepreneurship monitor. *2006 Report on Women and Entrepreneurship*.
- Alsos, G. A., Isaksen, E. J., & Ljunggren, E. (2006). New venture financing and subsequent business growth in men-and women-led businesses. *Entrepreneurship Theory and Practice*, 30(5), 667–686.
- Anna, A. L., Chandler, G. N., Jansen, E., & Mero, N. P. (2000). Women business owners in traditional and non-traditional industries. *Journal of Business Venturing*, 15(3), 279–303.
- Arasti, A. (2006). Iranian women entrepreneurs; socio-cultural factors in starting business. *Women Studies*, 4(1–2), 93–119 (in Persian).
- Arasti, Z. & Akbari Jokar, M. R. (2007). The Iranian women entrepreneurs' networks and business start-up. *Women's Studies (motaleat-i zanan)*, 4(3), 5–22 (in Persian).
- Arasti, Z., & Akbari Jokar, M. R. (2009). The research on the characteristics of Iranian educated women's business and their problems in start-up process. *Daneshvar, Special Issue on Management*, 15(32), 37–46 (11) (in Persian).
- Arasti, Z., & Kanani, A. (2011). Barriers to business financing by women entrepreneurs in Iran. *The NIEW Journal*, pp. 91–101. December 3, 2011.
- Arasti, Z., Rezayee, S. O., Zarei, B., & Shariat Panahi, S. (2012b). A qualitative study on environmental factors affecting Iranian women entrepreneurs' growth orientation. *Journal of Management and Strategy*. 3(2). p. 39.
- Arasti, Z., & Tarzamy, E. (2013). Dynamics of female social networks. *Entrepreneurship Development Journal (Tose-E-Karfarini)*, 6(4), 1–19 (in Persian).
- Arasti, Z., & Valinejad, M. (2011). Typology of women entrepreneurs' motivations. *Journal of Women's Studies*, 5(3), 99–125 (in Persian).
- Arasti, Z., Valinejad, M., Maleki Karam Abad, M., & Mobaraki, M. (2012a). Women entrepreneurs' motivations and its role in business growth. *Women's Studies (motaleat-i zanan)*, 11(1), 71–92 (in Persian).
- Arenius, P., & Autio, E. (2006). Financing of small businesses: are Mars and Venus more alike than different? *Venture Capital*, 8(02), 93–107.
- Brockhaus, R. H., & Nord, W. R. (1979). An exploration of factors affecting the entrepreneurial decision: Personal characteristic vs. environmental conditions. *Academy of Management Proceedings*, 1979(1), 364–368.
- Brush, C. G., Carter, N. M., & Gatewood, E. J. (2006). *Growth-oriented women entrepreneurs and their businesses: A global research perspective (new horizons in entrepreneurship series)*. Edward Elgar Publishing LTD.
- Brush, C. G., Carter, N. M., Gatewood, E. J., Greene, P. G., & Hart, M. (2004). Gatekeepers of venture growth: A Diana Project report on the role and participation of women in the venture capital industry. Available at SSRN 1260385.
- Brush, C. G., Carter, N. M., Greene, P. G., Hart, M. M., & Gatewood, E. (2002). The role of social capital and gender in linking financial suppliers and entrepreneurial firms: A framework for future research. *Venture Capital: An International Journal of Entrepreneurial Finance*, 4(4), 305–323.

- Brush, C. G., & Gatewood, E. J. (2008). Women growing businesses: Clearing the hurdles. *Business Horizons*, 51(3), 175–179.
- Buttner, E. (1993). Female entrepreneurs: How far have they come? *Business Horizons*, 36(2), 59–65.
- Buttner, E. H., & Moore, D. P. (1997). Women's organizational exodus to entrepreneurship: Self-reported motivations and correlates with success. *Journal of Small Business Management*, 35, 34–47.
- Carter, N., Brush, C., Greene, P., Gatewood, E., & Hart, M. (2003a). Women entrepreneurs who break through to equity financing: the influence of human, social and financial capital. *Venture Capital: An International Journal of Entrepreneurial Finance*, 5(1), 1–28.
- Carter, N. M., Gartner, W. B., Shaver, K. G., & Gatewood, E. J. (2003b). The career reasons of nascent entrepreneurs. *Journal of Business Venturing*, 18(1), 13–39.
- Chaganti, R., DeCarolis, D., & Deeds, D. (1995). Predictors of capital structure in small ventures. *Entrepreneurship Theory and Practice*, 20, 7–18.
- CIBC World Market. (2004). Annual accountability report 2004. Online available from: <https://www.cibc.com/ca/pdf/about/aar04-en.pdf>
- Cliff, J. E. (1998). Does one size fit all? Exploring the relationship between attitudes towards growth, gender, and business size. *Journal of Business Venturing*, 13(6), 523–542.
- Cole, R. A., & Wolken, J. D. (1995). Financial services used by small businesses: Evidence from the 1993 national survey of small business finances. *Federal Reserve Bulletin*, 81, 629.
- Coleman, S. (2000). Access to capital and terms of credit: A comparison of men-and women-owned small businesses. *Journal of Small Business Management*, 38(3), 48.
- Coleman, S., & Robb, A. (2009). A comparison of new firm financing by gender: Evidence from the Kauffman firm survey data. *Small Business Economics*, 33(4), 397–411.
- Constantinidis, C., Cornet, A., & Asandei, S. (2006). Financing of women-owned ventures: The impact of gender and other owner-and firm-related variables. *Venture Capital*, 8(2), 133–157.
- Coughlin, J. H. (2002). *The rise of women entrepreneurs: People, processes, and global trends*. Greenwood Publishing Group.
- Damwad. (2007). *Women entrepreneurship—A nordic perspective*. Nordic Innovation Centre (August 2007).
- Davidsson, P. (1989). Entrepreneurship—And after? A study of growth willingness in small firms. *Journal of Business Venturing*, 4(3), 211–226.
- De Bruin, A., Brush, C. G., & Welter, F. (2006). Introduction to the special issue: Towards building cumulative knowledge on women's entrepreneurship. *Entrepreneurship Theory and Practice*, 30(5), 585–593.
- Dubini, P., & Aldrich, H. (1991). Personal and extended networks are central to the entrepreneurial process. *Journal of Business Venturing*, 6(5), 305–313.
- ECA. (2014). *WEAmericas initiative*. Online available from: <http://eca.state.gov/highlight/weamericas-initiative#sthash.um2nde5C.dpuf>
- El Harbi, S., Anderson, A., & Mansour, N. (2009). The attractiveness of entrepreneurship for females and males in a developing Arab Muslim country; entrepreneurial intentions in Tunisia. *International Business Research*, 2(3), 47.
- Entrepreneurship, G. (2014). *The gender global entrepreneurship and development index (GEDI)*. In *Development institute 2013*.
- Epstein, T. S. (1993). Female petty entrepreneur and their multiple roles. In S. Allen, & C. Trumman (Eds.), *1993 Women in business: Perspectives on women entrepreneurs* (p. 1427). London: Routledge Press.
- European Commission (EC). (2013). *Entrepreneurship 2020 action plan: Reigniting the entrepreneurial spirit in Europe*.
- Fabowale, L., Orser, B., & Riding, A. (1995). *Gender, structural factors, and credit terms between Canadian small businesses and financial institutions*. Toronto: Faculty of Business, Ryerson Polytechnic University.
- Feizbakhsh, A., & Dehghanpour, A. (2002). Decision making in the beginning of entrepreneurship (case study: Iranian entrepreneurs). *Journal of Knowledge Management*, 58, 67–84.

- Foundationed. (2008). *Mission and vision*. Online available from: <http://foundationed.net/>
- Gelard, P. (2005). Key factors influence on Iranian women entrepreneurs. *Women Studies*, 3(1), 101–123 (in Persian).
- Gelard, P. (2007). Productivity Iranian women entrepreneurs. *Journal of Commerce*, 12(46), 179–209 (in Persian).
- Gelin, M. (2005). The importance of gender in starting and managing a small business. *Houston Psychiatric Society*, 4(5), 23–32.
- Gray, K. R., & Finley-Hervey, J. (2005). Women and entrepreneurship in Morocco: Debunking stereotypes and discerning strategies. *The International Entrepreneurship and Management Journal*, 1(2), 203–217.
- Gundry, L. K., & Welsch, H. P. (2001). The ambitious entrepreneur: High growth strategies of women-owned enterprises. *Journal of Business Venturing*, 16(5), 453–470.
- Hampton, A., Cooper, S., & McGowan, P. (2009). Female entrepreneurial networks and networking activity in technology-based ventures an exploratory study. *International Small Business Journal*, 27(2), 193–214.
- Hampton, A., McGowan, P., & Cooper, S. (2011). Developing quality in female high-technology entrepreneurs' networks. *International Journal of Entrepreneurial Behaviour and Research*, 17(6), 588–606.
- Haynes, G. W., & Haynes, D. C. (1999). The debt structure of small businesses owned by women in 1987 and 1993. *Journal of Small Business Management*, 37(2), 1.
- Hisrich, R., & Brush, C. (1984). The woman entrepreneur: Management skills and business problems. *Journal of Small Business Management*, 22(1), 30–37.
- Hisrich, R. D., & Brush, C. G. (1987). Women entrepreneurs: A longitudinal study. *Frontiers of entrepreneurship research*. 187.
- Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2005). *Entrepreneurship* (International ed.). Boston: McGraw-Hill.
- Hofstede, G. (1980). Motivation, leadership, and organization: do American theories apply abroad? *Organizational Dynamics*, 9(1), 42–63.
- Hughes, K. D. (2006). Exploring motivation and success among Canadian women entrepreneurs. *Journal of Small Business and Entrepreneurship*, 19(2), 107–120.
- Hulsink, W., Stam, W., & Elfring, T. (2009). *The locus of innovation in small and medium-sized firms: the importance of social capital and networking in innovative entrepreneurship* (pp. 80–106). Cases in Technological Entrepreneurship: Converting Ideas into Value.
- Ibwa. (2008). *Strategies*. Online available from: <http://www.ibwa.ir/index.php/fa/>
- Jack, S., & Rose, M. (2010). Tracing the historical foundations of social networks in entrepreneurship research. Available at: [www.isbe.org.uk/content/assets/BP09-SarahJack.pdf](http://www.isbe.org.uk/content/assets/BP09-SarahJack.pdf)
- Jaimie, S., Sullivan, P., Halbrendt, C. C., & Qingbin, W. (1998). *An exploratory study of how rural female entrepreneurs view success*. University of Vermont Publication.
- Javaheri, F., & Ghozati, S. (2004). Barriers of women entrepreneurs in Iran. *Journal of Psychology*, 5(2), 88.
- Kelley, D. J., Bosma, N., & Amorós, J. E. (2011). *Global entrepreneurship monitor: Global report 2010*. St. Louis, United States: Global Entrepreneurship Research Association.
- Kelley, D. J., Singer, S., & Herrington, M. (2012). The global entrepreneurship monitor. *2011 Global Report, GEM 2011*, 7.
- Kirkwood, J. (2009). Motivational factors in a push-pull theory of entrepreneurship. *Gender in Management: An International Journal*, 24(5), 346–364.
- Klapper, L. F., & Parker, S. C. (2011). Gender and the business environment for new firm creation. *The World Bank Research Observer*, 26(2), 237–257.
- Klyver, K. (2008). The shifting consultant involvement. *Journal of Small Business and Enterprise Development*, 15(1), 178–193.
- Klyver, K., Grant, S., & Hindle, K. (2007). The influence of social network structure on entrepreneurial participation: Gender differences studied across 47 countries. In *Third Global Entrepreneurship Monitor Research Conference*.

- Langowitz, N., & Minniti, M. (2007). The entrepreneurial propensity of women. *Entrepreneurship theory and practice*, 31(3), 341–364.
- Lavoie, D., (1992). Women in business: A collective profile. In *A resource guide to selected*.
- Lerner, M., Brush, C., & Hisrich, R. (1997). Israeli women entrepreneurs: An examination of factors affecting performance. *Journal of Business Venturing*, 12(4), 315–339.
- Manolova, T. S., Brush, C. G., & Edelman, L. F. (2008). What do women entrepreneurs want? *Strategic Change*, 17(3–4), 69–82.
- Martins, S. (2004). Barriers to entrepreneurship and business creation. *ECC-European Entrepreneurship Cooperation*.
- Mathew, V. (2010). Women entrepreneurship in Middle East: Understanding barriers and use of ICT for entrepreneurship development. *International Entrepreneurship and Management Journal*, 6(2), 163–181.
- Mc Clelland, D. C. (1961). *The achieving society*. Princeton, NJ: Van Nostrand.
- McGregor, J., & Tweed, D. (2002). Profiling a new generation of female small business owners in New Zealand: networking, mentoring and growth. *Gender, Work and Organization*, 9(4), 420–438.
- Mirghafoori, H., Tooranloo, H., & Taheridemneh, M. (2010). Investigating the barriers of women's entrepreneurship in Iran society. *Journal of Management Transformation*, 2.
- Morris, M. H., Miyasaki, N. N., Watters, C. E., & Coombes, S. M. (2006). The dilemma of growth: Understanding venture size choices of women entrepreneurs. *Journal of Small Business Management*, 44(2), 221–244.
- Morrison, A., Breen, J., & Ali, S. (2003). Small business growth: Intention, ability, and opportunity. *Journal of Small Business Management*, 41(4), 417–425.
- NAWBO. (2014). Online available from: <http://www.nawbo.org/>
- Nawe. (2006). *Vission*. Online available from: <http://www.nawe.ir/en/introduction>
- Nilufer, A. (2001). Jobs, gender and small enterprises in Bangladesh: Factors affecting women entrepreneurs in small and cottage industries in Bangladesh. *SEED working paper*. (14).
- O'Donnell, A., Gilmore, A., Cummins, D., & Carson, D. (2001). The network construct in entrepreneurship research: A review and critique. *Management Decision*, 39(9), 749–760.
- Orhan, M., & Scott, D. (2001). Why women enter into entrepreneurship: An explanatory model. *Women in Management Review*, 16(5), 232–247.
- Orser, B. J., Riding, A. L., & Manley, K. (2006). Women entrepreneurs and financial capital. *Entrepreneurship Theory and Practice*, 30(5), 643–665.
- Panahi, S. M. S. (2012). *Identifying individual factors influence on growth orientation of women owner business*. Master thesis. Tehran University (in Persian).
- Piacentini, M. (2013). Women entrepreneurs in the OECD (No. 147). *OECD social, employment and migration working papers*.
- Renzulli, L. A., Aldrich, H., & Moody, J. (2000). Family matters: Gender, networks, and entrepreneurial outcomes. *Social Forces*, 79(2), 523–546.
- Reshmi, M. (2002). The growth pattern of women-run enterprises: An empirical study in India. *Journal of Developmental Entrepreneurship*, 7(2), 217–237.
- Reynolds, P., Bosma, N., Autio, E., Hunt, S., De Bono, N., Servais, I., et al. (2005). Global entrepreneurship monitor: Data collection design and implementation 1998–2003. *Small Business Economics*, 24(3), 205–231.
- Rezayee, S. O. (2012). *Identifying environment factors influence on growth orientation of women owner business*. Master thesis. Tehran University (in Persian).
- Robb, A., & Wolken, J. D. (2002). Firm, owner, and financing characteristics: Differences between female-and male-owned small businesses.
- Roomi, M. A. (2013). Entrepreneurial capital, social values and Islamic traditions: Exploring the growth of women-owned enterprises in Pakistan. *International Small Business Journal*, 31(2), 175–191.
- Roomi, M. A., & Harrison, P. (2008). Training needs for women-owned SMEs in England. *Education + Training*, 50(8/9), 687–696.



- Roomi, M. A., Harrison, P., & Beaumont-Kerridge, J. (2009). Women-owned small and medium enterprises in England: Analysis of factors influencing the growth process. *Journal of Small Business and Enterprise Development*, 16(2), 270–288.
- Roomi, M. A., & Parrott, G. (2008). Barriers to development and progression of women entrepreneurs in Pakistan. *Journal of Entrepreneurship*, 17(1), 59–72.
- Rosa, P., Kodithuwakku, S., & Balunywa, W. (1994). Reassessing necessity entrepreneurship in developing countries. *Institute for Small Business and Entrepreneurship*, pp. 1–13.
- Rutashobya, L. K., Allan, I. S., & Nilsson, K. (2009). Gender, social networks, and entrepreneurial outcomes in Tanzania. *Journal of African Business*, 10(1), 67–83.
- Saber, F. (2002). *Women's entrepreneurship development*. Roshangaran Publication (in Persian).
- Sadi, M. A., & Al-Ghazali, B. M. (2012). The dynamics of entrepreneurial motivation among women: A comparative study of businesswomen in Saudi Arabia and Bahrain. In *The GCC Economies*, pp. 217–227.
- Sekarun, U., & Leong, F. T. (1992). Women power: Management in times of demographic turbulence. *International Journal of Comparative Sociology*, 24(3–4), 258–272.
- Seufert, S. (2000). The net academy as a medium for learning communities. *Educational Technology and Society*, 3(3), 122–136.
- Shabbir, A., & Gregorio, S. D. (1996). An examination of the relationship between women's personal goals and structural factors influencing their decision to start a business: The case of Pakistan. *Journal of Business Venturing*, 11(6), 507–529.
- Shane, S., Kolvereid, L., & Westhead, P. (1991). An exploratory examination of the reasons leading to new firm formation across country and gender. *Journal of Business Venturing*, 6(6), 431–446.
- Shane, S., Locke, E. A., & Collins, C. J. (2003). Entrepreneurial motivation. *Human Resource Management Review*, 13(2), 257–279.
- Shivani, S., Mukherjee, S. K., & Sharan, R. (2006). Socio-cultural influences on Indian entrepreneurs: The need for appropriate structural interventions. *Journal of Asian Economics*, 17(1), 5–13.
- Širec, K., & Crnogaj, K. (2009). Gender differences in networking of Slovenian SME's. *Revista de Management Comparat International/Review of International Comparative Management*, 10(5), 1043–1059.
- Statistical Center of Iran. (2014). *Iranian annual book of statistics, 2014*. Online available from: <http://www.amar.org.ir/>
- Stokes, N. A., Siddall, M. E., & Bureson, E. M. (1995). Detection of *Haplosporidium nelsoni* (Haplosporidia: Haplosporidiidae) in oysters by PCR amplification. *Diseases of Aquatic Organisms*, 23(2), 145–152.
- Storey, D. (2004, June). Promoting entrepreneurship and innovative SMEs in a global economy: Towards a more responsible and inclusive globalisation. In *Second OECD Conference of Ministers responsible for Small and Medium-sized Enterprises (SMEs)*, Istanbul.
- Tambunan, T. (2009). Women entrepreneurship in Asian developing countries: Their development and main constraints. *Journal of Development and Agricultural Economics*, 1(2), 027–040.
- Tarzamny, E. (2012). *Dynamics of female social networks (case study: Female exporters in Tehran)*. Master thesis. University of Tehran (in Persian).
- Treichel, M. Z., & Scott, J. A. (2006). Women-owned businesses and access to bank credit: Evidence from three surveys since 1987. *Venture Capital*, 8(1), 51–67.
- Ufuk, H., & Özgen, Ö. (2001). Interaction between the business and family lives of women entrepreneurs in Turkey. *Journal of Business Ethics*, 31(2), 95–106.
- Ullah, M. M., Mahmud, T. B., & Yousuf, F. (2013). Women entrepreneurship: Islamic perspective. *European Journal of Business and Management*, 5(11), 44–52.
- Valinejad, M. (2011). *Identify the impact of incentives to Iranian women entrepreneurs grow their businesses*. Master thesis, University of Tehran (in Persian).
- Verheul, I., & Thurik, R. (2001). Start-up capital: Does gender matter?. *Small Business Economics*, 16(4), 329–346.

- Welter, F. (2004). The environment for female entrepreneurship in Germany. *Journal of Small Business and Enterprise Development*, 11(2), 212–221.
- Wenet. (2004). *Objective and strategies*. Online available from: <http://www.ea.wenet.ir/index.php/fa/2011-05-10-12-00-17/presentation-plans>
- Xavier, S., Kelley, D., Kew, J., Herrington, M., & Vorderwulbecke, A. (2013). The global entrepreneurship monitor. *2012 Global report. GEM 2012*.
- Zali, M., & Razavi, M. (2008). *Barriers to entrepreneurship development in Iran*. Tehran.

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# Academic Entrepreneurship Readiness in University of Tehran

Jahangir Yadollahi Farsi

**Abstract** This chapter aims to report a qualitative research on determinants and barriers in the process of university research commercialization with emphasis on inevitable choice of approaching to internationalization. Through an in-depth literature review a conceptual framework developed to give a description and an explanation of the academic entrepreneurship concept and its role in economic development. Based on an interview with 76 faculty members who involved in at least one innovation project or act as managers in supporting organizations, we identified the key factors which influence innovation commercialization. In order to prioritize the importance and intensity of barriers and obstacles, after analyzing qualitative data we asked respondents to weight factors. We can classify identified factors in four categories. Determinants of innovation commercialization include: Business environment factors, supporting organization factors, project management and team member's factors, industry and innovation project characteristics.

## 1 Introduction

Universities have emerged as effective actors in the knowledge-based economy, expected to drive technological change and innovation. Despite the role they play in regional and local economic development, the need for redesigning universities is not well understood. In most leading entrepreneurial universities, commercialization is the core mission. Commercialization includes a process which starts from market's need identification or research results gain and then passing several steps toward introducing something new to market. Internationalization is a dynamic set of related activities in a process of increasing an international and intercultural dimension into

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the university functions (Knight 2003, p. 2). Internationalization and academic entrepreneurship are interrelated and could create synergy in academic development.

Technological innovation is a major source of competitive advantage and a popular subject of outsourcing. University is the best source of new technology. University to survive and keep its importance and credit should define and accept an important role in regional economy at least and in national and global economy in vision (Etzkowitz and Zhou 2007). The role of universities has evolved during the 20th century and its evolution is continued. In past universities focused on teaching, then research was added to university mission and finally participation in economic development became the duty of university (Etzkowitz et al. 2000) Universities have few recognized industry related scientific research as an important source of long term income and technological innovation. The weak involvement with industry has drastically made universities unqualified in economic activities and decreased the trust to the university technology transfer and licensing activities.

This research provides an opportunity to look deeply on university situation and identifying innovation commercialization barriers and obstacles. At first based on an in-depth literature review we explain the need for change in universities considers the major contributions in the conceptualization of the role that universities perform in global context, drawing on the academic entrepreneurship literature. This research focuses on the university innovation commercialization process from the perspectives of innovation and support services professionals. The objectives of this research are to:

1. Identify the determinants of innovation commercialization that influence or impact commercialization performance.
2. Identify support services required for commercialization success.
3. Proposing a comprehensive framework to improve innovation commercialization process and reduce current barriers.

In this paper we explore how universities support their member's commercialization activities. Based on an interview with innovators and university innovation support service managers we identified barriers and ways to improve academic entrepreneurship overall performance. Using an analysis of commercialization experiences, we argue that universities should provide more detailed support services. The final part of the paper includes offering a new framework that could produce better results. It is critical to empower university to be able to better understand the innovation differences across academic fields, and increased emphasis on different needs of each stage in an innovation project.

## 2 Research Background

### 2.1 *New Context for Universities*

Markets are interconnected and whatever affects supply and demand in one market will have subsequent effects in other markets (Elms and Low 2013). Economies have been in transition, aimed to transform into knowledge-based economies. The main production resource is knowledge (Kefalas et al. 2012). Universities have emerged as central actors in the knowledge-based economy by playing an active role in technological innovation (Bramwell and Wolfe 2008). In market firms compete with their value proposition. A value proposition is a statement of how value is to be delivered to customers. The value chain is a tool to breakdown a business into core relevant activities. This enables identification of the source of competitive advantage by innovation and performing these activities more cheaply or better than competitors. Any value chain is part of a larger Stream of activities carried out by other members of the supply chain, from resource providers to distributors (Walters and Lancaster 2000).

To improve innovation, executives need to view the process of transforming ideas into commercial outputs as an integrated flow rather like Michael Porter's value chain for transforming raw materials into finished goods (Farsi et al. 2012). The first of the three phases in the chain is to generate ideas; this can happen inside a unit, across units in a company, or outside the firm. The second phase is to convert ideas, or, more specifically, select ideas for funding and developing them into products or practices. The third is to diffuse those products and practices (Hansen and Birkinshaw 2007). Innovation processes are constructed as a value-chain framework, in which innovation results in the successful new products development (Chiu et al. 2012). In today's global economy, outsourcing has become a strategic necessity (Shin et al. 2009). Outsourcing in innovation also has become a popular strategy. So University and research institutions have an important role in research and development networks (Wei et al. 2012). Mansfield (1980) defined research and development stocks as the primary production factor.

Universities have played a crucial role in the supply of high level manpower, knowhow and technology needed for the socio-economic development of a nation. Universities are key players in innovation value chain. To this end, the effective management of this higher education sector becomes necessary (Ekundayo and Ajayi 2009). The process of innovation is an important source of competitive advantage (Ahuja and Katila 2004). New market opportunities have been created by the continued growth of the world economy. Most of the major companies in Europe and Japan have set up R&D centers in places like Silicon Valley and Boston

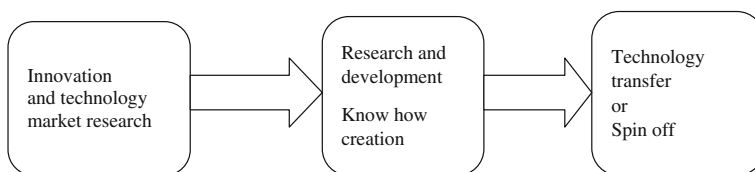
in the US, and in Cambridge UK. These centers are conduits for developing relationships with the premier universities in these regions (Lin and Tzeng 2009). It briefly explores the opportunities for creating strategic and operational synergies between the various ‘entrepreneurial’ and ‘enterprising’ activities being undertaken by universities as a basis for the building of a ‘real time’ entrepreneurial development strategy (Gibb 2012).

Better access to scientists and technologists in various parts of the world has provided great opportunities for outsourcing of technology development. The development of information and communication technology has helped effective interaction among the various individuals and coordination among geographically distributed groups. Governments and the financial institutions are providing new incentives for inter-organizational collaboration. University-industry relationship is not a new phenomenon. Germany was the pioneering country where university industry relationship helped create the pharmaceutical industry in the early 19th century. The United States has taken an active role in developing and fostering university industry collaboration. There are many mutual benefits to a close relationship between a university and an industrial firm. Firms gain access to not only leading edge technologies, but also highly trained students, professors and university facilities. Universities can augment their funding sources by working with the industry (Lin and Tzeng 2009). To enhance the role of universities for regional development requires the transformation of the “traditional university” towards the “new” one (Bramwell and Wolfe 2008). Shane (2009) argues that policy-makers should stop subsidizing start-ups and instead focus on supporting the small subset of new businesses with high growth potential. Etzkowitz (1983) coined the term “entrepreneurial university” to describe higher education institutions that have become critical to regional economic development. The emergence of university–industry–government interactions, the triple helix, can also be identified as a key institutional factor in regional development (Etzkowitz 2005). An innovating Region has the capability to be dynamic technological changes and periodically renew itself through new technologies. New firms generation from its academic base is also an outcome (Etzkowitz and Klofsten 2005). If localized knowledge spillovers are present in the university setting, higher rates of both start-up and survival would be observed in areas that are geographically proximate to the university (De Silva and McComb 2012). The role of universities has always been not merely to educate people and offer solutions to problems, but especially to tackle the grand societal challenges by introducing new openings from different perspectives to the dialogue between science and society, by defining targets and priorities for research to meet the societal change needs, as well as by making the desired changes happen by creating innovations (Markkula 2012).

## 2.2 Universities in Transition to Be Entrepreneurial

The increasing attention paid by universities to technology transfer has been paired with the legislative and organizational changes necessary to create the conditions for an effective commercialization of research results through patents. In the U.S. the turning point is considered to have been the approval of the Bayh-Dole Act in 1980, which was a piece of legislation that directly addressed this specific problem (Baldini et al. 2006). Universities contribution to national economic development has changed qualitatively, shifting from being primarily a manpower provider and knowledge creator to take on a more visible role in knowledge commercialization through increased patenting, licensing to private industry and spinning-off new ventures (Wong et al. 2007). The emergence of a knowledge production system is ‘socially distributed’, While knowledge production used to be located primarily at scientific institutions. Science systems are said to be in transformation (Hessels Laurens and Lente 2008). Technology commercialization includes activities, such as patenting and licensing, that universities use to protect and exploit researcher’s inventions (Agrawal and Henderson 2002). The objective is to provide the resources required to further research and development in universities (Thursby and Thursby 2002). Investopedia defines commercialization as the process by which a new product or service is introduced into the general market. Commercialization is broken into phases, from the initial introduction of the product through its mass production and adoption. It takes into account the production, distribution, marketing, sales and customer support required to achieve commercial success. As a strategy, commercialization requires that a business develop a marketing plan, determine how the product will be supplied to the market and anticipate barriers to success.

The process of commercialization is compared to a funnel. At the widest part are the many ideas that a company might have for launching a product. As the funnel narrows, the company weeds out ideas based on logistics and costs, consumer and economic trends, and feasibility. Commercialization is part of a larger feedback loop for a product, as the ultimate introduction of the product into the market may require adjustments to the process (Fig. 1).



**Fig. 1** Innovation value chain in universities

**Table 1** Definitions of an entrepreneurial university

Year	Author	Definition
1983	Etzkowitz	Universities that are considering new sources of funds like patents, research funded by contracts and entry into a partnership with a private enterprises
1995	Chrisman, Hynes and Fraser	The entrepreneurial university involves the creation of new business ventures by university professors, technicians, or students
1995	Dill	University Technology Transfer is defined as formal efforts to capitalize upon university research by bringing research outcomes to commercial ventures
1998	Clark	Seeks to innovate in how it goes to business, to work out a substantial shift in organizational character, to become stand-up universities that are significant actors in their own terms
1998	Röpke	Mean three things: the university itself, the members of the university
1999	Subotzky	Is characterized by closer university-business partnerships, by greater faculty responsibility for accessing external sources' of funding and by a managerial ethos in institutional governance, leadership and planning
2002	Kirby	Have the ability to innovate, recognize and create opportunities, work in teams, take risks and respond to challenges...
2003	Etzkowitz	Is a natural incubator, providing support structures for teachers and students to initiate new ventures: intellectual, commercial and conjoin
2003	Williams	Is nothing more than a seller of services to the knowledge industry
2003	Jacob, M, Lundqvist and Hellsmark	Is based both on commercialization (custom made further education courses, consultancy services and extension activities) and commoditization (patents, licensing or student owned start-ups)

Etzkowitz (1983) invented the term “entrepreneurial university” to describe institutions that have become critical to regional economic development (Woollard et al. 2007) (Table 1).

An entrepreneurial university means three things:

1. The university itself, as an organization, becomes entrepreneurial.
2. The members of the university -faculty, students, and employees- are turning themselves somehow into entrepreneurs.
3. The interaction of the university with the environment, the “structural coupling” between university and region, follows entrepreneurial patterns.



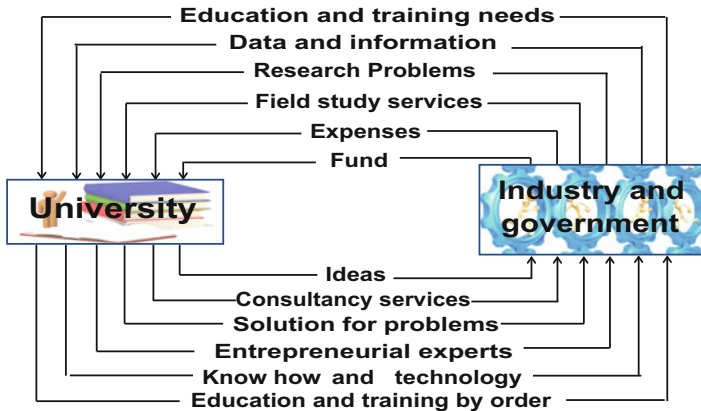


Fig. 2 Entrepreneurial university interactions

In developed countries universities have become increasingly entrepreneurial during recent decades (Mowery et al. 2004; Siegel 2006).

In the United States, several factors have facilitated emerging entrepreneurial universities. These factors include, among others, the rise in venture capital, the passage of the Bayh-Dole Act (providing incentives for universities to patent scientific breakthroughs accomplished with federal funding), the rise in the pool and thus mobility of scientists and engineers, and important technological breakthroughs in computing (microprocessor), biotechnology (genetic engineering), and, more recently, nanotechnology (Mowery et al. 2004; Siegel 2006).

Entrepreneurial universities additionally need to become entrepreneurial organizations; their members need to become potential entrepreneurs; and their interaction with the environment needs to follow an entrepreneurial pattern (Röpke 1998a, b, c) (Fig. 2).

Key components of entrepreneurial university organization are:

- A strong central steering core;
- A business development unit;
- Feedback system and Learning from practice
- Multidisciplinary research centers
- Network system with industry, entrepreneurs, investors and research institutions (Duberley et al. 2007; Etzkowitz 2003; Meyer and Evans 2007).

An entrepreneurial university can mean three things (Röpke 1998a, b, c):

- The university itself, as an organization, becomes entrepreneurial.
- The members of the university (faculty, students and employees) are turning themselves somehow into entrepreneurs.
- The interaction of the university with the environment, the structural coupling between university and region, follows entrepreneurial patterns.

To gain these properties universities need radical changes in structure, culture, systems and management. The actual organizational patterns of university governance have changed over the past few decades away from the classical notion of the university as a republic of scholars towards the idea of the university as a stakeholder organization (Bleiklie and Kogan 2007).

### ***2.3 Determinants of Entrepreneurial Universities***

For a university to be entrepreneurial, it should be managed like an entrepreneurial corporate. In fact, corporate entrepreneurship has been commonly defined either as an entrepreneurial activity, as an entrepreneurial process, or as an entrepreneurial behavior, and sometimes corporate entrepreneurship has been perceived as a strategy to enhance organizational competitive position. So an entrepreneurial university has an entrepreneurial advantage demonstrated in terms of organizational innovation, renewal and venturing initiatives, the proclivity towards risk-taking, proactive-ness and innovativeness should remain the center of university strategy (Entebang and Harisson 2012).

Previous research and studies on entrepreneurial university, academic entrepreneurship and university technology transfer had been concerned and focused on institutional policies, the organizational and institutional environment, the individual academic entrepreneur and the relationship between the university and its external environment (Yusof and Jain 2010).

An entrepreneurial university plays a crucial role in the development of region which is located. Technology transfer and new technology-based enterprise building due to commercialization activities create a flow of innovation in the region. The determinants of commercialization activities within a university context includes: (1) the attributes, personality characteristics and entrepreneurial capabilities of academic entrepreneurs; (2) the resource endowments and organizational competencies of the university; (3) university structures and policies facilitating commercialization; and (4) environmental factors influencing academic entrepreneurship (O'Shea et al. 2008).

The entrepreneurial university is an instrument that not only provides a workforce and value added with the creation or transformation of knowledge

**Table 2** Determinants of academic entrepreneurship (Kirby 2006)

External factors	Internal factors
Business environment	Organizational structure
Intellectual property wrights	Organizational systems
Competition in industry	Human resources
Access to capital	Management
Public support services	Culture
	Innovation infrastructure
	Interdisciplinary research centers
	Intellectual property policy

but also improves the individual’s values and attitudes towards these issues (Guerrero and Urbano 2010). Particularly universities, are becoming increasingly entrepreneurial, focusing on the realization of commercial value from research and searching for new organizational arrangements (D’Este et al. 2012). The most critical factors identified were the attitudes towards entrepreneurship from academics and students. The main explanation for this is that each university community is unique and its attitudes towards entrepreneurship are defined by a combination of factors, such as entrepreneurship education, teaching methodologies, role models and reward systems. An interesting point is that only few studies in the field have analyzed the academics’ intentions (Hay et al. 2002).

Formal factors: entrepreneurial organizational and governance structure, support measures for entrepreneurship, entrepreneurship education. Informal factors: university community’s attitudes towards entrepreneurship, entrepreneurial teaching methodologies, role models and reward system. Resources: human capital, financial, physical, and commercial. Capabilities: status and prestige, networks and alliances, localization (Guerrero and Urbano 2010; Rothaermel et al. 2007) (Table 2).

An entrepreneurial university requires entrepreneurial organizational structures to create a connection between teaching, research and administration functions and that help to generate a shared vision where a university is more than just the sum of warring departments (Dearlove 2002). An entrepreneurial university requires managers, with personal characteristics of leadership, in professionalized full-time posts, to fulfil its mission (Sporn 2001). Discovery of technological opportunities and exploitation of entrepreneurial opportunities are shaped by different factors associated with the scientist’s skills and idiosyncratic experience (D’Este et al. 2012).

**Table 3** Academic rank of respondents

Ph.D. candidates	Assistant professor	Associate professor	Professor	Sum
2	14	32	28	76

**Table 4** Prior commercialization experience

Yes	No	Sum
39	37	76

**Table 5** Work experience (year)

Years of experience	More than 20	16–20	11–15	6–10	Fewer than 5
Frequency	6	15	15	28	12

**Table 6** Projects barriers and obstacles based on commercialization stages

Stage of commercialization	Barriers and obstacles	Industry type			
		Electronic	IT	New material	Bio technology
Market opportunities recognition	Insufficient access to market information	A	A	A	A
	Insufficient access to industry information	B	A	A	A
	High cost of market research	B	B	B	B
Research	Weak access to technical information	B	B	A	A
	Lack of finance	A	A	A	A
	Weak industry networks	A	A	A	A
	Lack of expert human resource for innovation projects	C	C	A	A
	Insufficient lab facilities	C	C	A	A

**Table 7** Projects risks based on commercialization stages

Stages	Type of risks	Industry type			
		Bio technology	New material	IT	Electronic
Ideation	Idea property right protection	A	A	A	A
Market identification	Imprecise customer needs identification	A	A	A	A
	Imprecise data gathering	B	B	B	B
Research	Research results property right protection	A	A	A	A
	leaving key personnel	C	C	C	C
	Financial return	B	B	B	B
	In time finance	A	A	A	A
	Delay in access to requirements	A	A	A	A
Prototyping	Technical failure	B	B	C	B
	Investment return	B	B	B	B
Limited production	Market acceptance	A	A	B	B
	Imitation	B	B	A	A
	Change in government policies	B	B	B	B
	Access to investment funds	A	A	A	A
	Exchange rate fluctuations	B	B	B	B

### 3 Research Method

Research method is qualitative. The objectives of this research are to: Build and conduct a study on commercialization determinants based on an interview with those faculty members involved in the innovation process to identify organizational (university internal factors) determinants of commercialization success.

Develop a framework that can assist the university to develop entrepreneurial competencies required to enable technology transfer office to industry and exploiting academic opportunities.

Statistical population: The Statistical population and target respondents were managers of science and technology park and faculty members in Tehran University who involved in at least one innovation project. Both successful and unsuccessful

**Table 8** Projects needs for support services based on commercialization stages

Stage of commercialization	Support services	Industry type			
		Bio technology	New material	IT	Electronic
Idea feasibility study	Learning from best practices	A	A	A	A
	Consultation	A	A	A	A
	Information	A	A	A	A
Market identification	Market consultation	A	A	A	A
	Market information	A	A	A	A
Research	Technical information	A	A	A	A
	Expert personnel	A	A	A	A
	Technical consultation	A	A	A	A
	Lab and workshop services	A	A	C	A
	Industry visiting	A	A	A	A
	Funding	A	A	A	A
	Workings space	A	C	A	A
	Visiting industrial exhibitions	A	A	A	A
Prototyping and Prototype testing	Lab and workshop services	A	A	A	A
	Consultation	A	A	A	A
	Funding	A	C	A	A
Design improvement	Funding	A	A	A	A
Organizing	Training	A	A	A	A
Limited production	Working space	A	A	B	A
	Funding	A	A	A	A

practices considered in the study. Method of Data Collection: Research data collected by face to face interview. The respondents were asked to specify the commercialization barriers and existence or lack of enough support services.

## 4 Analysis and Conclusion

The primary focus of this research was to provide an answer to the following research questions:

1. What are the determinants of innovation commercialization in university?
2. What support services required for commercialization success?
3. How we can propose a comprehensive framework to improve innovation commercialization process and reduce current barriers?

#### ***4.1 Characteristics of the Sample***

The following tables present general information about sample. We interviewed 76 faculty members who involved in commercialization process or support services (Tables 3, 4 and 5).

Table 6 presents innovation projects barriers and obstacles based on commercialization stages. The intense of the barriers for each industry in each stage of the commercialization process can be seen in the table. In this table:

- A—means very strong barrier and obstacle.
- B—means strong barrier and obstacle.
- C—means moderate barrier and obstacle.

Table 7 presents innovation projects risks based on commercialization stages. The intense of the risks for each industry in each stage of the commercialization process can be seen in the table. In this table:

- A—means very strong risk.
- B—means strong risk.
- C—means moderate risk.

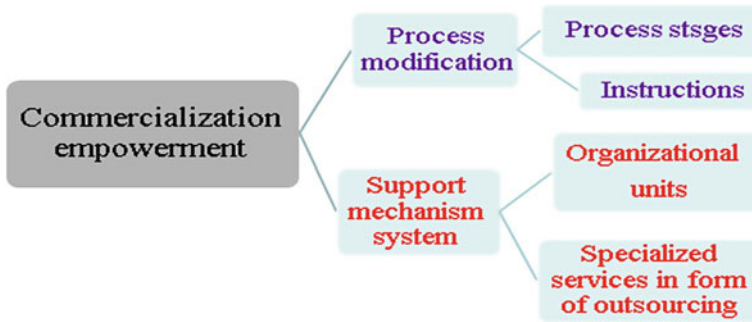
Table 8 presents innovation projects needs for support services based on commercialization stages. The intense of the needs for support services for each industry in each stage of the commercialization process can be seen in the table. In this table:

- A—means very strong needs for support services.
- B—means strong needs for support services.
- C—means moderate needs for support services.

Commercialization diagnosis: For commercialization diagnosis we need to identify current commercialization process and identifying its barriers obstacles.

## **5 Research Result**

Based on qualitative interview data gathering and content analysis of interviews texts, we can classify commercialization barriers in 4 classes:



**Fig. 3** Commercialization empowerment

**First**, factors related to university processes and structures:

1. Initial ideas for innovation are not selected based on market needs and lack of market research system.
2. Lack of technology needs assessment
3. Being inactive in accepting innovation ideas
4. Lack of a system for academic opportunities recognition
5. Lack of know how pricing system
6. Low competency in intellectual property management
7. Lack of strategy for commercialization
8. Feasibility study is not considered in innovation project
9. Market test is not considered
10. There are not some complementary activities to convert know how to technology
11. Business plan writing is not considered seriously
12. There is insufficient project management after know how
13. There is no access to venture capital
14. There is no training skills for commercialization
15. There is no method for pricing of idea and know how technology

**Second**, factors related to commercialization team:

1. Lack of market awareness and market interaction skills in university researchers.
2. Unfamiliarity with commercialization process.

**Third**, factor related to business environment:

1. Lack of clear intellectual property law.
2. Existence of monopoly in economy, and creating a condition that industry doesn't feel to need for academic knowledge.
3. Insufficient research 7 development infrastructure.



4. Critical success factors in research results commercialization.
5. Infrastructure: physical, Informational, financial and legal

**Forth**, factor related to Industry and innovation project characteristics.

1. Uncertainty
2. Novelty
3. Market maturity
4. Industry maturity

Based on qualitative data, key success factors in innovation commercialization are:

1. Capabilities of project leader and team.
2. Sufficient support services based on project needs in each stages.
3. Commercialization strategy.
4. Formal Commercialization and structure in university
5. Suitable relationship stakeholders in industry and government.

To empower university entrepreneurially we can start from most important obstacles and by modifying all aspects, gradually create a smooth and effective innovation commercialization process (Fig. 3).

## 6 Leading the Entrepreneurial University

Universities to be changed need entrepreneurial leadership. Entrepreneurial leadership is organizing a group of people to achieve a common goal using proactive entrepreneurial behavior by optimizing risk, innovating to take advantage of opportunities, taking personal responsibility and managing change within a dynamic environment. Entrepreneurial leadership is effectively behaved like a successful entrepreneur. Due to leader's efforts traditional attitudes replaced with a corporate mindset that focuses on entrepreneurial behavior. The entrepreneurial leader takes responsibility for their actions and those actions must be more proactive than reactive. They think about achieving organizational outcomes in an innovative way and working with a diverse group of people and resources to achieve these goals. The entrepreneurial leader use the approaches normally expected of an entrepreneur to identify opportunities to gain advantage. They also have the ability to then manage change to deliver that advantage. The entrepreneurial leader must have the ability to learn fast and within environments of ambiguity and change, while providing clarity and coherence for those around them.

To be an entrepreneurial university, internal and external changes are critical. Changes inside the university include: organizational structure, organizational systems, organizational culture, faculty members attitude and managerial style.

External changes include business infrastructure, support services and competitive environment. Any change must be based a feasibility study and take care of determinant factors. Most authors emphasized that university should be highly flexible in its response to the rapidly changing environment (Vaira 2004). Approaching to internationalization requires entrepreneurial risk taking and strategic choice (Knight 2003). Starting internationalization process involves risk of facing with unknown cultural, legal and institutional environment (Green and Baer 2000). The internationalization process is a learning process for university to be empowered and create organizational and academic competencies required for both entrepreneurship and internationalization.

Strategic intellectual leadership is needed for two major reasons: first to keep the balance between pure scientific orientation and academic entrepreneurship activities. Second to cope with the particular context of the nature of the university, its culture, domestic needs and its capabilities (Shattock 2000; Watson 2008). Identifying potential departmental change agents will be effective (Goffee and Jones 2007). It is necessary to create synergy among the university departments, research centers and economic organizational units including incubators and intellectual property management. Many activities currently observed in the responses of individual institutions to the various challenges. Today's global environment poses more and more challenges for higher education institutions to provide learning opportunities that enable students to become globally competent and prepared to face the challenges of an increasingly global society. For many universities, internationalizing their campuses can help students acquire knowledge, skills, and experiences to be able to compete in the global economy and become productive members of a diverse world society. There is a relationship between academic entrepreneurship and the level of internationalization. In the first generation of universities the mission was education and Internationalization was developing programs based on international interests with multi-cultural and multinational faculty members and students.

In the second generation of universities the mission was education and research so Internationalization was the first one plus developing research projects based on international interests with multi-cultural and multinational researchers and research result stake holders. In the third generation of universities the mission is being effective in sustainable development. So Internationalization is the first and second ones plus academic entrepreneurship activities and projects based on international interests with multi-cultural and multinational target population. International networking and cooperation are key success factors in this era.

## References

- Agrawal, A., & Henderson, R. (2002). Putting patents in context: Exploring knowledge transfer from MIT. *Management Science*, 48(1), 44–60.
- Ahuja, G., & Katila, R. (2004). Where do resources come from? *The Role of Idiosyncratic Situations*, *Strategic Management Journal*, 25, 887–904.

- Baldini, N., Grimaldi, R., & Sobrero, M. (2006). Institutional changes and the commercialization of academic knowledge: A study of Italian Universities' patenting activities between 1965 and 2002. *Research Policy*, 35, 518–532.
- Bleiklie, I., & Kogan, M. (2007). Organization and governance of universities. *Higher Education Policy*, 20, 477–493.
- Bramwell, A., & Wolfe, D. A. (2008). Universities and regional economic development: The Entrepreneurial University of Waterloo. *Research Policy*, 37, 1175–1187.
- Chiu, Y., Chin-wei, H., & Yu-Chuan, C. (2012). The R&D value-chain efficiency measurement for high-tech industries in China. *Asia Pacific Journal Management*, 29, 989–1006.
- D'Este, P., Mahdi, S., Neely, A., & Rentocchini, F. (2012). Inventors and entrepreneurs in academia: What types of skills and experience matter? *Technovation*, 32, 293–303.
- Dearlove, J. (2002). A continuing role of academics: The governance of UK universities in the post-dearing era. *Higher Education Quarterly*, 53(3), 257–275.
- Duberley, J., Cohen, L., & Leeson, E. (2007). Entrepreneurial academics: developing scientific careers in changing University settings. *Higher Education Quarterly*, 61(4), 479–497.
- Ekundayo, H. T., & Ajayi, I. A. (2009). Towards effective management of university education in Nigeria. *International NGO Journal*, 4(8), 342–347.
- Elms, D. K., & Low, P. (2013). *Global value chains in a changing world*. Printing by WTO Secretariat, Switzerland: WTO Publications.
- Entebang, H., & Harisson, R. T. (2012). An integrated definition of corporate entrepreneurship. *International Journal of ASEAN Entrepreneurship and Business Development*, 1(1), 119–130.
- Etzkowitz, H. (1983). Entrepreneurial scientists and entrepreneurial universities in American Academic Science. *Minerva*, 21(2–3), 198–233.
- Etzkowitz, H. (2003). Research groups as 'quasi-firms': The invention of the entrepreneurial university. *Research Policy*, 32(1), 109–121.
- Etzkowitz, H. (2005). *Tipple helix*. Stockholm: SNS Press.
- Etzkowitz, H., & Klofsten, M. (2005). The innovating region: Toward a theory of knowledge-based regional development. *R&D Management*, 35(3), 243.
- Etzkowitz, H., Webster, A., Gebhardt, C., & Terra, B. R. C. (2000). The future of the university and the university of the future: Evolution of ivory tower to entrepreneurial paradigm. *Research Policy*, 29(2), 313–330.
- Etzkowitz, H., & Zhou, C. (2007). *Regional innovation initiator: The entrepreneurial university in various triple helix models*. In Singapore Triple Helix VI Conference Theme Paper, p. 1.
- Farsi, J. Y., Imanipour, N., & Salamzadeh, A. (2012). Entrepreneurial university conceptualization: Case of developing countries. *Global Business and Management Research: An International Journal*, 4(2), 193–204.
- From a European Itinerant Graduate-Professional Study Abroad Program, *Adult Education Quarterly 201X, XX(X)*, 1–20.
- Gibb, A. (2012). Exploring the synergistic potential in entrepreneurial university development: Towards the building of a strategic framework. *Annals of Innovation & Entrepreneurship*. eISSN, 2000-7396.
- Goffee, R., & Jones, G. (2007). Leading clever people. *Harvard Business Review*, March.
- Green, M., & Baer, M. (2000). What does globalisation mean for teaching and learning? *CHET Transformation Debates*, July 21.
- Guerrero, M., & Urbano, D. (2010). The development of an entrepreneurial university. *Journal of Technology Transfer*, Springer Science+Business Media, LLC.
- Hansen, M. T., & Birkinshaw, J. (2007). The innovation value chain. *Harvard Business Review*. June, 121–138.

- Hay, D. B., Butt, F., & Kirby, D. A. (2002). Academics as entrepreneurs in a UK University. In G. Williams (Ed.), *The enterprising university: Reform, excellence and equity*. Buckingham: Open University Press.
- Hessels Laurens, K., & Lente, H. (2008). Re-thinking new knowledge production: A literature review and a research agenda. *Research Policy*, 37, 740–760.
- Kefalas, P., Ketikidis, P. S., & Ververidis, I. F. (2012). An entrepreneurial educational model for knowledge-based regional development through innovative learning practices. *Proceedings of International Conference for Entrepreneurship, Innovation and Regional Development ICEIRD*.
- Kirby, D. (2006). Creating entrepreneurial universities in the UK: Applying entrepreneurship theory to practice. *Journal of Technology Transfer*, 31(5), 599–603.
- Knight, J. (2003). Updated internationalization definition. *International Higher Education*, 33, 2–3.
- Lin, C., & Tzeng, G. H. (2009). A value-created system of science (technology) park by using DEMATEL. *Expert Systems with Applications*, 36, 9683–9697.
- Mansfield, E. (1980). Basic research and productivity increase in manufacturing. *American Economic Review*, 70(5), 863–873.
- Markkula, M. A. (2012). European engineering universities as key actors in regional and global innovation ecosystems. *SEFI 40th Annual Conference*, 23–26 September Thessaloniki, Greece.
- Meyer, L. H., & Evans, I. M. (2007). Supporting academic staff: Meeting new expectations in higher education without compromising traditional faculty values. *Higher Education Policy*, 20, 121–144.
- Mowery, D. C., Nelson, R. R., Sampat, B. N., & Ziedonis, A. A. (2004). *Ivory tower and industrial innovation. University-industry technology transfer before and after the Bayh-Dole Act*. Stanford University Press.
- O'Shea, R. P., Chugh, H., & Allen, T. J. (2008). Determinants and consequences of university spinoff activity: A conceptual framework. *Journal of Technology Transfer*, 33, 653–666.
- Röpke, J. (1998c). *The entrepreneurial university: Innovation, academic knowledge creation and regional development in a globalized economy*. Working paper, Philipps-Universität Marburg.
- Röpke, J. (1998a). *The entrepreneurial university, innovation, academic knowledge creation and regional development in a globalized economy*. Working Paper No.3, Department of Economics, Philipps-Universität Marburg, Germany.
- Röpke, J. (1998b). The entrepreneurial university innovation, academic knowledge creation and regional development in a globalized economy. Department of Economics, Philipps-Universität Marburg, Germany September 16, (e-mail: roepke@wiwi.uni-marburg.de)
- Rothaermel, Frank T., Agung, Shanti D., & Jiang, Lin. (2007). University entrepreneurship: A taxonomy of the literature. *Industrial and Corporate Change*, 16(4), 691–791.
- Shane, S. (2009). Why encouraging more people to become entrepreneurs is bad public policy. *Small Business Economics*, 33(2), 141–149.
- Shattock, M. (2000). Strategic management in European universities in an age of increasing institutional self reliance. *Tertiary Education Management*, 6, 93–104.
- Shin, N., Kraemer, K. L., & Dedrick, J. (2009). R&D, value chain location and firm performance in the global electronics industry. *Industry and Innovation*, 16(3), 315–330.
- Siegel, D. S. (2006). *Technology entrepreneurship: Institutions and agents involved in university technology transfer* (Vol. 1). London: Edgar Elgar.
- Silva, D. G., & Mc Comb, R. P. (2012). Research universities and regional high-tech firm start-up and exit. *Economic Inquiry*, 50(1), 112–130.
- Sporn, B. (2001). Building adaptive universities: Emerging organizational forms based on experiences of European and US universities. *Tertiary Education and Management*, 7(2), 121–134.

- Thursby, J. G., & Thursby, M. C. (2002). Who is selling the ivory tower? Sources of growth in university licensing. *Management Science*, 48(1), 90–104.
- Vaira, M. (2004). Globalization and higher education organizational change: A framework for analysis. *Higher Education*, 48, 483–510.
- Walters, D., & Lancaster, G. (2000). Implementing value strategy through the value chain management. *Decision*, 38(3), 160–178.
- Watson, D. (2008). Businesses or business-like? Some thoughts on cultural convergence, pp. 25–28.
- Wei, Y. H. D., Zhou, Y., Sun, Y., & Lin, G. C. S. (2012). Production and R&D networks of foreign ventures in China: Implications for technological dynamism and regional development. *Applied Geography*, 32, 106–118.
- Wong, P. K., Yuen-Ping, H., & Annette, S. (2007). Towards an “Entrepreneurial University” model to support knowledge-based economic development: The case of the National University of Singapore. *World Development*, 35(6), 941–958.
- Woollard, D., Zhang, M., & Jones, O. (2007). Institute for small business & entrepreneurship. 7–9 November 2007, Glasgow, Scotland.
- Yusof, M., & Jain, K. K. (2010). Categories of university-level entrepreneurship: A literature survey. *International Entrepreneurship Management Journal*, 6, 81–96.

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# Effect of Organizational Climate and Structure on Innovation Performance

Nader Seyyed Amiri, Hamidreza Yazdani and Alireza Kameli

**Abstract** Nowadays, identification of required infrastructures for effective knowledge management and making innovation is of high significance in organizations. Infrastructures have been studied separately in previous research but in this study it is tried to investigate the direct and indirect effects of organizational structure and climate on innovation performance by considering the mediatory role of knowledge management and social interaction by a comprehensive model. This study has been conducted in a sample including 140 staffs of sale and marketing department of Shuttle Company in Tehran by using simple random sampling. Research methodology was of correlative type and research instrument was questionnaire. Structural equation modeling by LISREL software was applied for data analysis. The finding showed that the effects of organizational structure on social interaction, organizational climate on knowledge management and social interaction on innovation performance were positive and significant. But organizational structure and social interaction variables on knowledge management, organizational climate on social interaction and knowledge management on innovation performance couldn't have any direct and significant influence.

## 1 Introduction

Nowadays, by formation of competitive complex environments, the only organizations that can continue their activities are the ones that reinforce their performance in organizational significant capabilities such as innovation (Farsijani and

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Samie Nistani 2010). The organizations are also seeking for enhancement of productivity and improvement of their economic states by reliance on innovation (Mirfakhredini et al. 2010). Innovative performance is achieved by help of knowledge management and appropriate social interaction for product development and new production processes or improvement of existing processes. Innovation has been changed to the most important motive for achievement of competitive success in many organizations. The increase in significance of innovation is to some extent due to globalizations of markets, foreign competition has stressed on companies in order to produce outstanding products and services and permanently use innovation which knowledge and information are of its prerequisites.

Employees with high ability in creation and sharing of knowledge improve the knowledge level of organization and help improve the innovation in organizational performance (Kostopoulos et al. 2011). But regarding the reports and interview done with HR manager of Chuttle Company, the researcher found that the studied company, considering the vision including better position in market, availability of High speed internet and digital content in Iran by the aim of communication among people, wasn't able to step in this way as it wanted and has faced challenges such as lack of ability in applying the optimum capacity of talents and potential abilities of individuals and using high and bureaucratic structure and formal policies due to the abundant of operational forces and lack of consultative and participation environment and these factors have led to failure in many designs and projects and has undergone too much expenses, while one of main objectives of innovative performance is creation of new processes and improvement of existing processes for decreasing the costs and increasing profitability for organizations and in order to achieve these objectives, appropriate fields must be created and these fields can be considered as an appropriate organizational climate by considering the previous researches which has been studied separately but present study has considered them as a general and coherent model.

The reason why the present study has turned to sale and marketing department is due to communication with customers and the reflection of their needs to other units which in fact as a beating heart of organization in innovation and giving information indicates the knowledge management and that these advantages are not present in other units. Regarding the mentioned contents, the previous researches have shown the importance of knowledge management role and its consequences (Huang and Li 2009). While, little experiential document have been presented for the relation between knowledge management and innovative performance of companies. But the present study tries to study the effective organizational fields on knowledge management and social interaction and their relation to innovative performance.

## 2 Research Theoretical Background

Innovative performance; nowadays, innovation is considered as one of factors influencing on success and survival of knowledge based organizations (Ardekani et al. 2013). The importance of innovation in organizational success is not only limited to the manufacturing departments of country but the issue is true for service departments of companies which foster the human resource of future and achieve more importance. Innovation is an idea, product or process of a system which is understood by individuals, groups or organizations even a part of industry and society as a new issue (Rogers 2003). Rezaian (2011) considers performance as the acceptance of results for domestic and foreign customers of organization which obtain products, services, information and decisions or applicable occurring such as presentations and competitions.

Regarding the separate definitions of innovation and performance, researchers found that innovation performance is determined by investigating the number of valid achievements, recorded reports and new projects which organizations are in charge of them in their working routine (Hung et al. 2011). Comparing the quality and function of new products and new processes with competitors is also indicator of organizations innovative performance and that reputation and popularity in market are among the determinant factors in this range (Moradi et al. 2013).

With the existence of competitive environment and pressure dominant in society, measuring the innovation performance is of special importance, so researchers require appropriate indexes for studying innovative performance. Following are Different kinds of elements measuring innovative performance (Table 1).

In the present study, by considering the previous studies (Huang and Li 2009) and above table, it is turned to the dimensions of innovative performance which includes technical and executive innovation, because these two dimensions reflect the general distinction between social structure and technology in organizations (Naranjo-Gil 2009). Technical innovation includes processes and technologies which are used in product manufacturing or service delivery, in other words,

**Table 1** Types of innovation (Skerlavaj et al. 2010)

Types of innovation
Fundamental innovation
Augmenter innovation
Product innovation
Process innovation
Technical innovation
Executive innovation



innovation includes creation of new programs and services, development of new technologies in order to improve quality, transformation of existing programs and services to a different frame and composition of knowledge and new methods for program presentation.

But executive innovation is related to managerial methods, executive processes and organizational regulations and depends directly on policies, systems and management of an organization, in other words, executive innovation includes innovation in official processes, applying innovative management in planning methods and process controlling, flexible answer of organizations to environmental changes and making new organizational interrelations with other organizations (Armbruster et al. 2008). Many factors are studied as infrastructures of innovative performance, but regarding the presented approaches performed by Police, the present study has been more focused on knowledge management.

*Knowledge management*; knowledge management is defined as a regular and coherent process of coordination throughout organization in order to achieve organizational objectives (Rastogi 2000). America productivity and quality center (APQC) defines the knowledge management as a set of new strategies and approaches for creation, protection and application of knowledge properties (including individuals and information) which let knowledge flow among related individuals and in an appropriate time such that they can use these properties for creation of more value for the organization.

Many frameworks are recognized for knowledge management but this paper investigates three processes which is agreed upon by experts which are: knowledge creation, knowledge sharing and knowledge application (Zheng et al. 2010). Effective knowledge management provide opportunities for individuals and groups in order to create, protect and share knowledge and that knowledge creation consequently provide opportunities for organizations to compose the present share of knowledge for creation of new knowledge (Argote et al. 2003).

Creation and sharing of knowledge is more dynamic in innovation process while protection activities regarding the way of knowledge protection inside the organization is more static (Chen et al. 2010). By knowledge creation, staffs can use the existing knowledge in a new way for doing their duties and so have a potential for creation of new knowledge in order to solve the problems (Sabherwal and Becerra-Fernandez 2003). Individuals and groups can use new knowledge and skills for introduction of innovative ideas, effectiveness improvement and creation of new product and services (Grant 1996).

*Social interaction*; social interaction refers to the extent in which organization members interact each other in terms of trust, communication and coordination. When organization members meddle in resource exchange (such as: information, contribution and leading to colleagues and solving shared problems), they are able to collect knowledge regarding the issues relating to work and operational solutions (Sparrowe et al. 2001; Hoegl et al. 2003). Social interaction such as mutual trust, effective communication and coordination may ensure the motivation and ability of organizational members for innovation (Levin and Cross 2004; Sivadas and Dwyer 2000).

Researchers found that mutual comprehension and trust among working members let the organizations grant and unify the information and distribute the expertise more effectively (Bartol and Srivastava 2002). But regarding the communication, researchers have suggested that when individuals have wider communicative channels or richer interactions, the potential of transforming vital information and knowledge inside the organization is provided with more possibility and individuals may dedicate significant resources to creation, exchange and application of required knowledge (Hoegl et al. 2003).

Coordination is the degree in which organization members feel that their organization has been well organized and integrated (Janz and Prasarnphanich 2003). Researchers believed that coordinated behaviors remove the boundaries between organizational units which itself leads to support of required knowledge sharing and using inside the organizations (Tsai 2002).

*Organizational structure*; organizational structure shows a strong body of duties and activities and can lead to development or non-development of knowledge management. Organizational structure shows the extent to which companies plan for authority, decision making power, standardization of regulations, policies and cohesion of members and works for their organization (Inkpe and Tsang).

According to Lee and Grover (2000), 4 significant aspects including concentration, formality, complexity and cohesion are emphasizing for organizational structure. But according to Chen and Huang (2007), organizational structure has been categorized in 3 dimensions of formality, concentration and cohesion. The present study has focused on formality, concentration and cohesion. The previous studies have defined the concentration as the amount of decision making power in higher levels of organizations and cohesion is considered as the extent in which different organizational departments work dependently together and formality is also defined as the extent of job standardization throughout the organization and leading of member's working content by policies and regulations (Andrews and Kacmar 2001; Robbins and Decenzo 2001)

*Organizational climate*; according to Janz and Prasarnphanich (2003), organizational climate is defined as usual methods, shared beliefs and value systems which flow in Organization. For individuals inside the organization, organizational climate is in form of a set of features and expectations which describe the general patterns of organizational activities (Jaw and Liu 2003). Climate relating to innovation is employee's comprehension regarding innovation in organizations including feelings, attitudes and behavioral tendencies. In a climate which is strongly appropriate for innovation, employees believe that innovation is valued and they will be prized instead of showing innovative behaviors. In a weak innovative climate, employees don't feel that innovation is valued and fear to be ridiculed by presenting new ideas (Mohamad Kazemi et al. 2012). So, by considering the importance of innovative and creative human force, the organizations which provide appropriate climate for innovation will benefit of obtained competitive advantage (Fakhrian 2002). Organizations can encourage employees to

think freely and clearly share their ideas and comments to others and search for uncommon options through innovative and formal climate (Chen et al. 2010). Table 2 shows Research experiential background.

**Table 2** Research experiential background

Research objective	Findings
Investigating the effect of organizational structure and climate on knowledge management through mediator variable of social reaction (Chen and Huang 2007)	Based on findings, supportive and innovative organizational climate has significant and positive influence on social interaction, while non-centered organizational structure has been less formalized and has positive influence on social interaction and social interaction has positive influence on knowledge management
Investigating the influence of organizational structure and climate on knowledge management and organizational innovation by the view of social interaction (Chen et al. 2010)	According to the findings of the study, knowledge management has a positive influence on innovation, while this influencing hasn't been formalized by the positive influence of supportive organizational climate and is justified according to knowledge management
Investigating the mediator role of knowledge management in the relation of social reaction and innovation (Huang and Li 2009)	According to the finding of this research, social interaction has positive influence on knowledge management and knowledge management has also positive influence on innovation. The findings also indicate the mediator role of knowledge management in relation between social interaction and innovation
Investigating the influence of organizational structure (Mahmoudsalehi et al. 2012a, b)	Findings show that organizational structure has a positive relation with knowledge management and concentration and formality has a negative relation to knowledge management but complexity and cohesion have positive relation to knowledge management
Investigating the influence of leadership style and organizational climate on knowledge management- by considering the mediator role of organizational structure and social interaction (survey study regarding Mellat Bank) (Yazdani et al. 2015)	Findings of the research showed that leadership style on organizational structure, climate on knowledge management and organizational structure on social interaction have significant and positive influence but leadership style and organizational structure and social interaction couldn't have any influence on knowledge management
Technical and executive innovation in Yazd university by emphasizing on implementation infrastructures of knowledge management (Konjkavfard et al. 2013)	The findings of the study showed that technology, structure and culture as the implementation infrastructures of knowledge management have significant influence on executive and technical innovation

### 3 Research Hypothesis and Conceptual Model

The previous studies showed that a non-centered structure can be the success factor of knowledge management and too much concentration prevent the interaction among organization members and reduce the opportunity for individual development and advancement and prevent the solvation of problems existing in management field (Zheng et al. 2010). Researchers found that too much formality cause that different resources of knowledge impose the production of new products and services but little formality cause employees think more creatively to their work and search for more information resources and solve different questions and they believed that flexibility and less emphasize on working regulation result in foundation of new ideas and creative behaviors (Chen et al. 2010).

Janz and Prasarnphanich (2003) believed that beside cooperation with each other, information sharing and discussion, individuals can create communicational and coordinating channels for exchange of knowledge and expertise. Knowledge management requires regular changes among communications through organization which may require cohesion function in order to coordinate the activities and technologies of organization (Grant 1996). It is shown in the previous studies that high degree of cohesion has a positive relation to knowledge management (Chen et al. 2010). With respect to experimental studies, the following hypothesis can be mentioned.

H1 organizational structure has significant, positive and direct influence on social interaction.

H2 organizational structure has significant, positive and direct influence on knowledge management.

Researchers believed that organizational climate has an important role in formation of employees interaction and behavior and influencing on their comprehension of knowledge management and also expressed that companies can encourage employees to freely think and share their ideas and comments with others and search for uncommon options through innovative and formal climate, from the social capital view, organizations can create different aspects of organizational climate such as supportive and innovative climate and when organizations are of higher level of innovative climate, employees are more willing to have social interaction for knowledge sharing for creative thinking (Chen et al. 2010; Chen and Huang 2007). It has been shown in the previous studies that when employees understand higher degree of supportive climate, show more willingness for working together and sharing knowledge (Janz and Prasarnphanich 2003). A supportive climate also influence on creation and sharing knowledge among members (Slater and Narver 1995). With respect to the mentioned topics, the following hypothesis can be expressed.

H3 organizational climate has significant, positive and direct influence on social interaction.

H4 organizational climate has significant, positive and direct influence on knowledge management.

Sharing and exchange of knowledge require a complex social process and many studies have indicated the importance of social interaction through organization (Nahapiet and Ghoshal 1998; Tsai 2002; Hoegl et al. 2003; Chen and Huang 2007). The last research conducted by Chen and Huang (2007) indicated the importance of social interaction and they believed that coordinated behaviors remove the boundaries between organizational units which itself cause support of knowledge sharing and application through organization.

The findings of previous studies have shown that weak social interaction prevents the successful implementation of knowledge management which can be a result of inappropriate structure and climate (Yazdani et al. 2015). On the other hand, Huang and Li (2009) believed that social interaction such as reciprocal trust, effective communication and coordination may ensure the motivation and ability of organization members for innovation. It determines and identifies the Innovative, unpredictable, multidiscipline act and changeable in trends and organizations are able to use advantages of multiple ideas by creating networks and social interactions among members (Tsai and Goshal 1998).

Previous study has shown that social interaction in entrepreneur teams facilitates the creation of new products and leads to innovative successes (Lechler 2001). Considering the mentioned items the following hypothesis can be considered for the research:

H5 social interaction has direct, positive and significant influence on knowledge management.

H6 social interaction has direct, positive and significant influence on innovative performance.

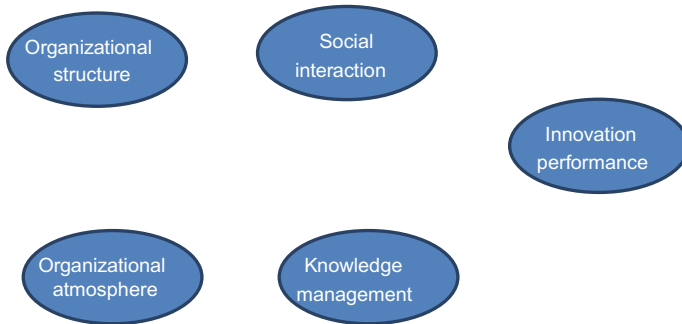
In the last hypothesis, innovation refers to organization willingness for development of new factors or new composition of present factors identified in products, technologies or management. Innovation process includes achievement, contribution and application of new knowledge (Moorman and Miner 1998).

Knowledge management possibly influence on innovation performance (Subramaniam and Youndt 2005). According to Huang and Li (2009) creation and sharing of knowledge is more dynamic in innovation process while application activities regarding the way of knowledge protection inside organization is more static. Knowledge creation provides opportunities for organizations in order to compose present share of knowledge for production of new knowledge (Argote et al. 2003).

H7 Knowledge management has direct, positive and significant influence on innovation performance.

H8 organizational structure has positive and significant and indirect influence on innovation performance with respect to the mediatory state of social interaction.

H9 organizational structure has positive, significant and indirect influence on knowledge management with respect to the mediatory role of social interaction.



**Fig. 1** Conceptual model

H10 organizational structure has positive, significant and indirect influence on innovation performance with respect to mediatory state of knowledge management.  
 H11 organizational climate has significant, positive and indirect influence on innovation performance with respect to the mediatory state of social interaction.  
 H12 organizational climate has significant, positive and indirect influence on knowledge management with respect to the mediatory state of social interaction.  
 H13 organizational climate has significant, positive and indirect influence on innovation performance with respect to the mediatory state of knowledge management.  
 H14 social interaction has positive, significant and indirect influence on innovation performance with respect to the mediatory role of knowledge management.

Figure 1 shows conceptual paper.

## 4 Research Methodology

As the aim of the study is determination of causal relation between organizational climate and structure with innovation performance with respect to the mediatory role of social interaction and knowledge management (in form of Table 1), the present study is applied in term of objective and survey in term of data collection and it is correlational. The statistical population in this study includes the staffs of marketing and sale department of Shuttle Company in 4 shifts. Number of statistical population of staffs according to the interview performed with human resource manager was reported 230 individuals. According to the table of Korjesi and Morgan, a sample including 140 individuals was selected. In the analytical model of the research, organizational climate and structure are independent variable, knowledge management and social interaction are mediator variables and innovation performance is dependent variable. The main instrument of data collection was questionnaire. In order to measure innovation performance, questionnaire presented

by Huang and Li (2009) by 9 speeches was used and for measuring organizational climate, social interaction and knowledge management a questionnaire by Chen and Huang (2007) with 5, 8, 7 and 8 speeches, respectively was applied. The measure considered for all variables is of Likert 5 spectrum.

## 5 Data Analysis

Measuring Model test include reliability and validity of Model. For Determining the reliability of questionnaire, the content reliability method and then diagnostic reliability in form of determining extracted variance mean index was applied. But in validity, the composed validity method beside Cronbach's alpha was applied which index is expressed in Table 3.

**Table 3** Question validity

Variable	Number of questions	Cronbach's alpha	Extracted variance mean coefficient	Composed reliability coefficient
Innovation performance	7	0/849	0/66	0/790
Organizational climate	5	0/843	0/616	0/753
Organizational structure	8	0/753	0/545	0/706
Social interaction	7	0/788	0/580	0/659
Knowledge management	8	0/730	0/532	0/717
<b>Total questions</b>	<b>35</b>	<b>0/852</b>		

**Table 4** The findings of measuring model of research variables (second order confirmative analysis)

Measuring model	Including variables	$\chi^2$	df	$\frac{\chi^2}{df}$	RMSEA
Measuring model independent variable	Organizational structure	26/80	17	1/57	0/064
	Organizational climate	3/39	4	0/847	0/001
Measuring model of mediator variable	Knowledge management	27/96	18	1/55	0/063
	Social interaction	24/87	12	2/07	0/088
Measuring model of dependent variable	Innovation performance	17/17	13	1/32	0/048

**Table 5** Descriptive and deductive statistics of statistical population of research variables

Variable name and their elements	Elongation	Skewness	Mean	Standard deviation	Observed t	Degree of freedom	State
Organizational climate	-	-	3/66	0/78	10/128	139	Appropriate
Innovative climate	-0/720	-0/218	3/75	0/86	10/42	139	Appropriate
Supportive climate	-0/672	-0/106	3/58	0/91	7/522	139	Appropriate
Organizational structure	-	-	3/68	0/53	15/224	139	Appropriate
Formality	-0/890	-0/011	3/96	0/54	21/07	139	Appropriate
Concentration	-0/206	-0/240	3/38	0/78	5/85	139	Appropriate
Cohesion	-0/186	-0/150	3/70	0/73	11/42	139	Appropriate
Social interaction	-	-	3/66	0/60	13/04	139	Appropriate
Trust	-0/347	-0/260	3/56	0/795	8/43	139	Appropriate
Cooperation	-0/347	-0/648	3/67	0/869	9/23	139	Appropriate
Communication	-0/809	-0/519	3/75	0/740	11/98	139	Appropriate
Knowledge management	-	-	3/20	0/56	4/31	139	Appropriate
Creation	-0/269	-0/320	3/42	0/627	8/04	139	Appropriate
Sharing	-0/462	-0/412	3/09	0/760	1/51	139	Appropriate
Application	-0/720	-0/555	3/08	0/846	1/24	139	Appropriate
Innovative performance	-	-	3/67	0/652	12/192	139	Appropriate
Executive innovation	0/252	0/027	3/55	0/713	9/237	139	Appropriate
Technical innovation	0/640	-0/708	3/78	0/749	12/44	139	Appropriate



Fornel and Larcker (1981) suggest the AVE quantities, 0.5 and more than it for quantities of mean variance explained which means the mentioned factor explains its indicators variance about 50% or more. In order to investigate the composed credit, factors with CR more than 0.6 are of acceptable reliability. Cronbach's alpha of factors must be more than 0.7 that all factors have appropriate factors according to Table 2.

The findings of this research are attained by investigating the measuring models of extrinsic variables (structure and organizational climate) and Endogenous variables (social interaction and knowledge management and innovation performance) by confirmative factorial analysis approach of first and second order in LISREL software and investigation of research structural model which are presented separately in the Table 4.

Before entering the step of hypothesis test and research conceptual models, it is required that extrinsic and endogenous variables are produced from the correctness of measuring model. So, measuring models of these two types of variables are presented in a unified table as following. This work is done due to the existence of latent variable by second order confirmative factorial analysis.

The findings of second order confirmative factorial analysis of extrinsic and endogenous variables showed that appropriate measuring models and total numbers and model parameters are significant. The proportion indexes of measuring models are described as above table which indicates the appropriateness of these models.

As it is understood from the Table 5, all variables have appropriate distribution and policy and the mean of all variables are around 3, on the other hand, it is better to elongation less than 7 and skewness between +3 and -3 for normal data which indicate the normality of all variables with regarding the above data (Aryanfar 2014).

As it is observed (Table 6) between organizational structure and climate and variables including social interaction, knowledge management and innovation performance is significant in significance level of 0.01. The highest amount of

**Table 6** Correlation analysis between research variables

Correlation between extrinsic and endogenous variables	Organizational climate	Organizational structure	Social interaction	Knowledge management	Innovation performance
Organizational climate	1	-	-	-	-
Organizational structure	0/722	1	-	-	-
Social interaction	0/634	0/777	1	-	-
Knowledge management	0/155	0/155	0/108	1	-
Innovative performance	0/495	0/614	0/617	0/084	1

significant correlation is related to the relation between organizational structure-social interaction with 0.777% and the lowest amount of significant correlation depends on the relation between innovation performance and knowledge management with 0.084%. From the correlation analysis among endogenous variables it can be concluded that any improvement in organizational structure and climate, social interaction and knowledge management leads to improvement in innovation performance.

## 6 Investigating the Structural Model

The quantity of proportion indexes indicates the appropriate fitness and the quantity of  $X^2$  on degree of freedom is equal to 1.58 and less than permitted amount of 3, the amount of RMSEA is equal to 0.065 and less than 0.08. in the above model, organizational structure has positive and significant influence on the amount of 0.7% and 0.07 for knowledge management and organizational climate has also positive and significant influence on social interaction by the quantity of 0.02%, on knowledge management with the quantity of  $-0.03\%$  and with innovation performance with the quantity of 0.87, knowledge management has also positive and significant influence on innovation performance with the following  $-0.06$ . According to the significant numbers in the above shape, it can be told that the hypothesis (first, fourth and fifth are confirmed and other hypothesis are not confirmed due to the significance less than 1.96 (Figs. 2 and 3).

Tables 7 and 8 show the rout coefficient and the significant amount of direct and indirect effects between dependent and independent variables but the present study has applied Sobel test in order to test mediatory effects in the suggested pattern and determination of their significance, to do so, Table 8 is applied for computation of Sobel test.

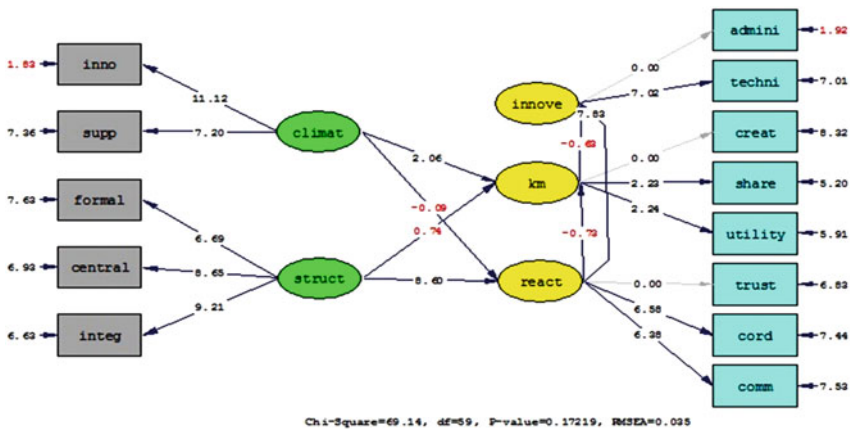


Fig. 2 Standard solution of model

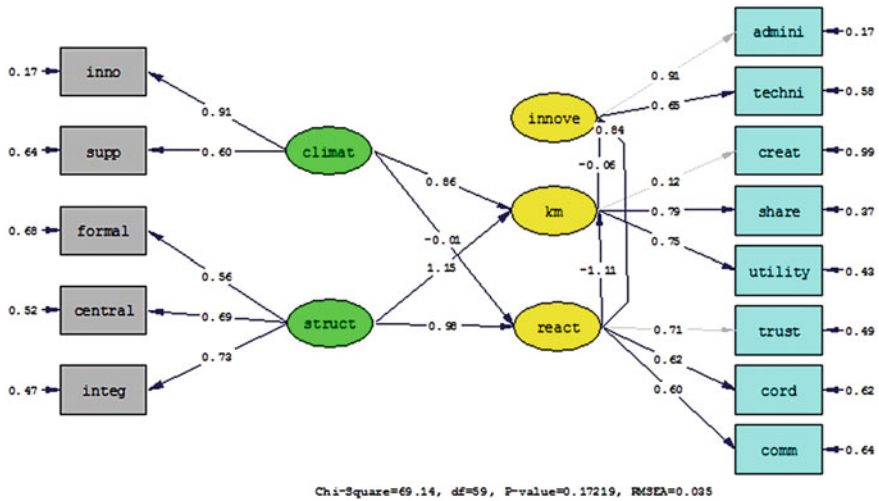


Fig. 3 T value of model

Table 7 T value results

Relations	Route coefficient		T value		Result	
	Direct influence	Indirect influence	Direct influence	Indirect influence	Direct influence	Indirect influence
Organizational structure—social interaction	0/71	–	<b>6/79</b>	–	Has	–
Organizational structure—knowledge management	0/07	–0/04	0/47	–0/25	Has got	Hasn't got
Organizational climate—social interaction	0/02	–	0/21	–	Hasn't got	–
Organizational climate—knowledge management	0/82	0/01	<b>4/25</b>	–0/16	Has got	Hasn't got
Social interaction—knowledge management	–0/03	–0/01	–0/25	–0/12	Hasn't got	Hasn't got
Innovation—social interaction	0/87	–	<b>10/22</b>	–0/12	Has	Hasn't got
Innovation—knowledge management	–0/06	–	–0/79	–	–	Hasn't got
Innovation—organizational structure	–	0/62	–	<b>7/22</b>	–	Has
Innovation—organizational climate	–	–0/04	–	–0/39	–	Hasn't got

**Table 8** The findings of research structural mode

Index	AGFI	GFI	NNFI	IFI	CFI	$\chi^2$	df	$\chi^2/df$	RMSEA
Acceptance threshold	>0/9	>0/9	>0/9	>0/9	>0/9	–	–	<3	<0/07
Quantity	0/9	0/9	0/91	0/94	0/94	93/38	59	1/58	0/065

**Table 9** Regression coefficient of factors

Predictable variable	* $\beta$	Se *	t *	** $\beta$	Se **	t **
Organizational structure	–	–	–	0/750	0/082	9/131
Organizational structure	0/187	0/140	1/329	0/415	0/126	3/301
Social interaction	–0/028	0/124	–0/225	0/382	0/111	3/440
Organizational structure knowledge management	–	–	–	0/752	0/083	9/016
	–	–	–	–0/013	–0/080	0/169
Organizational climate	–	–	–	0/414	0/062	0/699
Organizational climate	0/103	0/078	1/320	0/146	0/072	2/035
Social interaction	0/016	0/101	0/154	0/548	0/093	5/911
Organizational climate	–	–	–	0/413	0/063	6/580
Knowledge management	–	–	–	0/008	0/088	0/095
Social interaction	–	–	–	0/668	0/072	9/207
Social interaction	–	–	–	0/666	0/073	9/095
Knowledge management	–	–	–	0/020	0/079	0/253

Sobel test, by using Regression coefficient of Table 9 showed that the effect of organizational structure on innovation and organizational climate on innovation performance by mediatory variable of social interaction is indirect, significant and positive, it must be mentioned that the appropriate field of social interaction as the mediatory role in the relation of organizational climate and structure will facilitate the innovation performance. But Sobel test didn't confirm sub hypothesis.

## 7 Findings and Suggestions

The findings show that organizational structure has positive, direct and significant influence on social interaction which is compatible with previous findings and confirm them. If we consider the organizational structure as organic, we cause that social interactions have facilitating role between organizational structure and knowledge management. And as it is clear from the findings, the influence of organizational structure on social interaction, interaction on innovation performance and also organizational structure on innovation performance in form of indirect is significant and positive. But organizational structure wasn't able to have significant and direct influence on knowledge management which is not compatible with previous findings.

And maybe that is why sale and marketing department, has obtained knowledge management by customers (not by employees and top managers) and knowledge is less shared in organization and structure couldn't have positive influence on it. According to the previous researches, the more non-centralized, informal and coherent is the structure, the more positive and significant influence on knowledge management. So we can conclude that, due to high and inflexible structure of Shuttle, it has led not to have direct, indirect and significant influence on knowledge management and this prevent executive and technical innovation.

Due to the working nature and content of sale and marketing department which pay more attention to the external environment, the climate hasn't been able to have positive and significant influence on social interaction and this research is not compatible with previous findings (Chen and Huang 2007) (the rejection of the third hypothesis). But organizational climate in 2 dimensions (innovative and supportive) has significant, positive and direct influence and this finding is compatible with previous studies (the confirmation of the 4th hypothesis). Social interaction couldn't have positive, significant and direct influence on knowledge management and this study is not compatible with previous ones (Huang and Li 2009; Bartol and Srivastava 2002) (Rejection of the 5th hypothesis).

Due to high attention of sale and marketing department to the external environment, internal and employees social interaction has been weakened and a kind of weak communication and coordination has been produced between departments which has prevented knowledge management from success but on the other hand, due to the appropriate organizational structure which is the main factor of strong social interaction has made social interaction positively and significantly influence on innovation which is compatible with previous findings (Huang and Li 2009) (the confirmation of the 6th hypothesis).

Finally, nor knowledge management was able to significantly and positively influence on innovation performance neither provide a facilitator role for the relation of organizational climate and innovation performance and this result is not in agreement with previous findings (the rejection of 7th hypothesis).

In addition to investigation of main hypothesis, the present study turns to investigate indirect effects and sub hypothesis and that all indirect effects and relations are presented in previous studies in term of theory (Chen and Huang 2007; Chen et al. 2010; Huang and Li 2009) and that except the 8th and 11th hypothesis which is "social interaction has mediator and facilitator role between organizational structure and climate on innovation performance is compatible with previous studies but other hypothesis are not congruent with previous studies.

It is suggested to shuttle that if is going to create innovative performance throughout the organization must consider its requirements which are organizational climate, organizational structure and social interaction and knowledge management which are described.

In organizational structure issue, with respect to the fact that organizations nowadays are moving toward knowledge structures must lean toward organic, flexible and flat structures instead of high and mechanical structure, because the success of knowledge management requires cooperation and partnership among

members and needs the skills of group working and it is based on believing equality and uniformity and prevention of monarchy and superiority and these consequences never are effective in hierarchical structures.

When organizations apply organizational climate and structure for promotion of innovation performance, the role of social interaction and knowledge management will be more critical. So the strength of organizational structure and climate which has influence on innovation is influence by social interaction and knowledge management applied by organizations and these findings show that organizational climate can create higher level of knowledge sharing and creation inside the organizations.

In addition, the present findings are useful for helping the expression of organizational structure influences on knowledge management. Generally, if the features of organizational structure are less centralized and less formal, higher level of knowledge management will be produced. So, organizations must carefully foster an appropriate organizational field in order to facilitate knowledge management. Organizations need to produce a supportive and innovative climate for promotion of knowledge creation and sharing.

Besides, these companies require designing their structure less formal, less centralized and more integrated in order to provide more authority for employees so that employees feel more respect from the partnership in their job. Appropriate organizational fields lead to more satisfied level of knowledge management in organizations. In order to build a supportive climate for running the knowledge management, it is suggested that organizational managers support new and innovative ideas of employees and persuade them to present new comments and cooperation in work. In order to achieve such an important issue, suggestion system approaches, working groups, committees and stroke group as well as quality loops.

Finally the mediator role of social interaction must be considered as a facilitator, that is, social interaction must be improved by making organizational structure organic and leads to trust, coordination and communication among members in order to include the success of knowledge management. In order to develop knowledge management in organization, the changes leading to sagacity interaction or restructuring must be systematically encouraged and supported. In order to exchange and create knowledge, shuttle must apply interactional and communication activities such as training workshops, brainstorming sessions and new ideas which make both knowledge management and promote innovation performance.

## References

- Andrews, M. C., & Kacmar, K. M. (2001). Discriminating among organizational politics, justice, and support. *Journal of Organizational Behavior*, 22, 347–366.
- Argote, L., Mcevily, B., & Reagans, R. (2003). Managing knowledge in organization: An integrative framework and review of emerging theme. *Management Science*, 49(4), 571–582.
- Armbruster, H., Bikfalvi, A., Kinkal, S., & Lay, G. (2008). Organizational innovation: The challenge of measuring non-technical innovation in larg-scale surveys. *Technovation*, 28, 644–657.

- Aryanfar, M. (2014). *Investigating the influence of individual motivations on knowledge sharing behavior with respect to adjustment role of values (case study: Virtual society of city idea)* (Master thesis). Farabi Paradise of Tehran University.
- Bartol, K. M., & Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational reward systems. *Journal of Leadership*, 9(1), 64–76.
- Chen, C. J., & Huang, J. W. (2007). How organizational climate and structure affect knowledge management-social interaction perspective. *International Journal of Information Management*, 27, 104–118.
- Chen, C. J., Huang, J. W., & Hsiao, Y. C. (2010). Knowledge management and innovativeness: The role of organizational climate and structure. *International Journal of Manpower*, 31(8), 847–870.
- Fakhrian, S. (2002). *Investigating the relation of creativity and innovation of official employees with organizational factors* (Leading by Dr. Ali Divandari, Master thesis). Tehran University.
- Farsijani, H., & Samie Nistani, A. (2010). Investigating the integration role between comprehensive quality management and technology management in determination of quality and innovation performance (a study on manufacturing companies of central province). *IT Management*, 2(4), 117–136.
- Fornel, C., & Larcker, D. F. (1981). Evaluating structural equations models with unobservable variables and measurement error. *Marketing Research*, 18(1), 39–50.
- Grant, R. (1996). Toward a knowledge-based theory of the firm. *Strategy Management Journal*, 17, 109–111.
- Hoegl, M., Parboteeah, K. P., & Munson, C. L. (2003). Team-level antecedents of individuals' knowledge networks. *Decision Sciences*, 34(4), 741–770.
- Huang, J. W., & Li, Y. H. (2009). The mediating effect of knowledge management on social interaction and innovation performance. *International Journal of Manpower*, 30(3), 285–301.
- Hung, R. Y. Y., Lien, B. Y. H., Yang, B., Wu, C. M., & Kue, Y. M. (2011). Impact of TQM and organizational learning on innovation performance in the high- tech industry. *International Business Review*, 20(2), 213–225.
- Janz, B. D., & Prasarnphanich, P. (2003). Understanding the antecedents of effective knowledge management: The importance of a knowledge-centered culture. *Decision Sciences*, 34(2), 351–384.
- Jaw, B. S., & Liu, W. (2003). Promoting organizational learning and self-renewal in Taiwanese companies: The role of HRM. *Human Resource Management*, 42(3), 223–241.
- Konjkavfard, A., Ardekani, S., Saeed, T., Mohammad, S., & Zanjeerchi, S. M. (2013). Technical and executive innovation in Yazd university by emphasizing on infrastructures of knowledge management implementation, research quarterly and planning. *Higher Education*, 68, 69–90.
- Kostopoulos, K., Papalexandris, A., Papachroni, M., & Iannou, G. (2011). Absorptive capacity, innovation, and financial performance. *Journal of Business Research*, 64(12), 1335–1343.
- Lechler, T. (2001). Social interaction: A determinant of entrepreneurial team venture success. *Small Business Economics*, 16(4), 263–278.
- Lee, C. C., & Grover, V. (2000). Exploring mediation between environmental and structural attributes: The penetration of communication technologies in manufacturing organizations. *Journal Management Information System*, 16(3), 187–317.
- Levin, D. Z., & Cross, R. (2004). The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer. *Management Science*, 50(11), 1477–1490.
- Mahmoudsalehi, M., Dari, B., & Safari, K. (2012a). Investigating role of mediator social interaction in the influence of organizational climate and structure on knowledge management (case study: iran's automobile industry). *Journal of Information Technology Management*, 4 (11), 69–92.
- Mahmoudsalehi, M., Moradkhannejad, R., & Safari, K. (2012b). How knowledge management is affected by organizational structure. *The Learning Organization*, 19(6), 518–528.

- Mirfakhredini, H., HatamiNasab, H., Taleifar, R. Konjkav, & Monfared, A. (2010). Knowledge management, knowledge innovation and innovation performance in small and middle companies. *Commercial Management Views*, 35(2), 103–118.
- Mohamad Kazemi, R., Jafari Moghadam, S., & Soheili, S. (2012). Identifying the extent of organizational climate influence on innovation (case study: Banke Melat). *Entrepreneur Development*, 5(2), 67–86.
- Moorman, C., & Miner, A. S. (1998). Organizational improvisation and organizational memory. *Academy of Management Review*, 23(4), 698–723.
- Moradi, M., Valipoor, M., Yakideh, K., Safardoost, A., & Abdolhahan, F. (2013). Investigating the role of knowledge attraction capacity on innovative performance of organizations (case study: Pharmacy organizations and insurance companies present in securities of Tehran). *Commercial Management View*, 46(13), 79–102.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital and the organizational advantage. *Academy of Management Review*, 23(2), 242–266.
- Naranjo-Gil, D. (2009). The influence of environmental and organizational factors on innovation adoptions: Consequences for performance in public sector organizations. *Technovation*, 29, 18–81.
- Rastogi, P. (2000). Knowledge management and intellectual capital—The new virtuous reality. *Human Systems Management*, 19(1), 39–49.
- Rezaian, A. (2011). *Team making in 21th century (developed organizational behavior management)* (3rd ed.). Tehran: Human Science Books of Universities (SAMT).
- Robbins, S. P., & Decenzo, D. A. (2001). *Fundamentals of management: Essential concepts and applications*. NJ: Prentice-Hall.
- Rogers, E. M. (2003). *Diffusion of innovations*. New York: The Free Press.
- Sabherwal, R., & Becerra-Fernandez, I. (2003). A empirical study of the effect of knowledge management processes at individual, group & organizational levels. *Decision Sciences*, 34(2), 225–260.
- Sivadas, E., & Dwyer, F. R. (2000). An examination of organizational factors influencing new product success in internal and alliance-based processes. *Journal of Marketing*, 61(4), 31–50.
- Skerlavaj, M., Song, J. H., & Youngmin, L. (2010). Organizational learning culture, innovative culture and innovations in south Korean firms. *Expert Systems with Applications*, 37, 6390–6403.
- Slater, S. F., & Narver, J. C. (1995). Market orientation and the learning organization. *Journal of Marketing*, 59, 63–74.
- Sparrowe, R. T., Liden, R. C., & Kraimer, M. L. (2001). Social networks and the performance of individuals and groups. *Academy of Management Journal*, 44(2), 316–325.
- 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.
- Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *Academy of Management Journal*, 41(4), 464–476.
- Tsai, W. (2002). Social structure of cooperation within a multiunit organization: Coordination, competition, and intra-organizational knowledge sharing. *Organization Science*, 13(2), 179–190.
- Yazdani, H., Hamidzadeh, A., & Kameli, A. (2015). Investigating the influence of leadership style and organizational climate on knowledge management, with respect to the mediator role of organizational structure and social interaction (survey research regarding official department of Mellat Bank). *IT Management*, 7(1).
- Zheng, W., Yang, B., & Mclean, G. (2010). Linking organizational culture, structure, strategy and organizational effectiveness: Mediating role of km. *Journal of Business Research*, 63(7), 763–771.



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**Part II**  
**Diaspora and Transnational**  
**Entrepreneurship**

# Transnational Entrepreneurship in a Diaspora

**Vanessa Ratten, Léo-Paul Dana, Veland Ramadani  
and Shahamak Rezaei**

**Abstract** Transnational entrepreneurs are innovating global society by providing interesting new products, services and processes. The aim of this chapter is to provide an overview of transnational entrepreneurship by focusing on the diaspora. This means utilizing a theory of practice framework to understand the changing conceptualization of immigrant entrepreneurship. The role of transnational diaspora entrepreneurs is discussed, which emphasizes the role of transnational living in the global economy. The role of transnational networks are discussed that leads to an examination of hybrid forms of entrepreneurship that integrate immigrant and ethnic entrepreneurship. Future research suggestions are also stated.

## 1 Introduction

Entrepreneurship is a relational process as opportunities are created through networks with sociocultural factors being important in understanding the entrepreneurial process (Aldrich and Zimmer 1986; Korsgaard 2011). These networks often internationally orientated evolve over a time period depending on the ability of individuals to engage in business ventures (Dubois 2016). The way entrepreneurship is both a relational and evolutionary process is seen in the ability of individuals

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to utilize knowledge found in multiple geographies (Yeung 2009). This is due to the social environment playing an important role in business development especially in terms of transnational and diaspora entrepreneurship, which has increased due to rising immigration and ease of global travel.

Entrepreneurship research needs to focus more on transnational and diaspora elements due to the increasing proportion of people living outside their country of origin. The decrease in global boundaries of individual countries has meant that there is more interest in transnational entrepreneurship (Patel and Conklin 2009). This is due to entrepreneurs moving amongst different geographical regions because of lifestyle reasons and increased ease of international travel (Portes et al. 2002). In addition, there are global advances such as increased interdependence between countries that have reduced barriers to cooperation. Some transnational entrepreneurs see the growth of cross-border business as a competitive strategy that maximizes their knowledge and expertise. Transnational entrepreneurship is a key part of entrepreneurship, which can be generally defined as “the pursuit of new business activities shaped by the dual and complementary set of ‘habitus’ and ‘field’, which structure entrepreneurial activity” (Terjesen and Elam 2009: 1105). The habitus refers to the knowledge and information possessed by an entrepreneur that can be studied in the marketplace. Field involves the context of the business activity in terms of its type and geographical setting. Both habitus and field are key elements of transnational entrepreneurship.

Dimitratos et al. (2015: 1) states “transnational entrepreneurs are a new business phenomenon, representing a fluid context in which established arrangements may be expected to change”. Transnationalism has been studied in a variety of disciplines including anthropology, entrepreneurship and sociology (Urbano et al. 2011). Transnationalism can involve informal business activities that are conducted in an ad hoc manner depending on circumstances (Levitt 2001). Basch et al. (1994: 7) defines transnationalism as “the processes by which immigrants forge and sustain multi-stranded social relations that link together their societies of origin and settlement”. As a process transnationalism is a key part of the immigrant literature due to its acknowledgement of cross-cultural social relations being important considerations (Basch et al 1994). This is due to its emphasis on international business and the ethnicity of an entrepreneur being important to transnationalism (Urbano et al. 2011).

There has been difficulty in explaining transnationalism due to the changing nature of ethnic entrepreneurs and their linkages with their home countries (Itzigshohn et al. 1999; Ramadani et al. 2014). Most practices of transnationalism focus on the links between home and host countries maintained by travel (Landholt 2001). The extent of transnationalism depends on the frequency of travel between home and host countries but this is changing with physical movement being less important due to virtual communications (Bagwell 2015). Bagwell (2015: 3305) states “there is a need for a broader understanding of transnationalism that does not rely solely on the physical locations of the business and the extent of travel between them but also considers the degree to which entrepreneurs access different forms of transnational support from the overseas diaspora”. This has led to transnationalism

focusing more on links entrepreneurs have in multiple locations that are sustained in a dynamic manner.

Transnational entrepreneurs differ to other types of entrepreneurs because of their travel to their home country for business reasons (Portes et al. 2002). This means that transnational entrepreneurs with their knowledge of two geographic locations can develop more international business ventures (Drori et al. 2009). The ability to access information from home and host countries enables transnational entrepreneurs to have special characteristics allowing them to access information more quickly (Saxenian 2006). In this chapter we define transnational entrepreneurship as “social actors who enact networks, ideas, information and practices for the purpose of seeking business opportunities or maintaining businesses within dual social fields” (Drori, Honig and Wright 2009: 1001).

This chapter investigates the role of transnational entrepreneurship in a diaspora by contributing to the literature on ethnic business research. The motivations for transnational entrepreneurship come from having an ethnic and diaspora disposition that encourages business endeavours. Conventional entrepreneurship is conducted in one geographic setting but transnational entrepreneurship recognizes the internationalisation of people that is facilitated by migration. The demanding nature of being an entrepreneur means it is useful to utilise transnational business practices for competitive gain.

The structure of this chapter is as follows. First, the importance of transnational entrepreneurship in the global economy is discussed. This includes an examination of how the literature has developed and its significance to business. The following sections discuss the directions that transnational entrepreneurship will take in the future. Finally, conclusions and implications for practice are stated.

## **2 Literature Review**

### ***2.1 Theory of Practice***

Bourdieu’s theory of practice is often used by transnational entrepreneurship researchers to understand the process (Terjesen and Elam 2009). The theory of practice “explains individual and group behavior with the underlying assumption that actions of social groups are more aggregated than individual actions and are influenced by cultures, traditions and objective structures within the society” (Patel and Terjesen 2011: 61). Within the theory of practice there are the concepts of capital, field and habitus to describe individual behavior in social groups (Bourdieu 1986). Capital involves the ability of an individual to utilize information for positive outcomes. In a transnational entrepreneurship setting, it includes cultural, economic, social and symbolic (Patel and Terjesen 2011). Cultural capital is being relied more in global business due to the diversity and creative opportunities it brings.

This means that spirituality is part of cultural capital as it influences individual behavior. Patel and Terjesen (2011) refer to non-objectified cultural capital as accents, comportment and race whilst objectified cultural capital includes art, dress and physical equipment.

Economic capital involves financial assets that can be utilised for investments. For transnational entrepreneurs, the ability to access money for business activities in different countries is important for their success. Depending on the political environment of the home country it may sometimes be hard for transnational entrepreneurs to access economic capital. Social capital involves the linkages to mutual acquaintances that can be a source of knowledge (Nahapiet and Ghoshal 1998). This means that transnational entrepreneurs utilise social capital to develop relationships in different countries to capitalise on business needs. This is helpful when political constraints mean that personal relationships provide access to resources in certain countries. Symbolic capital involves credibility as a result of position or authority (Patel and Terjesen 2011). Some countries value symbolic capital in the form of titles or family that can be utilized by transnational entrepreneurs. In transitional economies, symbolic capital might help with bridging cultural barriers that have been embedded in people living outside their home country for a long time period.

## ***2.2 Immigrant Entrepreneurship***

There has been an increase in migration and associated entrepreneurial activities in both home and host countries (Patel and Terjesen 2011). Immigrants have ongoing relationships with their home country that becomes part of their cultural identity (Sequeira et al. 2009). This helps transnationalism to encourage cross border collaboration by fostering social connections (Portes et al. 2002). Many immigrants are entrepreneurs or involved in entrepreneurial organisations that enable them to utilise their home country connections for business gain. Immigrant entrepreneurs have unique community and personal relationships with their home countries that they can capitalise on in business ventures (Bagwell 2015). Often immigrant entrepreneurs utilize home country contacts to access finance and important products, which encourages transnational innovation networks to develop from knowledge transfer between international communities. Transnational entrepreneurs focus on how immigrants access resources from their country of origin to help develop businesses with their country of origin (Urbano et al. 2011). Kariv et al. (2009) highlighted how ethnic entrepreneurs in Canada utilised their networks of social relationships to develop transnational businesses. More recently there has been a focus on highly skilled immigrants who form transnational businesses due to their entrepreneurial knowledge (Drori et al. 2009). Urbano et al. (2011) in a study of transnational entrepreneurs in Spain found that immigrant's perceptions of entrepreneurial culture of the host country is a key factor in their development.

Amongst transnational entrepreneurs there is diversity in their home country and educational qualifications (Portes 2001). Immigrants often still participate in the political and social life of their home country despite being elsewhere (Levitt 2001). Immigrants have a cultural identity based on their heritage but also social upbringing (Basch et al. 1994). In addition, the improved international transportation methods have enabled transnational entrepreneurship to develop. Transnational entrepreneurs are a subset of immigrant entrepreneurship due to their role in maintaining linkages with their country of origin when engaging in business activity (Dimitratos et al. 2015). Transnational entrepreneurs leverage their ability to utilise two socially embedded environments to conduct business (Crick and Chaudhry 2013). Migrants play a crucial role in the economic growth of a country due to the networking and new business ideas they bring into the marketplace (Desiderio and Salt 2010). Immigrants can face labour market disadvantages in host countries, which leads them to self-employment (Levie 2007).

Immigrant entrepreneurs access to cultural and economic capital in their home country influences their ability to be a transnational entrepreneur (Portes et al. 1999). Sometimes immigrant entrepreneurs can take a while to assimilate to their host country slowing the transnationalism process (Patel and Conklin 2009). Transnational habitus involves immigrants subconsciously acting and reacting to events in their home and host country (Patel and Conklin 2009). This includes how their cultural disposition as a transnational entrepreneur involves adjusting to different situations (Guarnizo 1997). Often transnational entrepreneurs constantly receive information and news about their home country, which makes them compare it to their host country (Vertovec 2004).

Bifocality refers to their ability of an entrepreneur to adjust to transnational settings (Rouse 1992). This is important for transnational entrepreneurs who need to be bifocal in understanding business in different countries. This means that being bilingual in addition to having social and family ties in their home and host country will facilitate entrepreneurship. Patel and Conklin (2009) described this bifocal approach as integrating personal outlooks of a transnational entrepreneur with market opportunity. Social capital is important for entrepreneurs as it includes more mutual sources of knowledge (Renzulli and Aldrich 2005). It differs to social networks that involve sources of information that are accessed on a need to know basis. Social networks help transnational entrepreneurs access contacts that create opportunities (Patel and Conklin 2009).

### ***2.3 Transnational Diaspora Entrepreneurs***

Transnational diaspora entrepreneurs are “migrants and their descendants who establish entrepreneurial activities that span the national business environment of their countries of origin and countries of residence” (Riddle et al. 2010: 398). Diasporas are people who consider themselves as having the same ethno-national origin (Sheffer 2006). This means that diasporas are social-political formations that

enable individuals to maintain linkages to others with the same ethnic background. To encourage investment from diasporas countries have set up special marketing policies (Riddle et al. 2008). Transnational diaspora entrepreneurs are immigrants that operate in cross-national domains (Drori et al. 2006). Some diaspora migrate circularly as they physically or virtually return to their country of origin (Riddle et al. 2010). This enables the diaspora to have dual cultural identities that enhance their position in their community (Nielsen and Riddle 2009). Some diaspora particularly from developing countries see connections with their home country as essential to facilitating economic growth and improved social conditions (Riddle et al. 2010).

Diaspora or emigrant groups maintain a relationship to their country of origin that without technological innovation was impossible in the past (Riddle and Brinkerhoff 2011). Riddle and Brinkerhoff (2011: 670) describe international ethnic entrepreneurship as “diasporans who establish new ventures in their countries of origin”. Diasporas enable a community of people to create social connections to their country of origin and the increased ability to utilize cross-border capital has lead to more diaspora investing in their home countries (Gillespie et al. 1999). Often diaspora entrepreneurs are motivated by non-financial incentives including a sense of duty and moral obligation to their country of origin with institutional acculturation being an important consideration. Institutional acculturation is defined as “the exposure to and adoption of institutional roles and relationships associated with a new cultural setting” (Riddle and Brinkerhoff 2011: 670). There are a variety of different types of diaspora entrepreneurship from manufacturing, service and establishment of subsidiaries (Riddle and Brinkerhoff 2011). Diaspora entrepreneurs have a feeling of commitment to their homeland, which makes them create business ventures related to this transnational linkage (Riddle et al. 2008).

Some diaspora entrepreneurs face learning curves about how to do business in their home country of origin if they have lived elsewhere for a long time period (Riddle and Marano 2008). The weak infrastructure environment of some developing countries necessitate diaspora entrepreneurship (Gillespie et al. 1999). In addition, lesser known countries can utilise diaspora investment to connect with larger countries that have more purchasing power. International organizations have recognized the role that diaspora entrepreneurs play in emerging economies (Ramamurti 2004). This is due to in emerging and transitional economies, diaspora entrepreneurs can often negotiate the uncertain environment due to their bond with their country of origin (Gillespie et al. 2001).

Diaspora entrepreneurs can utilize the new behaviors they have learnt to develop innovative businesses in their country of origin (Riddle and Brinkerhoff 2011). The knowledge of dissimilar cultures can be utilized by diaspora entrepreneurs as a way to differentiate themselves in the market. As countries differ based on income levels and cultural behavior this knowledge is useful for transnational entrepreneurs. Laframboise et al. (1993) suggested that some migrants adapt to their new country by abandoning the cultural behavior of their home country. This view is in contrast to more recent research by Riddle and Brinkerhoff (2011) who suggest that migrants maintain their original cultural identity but adapt new cultural behaviors.



## 2.4 *Transnational Living*

Transnational living means when migrants recreate cultural and economic conditions in their adopted country although having cross-border relationships (Guarnizo 2003). The recreation of home country culture in a new environment is helpful to remembering social relationships that have cultural meanings. Transnational activities include “remittances, migrant entrepreneurship, cross-border trade, telecommunications, political participation in the country of origin, tourism and cross-border traveling and technology and knowledge transfers” (Santamaria-Alvarez and Sliwa 2016: 206). Large companies are utilising transnational entrepreneurship as a way to overcome cultural barriers (Terjesen and Elam 2009). Some transnational entrepreneurs have a motherland sentiment that motivates their business connection to their homeland (Lin and Tao 2012). This sentiment is reflected in the desire to be close to family and friends, which influences the growth of transnational businesses. The international capitalist class as being able to relocate based on financial resources and business opportunities. This is evident in many Commonwealth countries such as Canada encouraging immigration based on skills and family networks.

Transnational entrepreneurs engage in a variety of strategies that encompasses their home country but from a host country base (Dimitratos et al. 2015). The cultural background of having knowledge of multiple countries enables more opportunities for entrepreneurship (Light and Dana 2013). This helps with exploiting business ventures based on distinct cultural characteristics. The bicultural association transnational entrepreneurs have means they have unique sources of knowledge (Hernandez 2014). This helps transnational entrepreneurs to utilise their networks in home countries to leapfrog their competitors (Dimitratos et al. 2015). The ethnic links transnational entrepreneurs have means they have a unique course of social capital (Portes et al. 2002). This helps with finding new sources of business ventures that can facilitate entrepreneurship. As more people now live outside their home country it is becoming important to utilise this knowledge as a strategic advantage in the marketplace. This is seen in the growth of ethnic communities that have given rise to specialised business services. An example of this is the Indian communities in the United Kingdom that have introduced ethnic food to the mainstream population. These ethnic communities especially in the United Kingdom have been a source of entrepreneurship (Crick and Chaudhry 2013).

Transnational entrepreneurs are those that establish a business utilizing both their home and host country. The more time an individual spends in their host country tends to equate with a decrease in transnational activities (Fitzgerald 2009). Transnational businesses enable migrants to link their country of origin to their new country of residence (Eckstein and Najam 2013). Transnational entrepreneurship has been found to have a positive effect on the economic growth of home countries (Sahoo and Pattanaik 2014). This is due to transnational entrepreneurs utilising social networks in two or more countries to facilitate business development. This means that transnational entrepreneurs are not bounded by a single geographic

location but rather capitalise on multiple relationships (Yeung 2009). As economic geography helps to understand the process of entrepreneurship it is important to understand the relationships individuals have with multiple countries. Yeung (2009) argues that transnational entrepreneurs can benefit from accessing knowledge about cost differences to increase their competitive advantage. This is helpful to understanding the multiple resources that are required based on entrepreneurship becoming a global phenomenon. Transnational entrepreneurs utilise multiple countries to create a more integrated business model that can adapt to changing economic conditions in the global marketplace. This helps to bring a more international ideology into the process of entrepreneurship to incorporate cultural and market differences.

## ***2.5 Transnational Entrepreneurship***

Transnational entrepreneurs include self employed people who are foreign born that utilise travel for business reasons (Sequeira et al. 2009). As more goods and services are the result of an international value chain it is important to utilise overseas contacts for strategic business reasons. Transnational entrepreneurs utilise contacts in their home country to derive new businesses and also negotiate better prices for supplies related to their businesses. Transnational entrepreneurs develop socially embedded networks to access resources both in their home and host country environment (Drori et al. 2006).

Transnational enterprises are categorized as circuit, cultural, elite, ethnic and return enterprise (Landolt et al. 1999). Circuit enterprises involve businesses that involve resources from multiple countries in the production process. This can include raw materials being used in the production of a good that are assembled in a different country but exported back to be sold in the visited country. The circuit means that there are flows between different aspects of a business's development depending on the country settings (Sequeira et al. 2009). Cultural enterprises utilise the culture of an immigrant's home country in a business (Sequeira et al. 2009). This may include food enterprises that have a cultural connotation based on ethnic ingredients. Cultural enterprises utilise customs or existing culture to expand into new countries. This brings about new business opportunities as individuals want to try products and services. Elite expansion enterprises are those that are specialised in a certain industry that market their services to immigrants in another country (Sequeira et al. 2009). For many immigrants they want to bring products from their home country but live in a different country thereby creating businesses that expand to new markets.

Transnational entrepreneurs utilise the social and economic context to develop business ventures (Urbano et al. 2011). Being embedded in multiple country environments enables transnational entrepreneurs to maximize their use of resources (Drori et al. 2006). This is helpful to creatively use resources in ways that have not been done before by entrepreneurs. The institutional environment differs

depending on the economic conditions of a country (Yeung 2009). Some countries have institutional environments favourable to certain types of economic activity that entrepreneurs can harness to increase business performance. This is seen in labour intensive industries being located in countries like China and India that have a large population. Transnational entrepreneurs can source the human capital of these countries but the more knowledge intensive environments of their host countries such as the United States. More people are becoming transnational entrepreneurs due to the increasing number of immigration occurring globally (Light 2007).

Transnational entrepreneurs utilise their foreignness in a positive manner to fulfill needs in the global market (Terjesen and Elam 2009). This is due to transnational entrepreneurs being able to be dynamic with access to their resource base. This helps them to exploit opportunities in multiple markets due to their cultural attachment to different countries (Ireland and Webb 2007). Other entrepreneurs may not be able to see these opportunities because they lack the cultural knowledge. Transnational business practices have increased due to the technological innovations such as the internet making it easier to communicate over long distances (Urbano et al. 2011).

### 3 Transnational Networks

Transnational networks are key to ethnic entrepreneurs accessing new ideas and business opportunities (Bagwell 2015). Transnational networks are a source of social capital as they facilitate the flow of information (Portes et al. 1999). Transnational entrepreneurship links both the ethnic, minority and international entrepreneurship literature together. This is the result of the increase in studies focusing on the role of ethnic communities in developing different types of business that is innovative (Chen and Tan 2009). The rationale for this is more migrants living simultaneously in multiple countries and requiring economic activity (Portes et al. 1999). The constant movement between multiple countries characterizes transnational entrepreneurs as being multi-talented individuals able to adapt quickly (Levitt 2001). These unique traits of transnational entrepreneurs helps them build new experiences and foster creativity in business practices (Urbano et al. 2011).

Bagwell (2015) suggests that physical communication for transnational entrepreneurs is becoming less important due to the super connectivity of internet communications. Transnational entrepreneurs have a range of capital including economic (financial resources), cultural (bilingualism) and social (family contacts) (Bagwell 2015). These different forms of capital help transnational entrepreneurs access knowledge and build trusting relationships (Nee and Sanders 2001). Jones et al. (2010) found that Somali entrepreneurs in the United Kingdom use transnational links for information and for employment reasons. Landolt et al. (1999) in a study of El Salvadoran immigrant communities in Los Angeles and Washington DC found that the transnational nature of production inputs helped develop consumer markets. Transnational networks involve using contacts from a

person's home country for immigrant based businesses (Rusinovic 2008). A transnational enterprise involves separate parts of a business being conducted in different countries by owners who have cultural connections in these countries (Wong and Ng 2002). The key difference between international and transnational enterprises is the social embeddedness of business owners in both home and host countries (Sequeira et al. 2009).

### ***3.1 Hybrid Transnational Ethnic Entrepreneurship***

Patel and Conklin (2009: 1043) states, "transnational entrepreneurs leverage capital across dual environments, increasing the potential to produce greater economic rents than those generated by operating in a single environment". The difference between ethnic entrepreneurship is that transnational entrepreneurs utilise ethnic resources to conduct business activities across a number of countries (Light and Gold 2000). This means that transnational entrepreneurship utilises cultural and economic adaptations facilitated by global migration (Patel and Conklin 2009). This enables comparative advantages to be derived from market knowledge in home country settings.

Riddle and Brinkerhoff (2011) in a study of hybrid transnational ethnic entrepreneurship found that e-commerce platforms are useful to connect buyers and sellers. This is due to bilateral trade being enhanced by transnational entrepreneurs who act as international business agents (Lin and Tao 2012). Lin and Tao (2012) in a study of the Chinese Canadian community found that many migrate because of business opportunities. The significance of transnational entrepreneurship has grown from the ability to adapt economically from having connections in dual locations (Lin and Tao 2012). Many countries are relying on immigrant as a way of developing their economy and increasing investment. To facilitate more transnational entrepreneurship there needs to be more international cooperation regarding intellectual property, work rights, residency, taxation and communications technology.

## **4 Conclusions**

This chapter has focused on the importance of transnational entrepreneurship in the global economy. The role of capital in the form of cultural, economic, social and symbolic was emphasised to ensure success for transnational entrepreneurs. This chapter helps to explain the growth of transnational entrepreneurs and why they are significant. The findings of this chapter suggest that transnational or diaspora entrepreneurship is a distinctive form of entrepreneurship that has been adopted due to technological advances and globalisation. As discussed in this chapter there needs to be more government policies that make it easier for transnational

entrepreneurship. There is an emphasis on highly skilled immigration but this needs to be tied to investment opportunities (Lin and Tao 2012). This means that transnational entrepreneurship will continue to grow in terms of being a significant part of entrepreneurship, international business and sociology research.

## References

- Aldrich, H. E., & Zimmer, C. (1986). Entrepreneurship through social networks. In D. L. Sexton & R. W. Smilor (Eds.), *The art and science of entrepreneurship* (pp. 3–24). Cambridge, MA: Ballinger.
- Bagwell, S. (2015). Transnational entrepreneurship amongst Vietnamese businesses in London. *Journal of Ethnic and Migration Studies*, 41(2), 329–349.
- Basch, L. G., Schiller, N. G., & Blanc, C. S. (1994). *Nations unbound: Transnational projects, postcolonial predicaments and deterritorialized nation-states*. New York: Gordon and Breach Science Publishers.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York: Greenwood Press.
- Chen, W., & Tan, J. (2009). Understanding transnational entrepreneurship through a network lens: Theoretical and methodological considerations. *Entrepreneurship Theory and Practice*, 33(5), 1079–1091.
- Crick, D., & Chaudhry, S. (2013). An exploratory study of UK based, family-owned Asian firms motives for internationalising. *Journal of Small Business and Enterprise Development*, 20(2), 526–547.
- Desiderio, M. V., & Salt, J. (2010). *Main findings of the conference on entrepreneurship and employment creation of immigrants in oecd countries*. Paris: OECD.
- Dimitratos, P., Buck, T., Fletcher, M., & Li, N. (2015). The motivation of international entrepreneurship: The case of Chinese transnational entrepreneurs. *International Business Review* (in press).
- Drori, I., Honig, B., & Ginsberg, A. (2006). Transnational entrepreneurship: Toward a unifying theoretical framework. In *Academy of Management Best Paper Proceedings*, Atlanta, Georgia.
- Drori, I., Honig, B., & Wright, M. (2009). Transnational entrepreneurship: An emergent field of study. *Entrepreneurship Theory and Practice*, 33(5), 1001–1021.
- Dubois, A. (2016). Transnationalising entrepreneurship in a peripheral region-the translocal embeddedness paradigm. *Journal of Rural Studies*, 46, 1–11.
- Eckstein, S. E., & Najam, A. (2013). *How immigrants impact their homeland*. Durham: Duke University Press.
- Fitzgerald, D. (2009). *A nation of emigrants: How Mexico manages its migration*. Berkeley, CA: University of California Press.
- Gillespie, K., Riddle, L., Sayre, E., & Sturges, D. (1999). Diaspora homeland investment interest. *Journal of International Business Studies*, 30(3), 623–634.
- Gillespie, K., Sayre, E., & Riddle, L. (2001). Palestinian interest in homeland investment. *Middle East Journal*, 55(2), 237–255.
- Guarnizo, I. E. (2003). The economics of transnational living. *International Migration Review*, 37(3), 666–699.
- Guarnizo, L. E. (1997). The emergence of a transnational social formation and the mirage of return migration among Dominican transmigrants. *Identities*, 4(2), 281–322.
- Hernandez, E. (2014). Finding a home away from home: Effects of immigrants on firms foreign location choice and performance. *Administrative Science Quarterly*, 50(1), 73–108.
- Ireland, R. D., & Webb, J. W. (2007). A cross-disciplinary exploration of entrepreneurship research. *Journal of Management*, 33, 891–927.

- Itzigsohn, J., Cabral, C. D., Medina, E. H., & Vazquez, O. (1999). Mapping Dominican transnationalism: Narrow and broad transnational practices. *Ethnic and Racial Studies*, 22(2), 316–339.
- Jones, T., Ram, M., & Thodorakopoulos, N. (2010). Transnationalism as a force for ethnic minority enterprise? The case of Somalis in Leicester. *International Journal of Urban and Regional Research*, 44(3), 565–585.
- Kariv, D., Menzies, T., Brenner, G., & Filion, L. J. (2009). Transnational networking and business performance: Ethnic entrepreneurs in Canada. *Entrepreneurship and Regional Development*, 21(3), 239–264.
- Korsgaard, S. (2011). Entrepreneurship as translation: Understanding entrepreneurial opportunities through actor-network theory. *Entrepreneurship and Regional Development*, 23(7–8), 661–680.
- Laframboise, T., Coleman, H. L., & Gerton, J. (1993). Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin*, 114, 395–412.
- Landholt, P. (2001). Salvadoran economic transnationalism: Embedded strategies for household maintenance, immigrant incorporation and entrepreneurial expansion. *Global Networks*, 1(3), 217–241.
- Landolt, P., Autler, L., & Baires, S. (1999). From Hermano Liejano to Harmano Mayor: The dialectics of Salvadoran transnationalism. *Ethnic Racial Studies*, 22, 290–315.
- Levie, J. (2007). Immigration in migration, ethnicity and entrepreneurship in the United Kingdom. *Small Business Economics*, 28(2–3), 143–169.
- Levitt, P. (2001). Transnational migration: Taking stock and future directions. *Global Networks: A Journal of Transnational Affairs*, 1(3), 195–216.
- Light, I. (2007). Global entrepreneurship and transnationalism. In L.-P. Dana (Ed.), *Handbook of research on ethnic minority entrepreneurship* (pp. 3–15). Cheltenham: Edward Elgar.
- Light, I., & Dana, L.-P. (2013). Boundaries of social capital in entrepreneurship. *Entrepreneurship Theory and Practice*, 37(3), 603–624.
- Light, I., & Gold, S. (2000). *Ethnic economies*. San Diego: Academic.
- Lin, X., & Tao, S. (2012). Transnational entrepreneurs: Characteristics, drivers, and success factors. *Journal of International Entrepreneurship*, pp. 1–19.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital and the organizational advantage. *Academy of Management Review*, 23(2), 242–266.
- Nee, V., & Sanders, J. (2001). Understanding the diversity of immigrant incorporation: A forms-of-capital model. *Ethnic and Racial Studies*, 24(3), 386–411.
- Nielsen, T. M., & Riddle, L. (2009). Investing in peace: The motivational dynamics of diaspora investment in post-conflict economies. *Journal of Business Ethics*, 89(4), 435–448.
- Patel, P. C., & Conklin, B. (2009). The balancing act: The role of transnational habitus and social networks in balancing transnational entrepreneurial activities. *Entrepreneurship Theory and Practice*, 33(1), 1045–1078.
- Patel, P. C., & Terjesen, S. (2011). Complementary effects of network range and tie strength in enhancing transnational venture performance. *Strategic Entrepreneurship Journal*, 5, 58–80.
- Portes, A. (2001). Introduction: The debates and significance of immigrant transnationalism. *Global networks: A Journal of Transnational Affairs*, 1(3), 181–194.
- Portes, A., Guarnizo, L. E., & Landolt, P. (1999). The study of transnationalism: Pitfalls and promise of an emergent research field. *Ethnic Racial Studies*, 22(2), 217–237.
- Portes, A., Haller, W., & Guarnizo, I. (2002). Transnational entrepreneurs: An alternative form of immigrant economic adaptation. *American Sociological Review*, 67, 278–298.
- Ramadani, V., Rexhepi, G., Gërguri-Rashiti, S., Ibraimi, S., & Dana, L.-P. (2014). Ethnic entrepreneurship in Macedonia: The case of Albanian entrepreneurs. *International Journal of Entrepreneurship and Small Business*, 23(3), 313–335.
- Ramamurti, R. (2004). Developing countries and MNEs: Extending and enriching the research agenda. *Journal of International Business Studies*, 35(4), 277–283.
- Renzulli, L. A., & Aldrich, H. (2005). Who can you turn to? The activation within core business discussion networks. *Social Forces*, 84(1), 323–341.

- Riddle, L., & Brinkerhoff, J. (2011). Diaspora entrepreneurs as institutional change agents: The case of Thamel.com. *International Business Review*, 20, 670–680.
- Riddle, L., Brinkerhoff, J., & Neilsen, T. M. (2008). Partnering to beckon them home: Public sector innovation for diaspora homeland investment proportion. *Public Administration and Development*, 28, 54–66.
- Riddle, L., Hrivnak, G. A., & Nielsen, T. M. (2010). Transnational diaspora entrepreneurship in emerging markets: Bridging institutional divides. *Journal of International Management*, 16, 398–411.
- Riddle, L., & Marano, V. (2008). Homeland export and investment promotion agencies: Learning from Afghanistan. In J. M. Brinkerhoff (Ed.), *Diasporas and development: Exploring the potential*. Boulder: Lynne Rienner.
- Rouse, R. (1992). Making sense of settlement: Class transformation, cultural struggle and transnationalism among Mexican migrants in the United States. *Annals of the New York Academy of Sciences*, 645(1), 25–52.
- Rusinovic, K. (2008). Transnational embeddedness: Transnational activities and networks among first and second generation immigrant entrepreneurs in the Netherlands. *Journal of Ethnic and Migration Studies*, 34(3), 431–451.
- Sahoo, S., & Pattanaik, B. K. (2014). *Global diasporas and development: Socioeconomic, cultural and policy perspectives*. New Delhi: Springer.
- Santamaria-Alvarez, S. M., & Sliwa, M. (2016). Transnational entrepreneurship in emerging markets: The Colombian case. *Journal of Enterprising Communities: People and Places in the Global Economy*, 10(2), 203–223.
- Saxenian, A. (2006). *The new argonaut: Regional advantage in a global economy*. Cambridge: Harvard University Press.
- Sequeira, J. M., Carr, J. C., & Rasheed, A. A. (2009). Transnational entrepreneurship: Determinants of firm type and owner attributions of success. *Entrepreneurship Theory and Practice*, pp. 1023–1044.
- Sheffer, G. (2006). *Diaspora politics*. Cambridge: Cambridge University Press.
- Terjesen, S., & Elam, A. (2009). Transnational entrepreneurs' venture internationalization strategies: A practice theory approach. *Entrepreneurship Theory and Practice*, 33, 1093–1120.
- Urbano, D., Toledano, N., & Ribeiro-Soriano, D. (2011). Socio-cultural factors and transnational entrepreneurship: A multiple case study in Spain. *International Small Business Journal*, 1, 1–16.
- Vertovec, S. (2004). Migrant transnationalism and modes of transformation. *International Migration Review*, 38(3), 970–1001.
- Wong, L. L., & Ng, M. (2002). The emergence of small transnational enterprise in Vancouver: The case of Chinese entrepreneur immigrants. *International Journal of Urban and Regional Research*, 26(3), 508–530.
- Yeung, H. (2009). Transnationalising entrepreneurship: A critical agenda for economic geography. *Progressing Human Geography*, 33(2), 210–235.

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# Transnational Iranian Entrepreneurs in the Import/Export Industry of Los Angeles

Ivan Light and Parvin Shahlapour

**Abstract** Immigrants perform better in import/export industries than generally in independent business. The usual explanation addresses their overseas social networks. Extensive network connections abroad enable immigrants to reduce the daunting transaction costs that otherwise bedevil SMEs in international trade. Accepting that prevailing view, this research obtains evidence regarding the actual social network ties that Iranian immigrant entrepreneurs in Los Angeles had with trading partners abroad. However, instead of looking at connections between the Iranians and their homeland, we examined instead their social connections with other locations in the Iranian international diaspora. Although preliminary and sketchy, this evidence tends to confirm the importance of personal social contacts abroad, but it also shows that Iranian traders still reported many collection problems overseas and, as a result, had undertaken legal strategies of self-protection.

## 1 Introduction

International trade is a difficult and risky business. It is difficult because importers and exporters need to find suppliers and markets abroad, and finding them requires market and cultural knowledge that are difficult to acquire and expensive and awkward to rent. It is risky because of its inherent exposure to opportunistic exploitation under awkward circumstances. If a trading partner abroad does not pay her/his bill or reneges on contractual obligations, the cheated party has limited resources for restitution. Of course, a plaintiff can in principle sue an overseas

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business partner in a foreign court, but the complications, delays, and costs of doing so are high, and the likelihood of success low.

Because of the ever-present risk of opportunism and the difficulties of collection, international traders confront extraordinarily high transaction costs (Williamson 1985). Large companies reduce transaction costs by globe-spanning bureaucracies that internalise it. That is, their hierarchy establishes subsidiaries on both sides of the ocean, and, if the subsidiaries do not internalise transaction costs, which they often accomplish, they provide at least representatives on the ground abroad. These representatives can handle negotiation with or lawsuits against a trading partner. Thus, for example, in case of trade dispute with trading partners in China, Walmart turns to its foreign representatives abroad. Walmart's Chinese suppliers in China negotiate with a China-based subsidiary of Walmart that is responsible to the corporate parent in Arkansas. The subsidiary has plenty of cultural knowledge and political influence in China and so can take effective action in China that would not be possible for monolingual English speakers operating out of Walmart's corporate headquarters in Arkansas.

By definition, small and medium trading enterprises (SMTEs) lack the globe-spanning organisation that permits multinational corporations to control transaction costs. This solution small and medium firms cannot use without becoming big firms. Instead, the SMTEs of the import/export industry have actually to deal with independent firms abroad, assuming whatever transaction costs and risks long-distance, market-based relationships impose (Girma and Yu 2007, pp. 2–3; Istrate et al. 2010, p. 4). This requirement helps to explain why small and medium enterprises have long been relatively unsuccessful in import/export industry and still are. In 2007, SMEs did not make the same contribution in import/export industry that they made generally in the US economy. Representing about half of all employment and economic activity in the US economy, SMEs were 97% of exporting firms, but they produced only one third of 'total export value' (Brookings Institution 2012, p. 7). It is apparent from this statistic that international trade was a lopsidedly big business industry in 2007 when compared to the rest of the US economy, and the usual explanation is fear of non-payment. In the words of Hochberg (2011), Chairman of the Export-Import Bank of the USA, "What stops small business from exporting is ... fear of non-payment ... I hear it all the time."

To be sure, the underperformance of small business in international trade is the product of several independent causes. Important as it is, Hochberg's 'fear of non-payment' does not trump all other problems that SMEs encounter in import/export industry, and that also tend to explain their relative disadvantage. These problems include the favourable attention large firms' contracts receive from national governments that ignore the needs and complaints of SMEs as well as the favourable attention banks and lenders give to big traders relative to small ones (Brookings Institution 2012, p. 11). But they also include lack of information about foreign markets, lack of foreign language skills, and lack of interest in business, all social contexts of economic action rather than commodities (Export-Import Bank of the United States 2010; Rauch and Watson 2004, p. 69).

The general and much-lamented weakness of SMEs in international trade has a major exception among immigrants and ethnic minorities. Within the import/export sector, SMEs owned by persons of ethnic minority derivation are appreciably larger and more successful than SMEs whose owners are of majority ethnic derivation, and they occupy a larger share of the total business population. In a path-breaking compilation of hitherto unpublished sources, the US Census Bureau (2007) and US Census (2012c) reported that exports accounted for 14.4% of total receipts of minority-owned firms in the USA compared with 5.4% of total receipts for non-minority-owned firms. Generally, marginal and struggling in American business, minority-owned firms are most successful in international trade.

Minority-owned exporting firms were also larger than their non-exporting minority-owned counterparts in terms of receipt size and employment. Average receipts for minority-owned exporting firms were \$7.4 million; for minority-owned non-exporting firms, \$141,776. The average number of employees for minority-owned exporting employer firms was 21; the comparable number for minority-owned non-exporting employer firms was 7. Average productivity for minority-owned employer exporters (i.e., receipts per employee) was \$407,592; the comparable calculation for minority-owned employer non-exporters was \$122,545.

## 2 Hispanic and Asian-Owned Firms

The US Census provided special coverage of Hispanic-owned and Asian-owned firms, and found the same patterns repeated in this category that existed more generally among minority-owned firms. Hispanic-owned exporters were larger than Hispanic-owned firms in general. Average receipts for Hispanic-owned exporting firms were \$7.2 million compared with \$124,418 for Hispanic-owned non-exporting firms. Hispanic owned employer firms in the export industry were almost three times larger than Hispanic-owned employer firms in all other industries. The average number of employees for Hispanic-owned exporting employer firms was 19, but the comparable number for Hispanic-owned non-exporting employer firms was 7. Average productivity for Hispanic-owned employer exporters (i.e., receipts per employee) was \$443,632; the comparable calculation for Hispanic-owned non-exporting employer firms was \$119,869.

Hispanic firms specialised in exporting to Latin America, and Hispanic firms exported more to these markets than did non-Hispanic firms. In 2007, average export value for Hispanic-owned exporting firms to 20 Latin American countries was \$1.1 million. Non-minority-owned exporting firms' average export value to the same 20 countries was \$553,725. Trade with these 20 Latin American countries accounted for 81.1% of the total export value accounted for by Hispanic-owned exporting firms. The corresponding number for non-minority-owned exporting firms was 15.1%.

Asian minorities had a comparable advantage in trade with Asia. In 2007, average export value for Asian-owned exporting firms to Pacific Rim countries was

\$1.3 million, while average export value to the same region by non-minority-owned firms was \$651,264. Trade with the Pacific Rim countries accounted for 56.9% of the total export value generated by Asian-owned exporting firms; the corresponding num for non-minority-owned firms was 21.9%.

### 3 Hypotheses

In a major contribution to knowledge, White (2010) pulled together the fragmentary research on immigrants and international trade. He found international evidence that corroborated the role that immigrants play in expediting international trade. This evidence mainly consisted of statistical associations between the presence or appearance of immigrants in a host country and subsequent expansion of international trade to their countries of origin. After the immigrants arrived, trade with their countries of origin increased, which implies that immigrants increased international trade with their counties of origin. Despite the known risk of a *post hoc, propter hoc fallacy*, in the current state of knowledge the evidence of temporal coincidence is persuasive enough to require follow-up research.

When White (2010, p. 3) sought to explain why such a temporal coincidence existed, the current state of knowledge required him to resort to conjecture. That is, these causes were ‘thought to result’ from “immigrants’ knowledge of host and home country customs and business practices, their language abilities and understanding of informal contracting structures, and their connections to business and social networks that act to reduce trade-related transaction costs.” Our review of subsequent literature suggested as well that White’s conclusion still depends upon conjecture. The conjecture is plausible, but it is still only conjecture, not direct evidence.

Following White and many others in this literature (Smallbone and Welter 2013, pp. 96–98; Blount et al. 2013), we also hypothesise that the success of ethnic minorities and immigrants in international trade derives from their exploitation of cultural skills, like language, their cultural knowledge, like foreign countries’ laws and markets, and the personal social networks that link them abroad. In a way, the SMTEs have an advantage of the multi-national traders that must ‘create trust’ that small and medium firms simply inherit thanks to existing social networks (Matthews and Stokes 2013). That is our presumption too. We propose in this modest and preliminary study to acquire direct information that bears on what is only a presumption. To this end, we interviewed immigrant entrepreneurs in international trade within Los Angeles County, and asked them about their linkages abroad, their strategies for risk-reduction, and the location of their international contacts. To our knowledge, we are the first to address this topic directly rather than indirectly.

Our research departs from the existing cannon in one significant respect. The existing literature addresses linkages between immigrants and their *countries of origin*. Thanks to all the prior research on this topic, this linkage can now be declared reliably present. Immigrants increase trade most with their country of origin. That proposition does not require additional documentation. In contrast, we

asked immigrant entrepreneurs about their social relationships with trading partners *in countries not their home country*. It is not intuitively obvious that immigrant entrepreneurs would enjoy cultural or social capital in countries other than their home country, but it is plausible, on the strength of diaspora research (Light et al. 2013; Honig et al. 2010; Light 2001, 2010; Rezaei 2009) to hypothesise that they probably do. That is, immigrants are linked by social networks to co-ethnics in their diaspora, not just to those in the homeland. Therefore, they might exploit relationships of kinship, provenance, and co-religiosity with peers scattered abroad, not just those living in their homeland. If so, a linkage result would suggest a new and additional way in which immigrant entrepreneurs strengthen the performance of SMEs in international trade.

#### 4 Sample and Characteristics

Los Angeles ranks first nationally in total metropolitan exports, and it is also the nation's number one port centre, based on trade volume (Brookings Institution 2012, p. 3). The USA contains one-quarter of the 1,035,000 Iranians abroad in the world, and Los Angeles contains the largest concentration of Iranians abroad of any city in the world. The US Census Bureau's American Communities Survey of 2013 counted 126,506 Iranian-born persons in Los Angeles County. Generally speaking, the Iranians of Los Angeles constitute a prosperous highly-educated community with high and stable incomes. We interviewed 17 Iranian business owners during the first six months of 2013. All resided in Los Angeles County, and all owned and operated SMEs in the international import/export trade. Yeung (2002, p. 37) defines transnational entrepreneurs as social actors "capable of bearing risks and taking strategic initiatives to establish, integrate, and sustain foreign operations." Thus defined, all of our respondents were transnational entrepreneurs. To find these entrepreneurs we utilised snowball sampling, starting with a single known business owner, and progressing from him by sequential referrals to the list of 17 (Salganik and Heckathorn 2004). We stopped the sampling process when we began to get referrals to business owners to whom we had already spoken. No association of Iranian business owners exists in Los Angeles County but the self-employment rate is approximately 20%. According to the business owners whom we interviewed, approximately 35 Iranian-born persons operate firms that trade internationally. In that case, our snowball sample would represent approximately half of the total population of Iran-born international traders in Los Angeles County. Our interviews were introduced in English and Farsi, and six were conducted in both languages, and one exclusively in Farsi. The other interviews were all conducted in English. This choice was always the respondent's, and all the respondents were fluent in English, but, given a choice, some preferred to speak their native language.

Our structured questionnaire contained 25 questions the last of which was a request for another contact name. But, the structured portion completed, we asked Rs to tell us in their own words about their business, and recorded the results. We

also asked Rs for their business website, and we consulted the website when questions arose as to the interpretation of their questionnaire results. Our interviewer is prominent in Iranian community civic affairs. As a result, she was known to Rs by reputation, and could readily obtain referrals within a community that rarely opens private doors to unknown parties.

Of the 17 interviewed, all but one were male. Their mean age was 58 years, and they had resided on average 30 years in the USA. Most arrived in the USA during the peak years of the exodus from Iran that followed the establishment of the current Islamic Republic in 1979. Non-Islamic surnames were appreciably more common among these business owners than among the contemporary population of Teheran. These non-Muslim respondents were Armenians, Jews, and Zoroastrians. Their industries spanned a wide range but 'general merchandise' and 'house wares' were the two most prominent designations. Twelve business owners described themselves as import service providers in part. That means that some portion of their business consisted in helping others import or export whether by specialised knowledge, brokerage, or social networks. The respondents' businesses were by SME standards medium in size. Six firms had one to five employees; nine firms had six to 50 employees, and two firms had more than 50 employees. Eleven Iranian traders reported that they borrowed from the export/import bank or another US Government agency. Five had utilised credit extended to them by overseas trading partners. Only four said that they settled obligations in cash without borrowing or lending.

## 5 Trading Partners

Because international trade is so financially perilous, we hypothesised that small and medium Iranian firms would reduce or control the peril by trading with known people abroad. We asked the Iranian traders only about their connections to countries other than Iran, their home country. We did not ask them about trade with Iran because US law prohibits trade with Iran, but also because we wanted to examine an immigrant minority's trading patterns with partners *not located in their country of origin*. The stronger their social network ties with overseas partners, we reasoned, the more secure against opportunism the Iranian traders would feel themselves. To find out, we asked traders what relationships they had with overseas trading partners. Of the 16 traders who answered this question, only one declared no social relationship with any overseas trading partners. Of the other 15, 12 told us that they had personally met their overseas trading partners. Three reported that overseas partners were related to them by blood or marriage. Four declared that their overseas trading partners were personal friends. Three stated that overseas trading partners were friends of friends. Three traders acknowledged that overseas partners were born in Iran. In seven cases of the 17, respondents maintained more than one kind of social relationship with their overseas trading partners.

For example, a trader might report that he had both a relationship by marriage with an overseas partner as well as a personal friendship. We called these multiplex business relationships, and nearly half the traders had them.

Even though nearly all respondents maintained social connections with trading partners abroad, and outside Iran, they had not experienced trouble-free trading histories. Of 17 traders, only two said that they 'never' experienced collection problems or contractual violations with overseas trading partners. In contrast, 11 Iranian traders said that they 'often' had such problems, and two said they 'sometimes' had them. In other words, nearly all reported collection problems or contractual violations from trading partners despite their personal often multiplex social ties with their foreign trading partners.

We expected that Iranian traders would rely on diasporic social capital to protect them against opportunism from foreign trading partners. The expectation proved somewhat correct but overly simple. We found that Iranian traders did not often inherit social networks in the diaspora. They had commonly been required to create trust with overseas partners early in their trading careers. Attending trade fairs was the method they most commonly mentioned for doing so. Trade fairs permitted Iranian exporters and importers to make personal contact with counterparts abroad. China was the Los Angeles Iranians' biggest trade partner. Fewer than one thousand Iranians abroad live in China, but, as one trader said, our family business 'has many good friends and partners in China'. The business retained these friends and partners 'after dad died'.

We also asked traders about their methods of collection and self-protection. Of 15 entrepreneurs, 12 used attorneys in the USA or abroad when setting up trade contracts. Only five dispensed with the services of attorneys. Five is almost a third, but it falls far short of everyone. Only three entrepreneurs acknowledged doing business on the basis of 'handshake agreements' with overseas partners or with simple 'letters of agreement'. In view of the entrepreneurs' frequent mention of collection and contractual problems abroad, their utilisation of attorneys is contextually appropriate, but all the evidence we have suggests that social capital facilitated their business relationships, but it was insufficient to guarantee the security of international contracts. That does not mean social capital was useless, but it does underline the severity of the trust problem that international trade imposes on anyone who undertakes it. Diasporic social capital is helpful, but it is neither a necessary nor a sufficient condition for the creation of the requisite international trust.

## **6 Location of Trading Partners Abroad**

We asked the Iranian-born traders to rank order the four top destinations to which they shipped merchandise exports and from which they imported. A comparison of these results with known destinations would identify discrepancies between the partners of traders in the USA, in California, in Iraq, and our sample of Iranian

traders. In general, the less the overlap between the Los Angeles sample’s lists and other lists, the more the Iranian traders diversified California’s export directions. Conversely, if the Los Angeles Iranians’ trade partners were identical with those of California and the USA, the Iranians would not diversify the trading profiles of either California or the USA.

Our comparative evidence is regrettably rough. We obtained only a rank-order list of top four partners from our sample, and did not obtain dollar value estimates of trade they conducted with various countries. Also, we could not discriminate import and export partners for our sample of Iranian traders, and we were compelled to use the same rank order for both. Following through despite this limitation, Table 1 shows the results. Comparing export destinations, California’s list exhibits 100% compatibility with USA’s export destinations. California did not diversify the USA’s export profile. Conversely, our sample of Los Angeles-based Iranian traders exhibits 50% overlap with the top-four trading partners of both the USA and with California. The Iranian traders in Los Angeles exported relatively more to Panama and to India than did either the USA or California and less to Canada and Japan. As a result, the Iranians’ exports tended to diversify the export profiles of both California and the USA.

Comparing import sources, the Iranian traders in Los Angeles’ list shows 50% overlap with the USA list, and 25% overlap with California’s. The Iranian traders in Los Angeles traded relatively more with India and Panama than did California and less with Canada and Japan, thus tending to diversify California’s trade partners. The Iranian traders traded relatively more with Mexico, India, and Panama than did the USA and less with Canada and Japan so their import business tended to diversify the import partners list of the USA as well.

China was the number one trading partner of the Iranian traders in Los Angeles, but Mexico was the number one export and import partner for California firms. The discrepancy deserves a brief comment because, in the course of the research, we acquired unexpected information from Iranian business circles in Beijing thanks to the assiduous field work of a Persian informant there. Many Iranian traders in

**Table 1** Top export and import destinations: USA, California, Los Angeles sample

<i>Four top export destinations of</i>			
	All	All	Iranians
	USA	California	LA sample
1	Canada	Mexico	China
2	Mexico	Canada	Mexico
3	China	China	India
4	Japan	Japan	Panama
<i>Four top import sources</i>			
1	China	Mexico	China
2	Japan	Canada	Mexico
3	Germany	China	India
4	S. Korea	Japan	Panama

Source US Census (2012a, b, 2013a, b)



Beijing believed that China imported goods from the USA that China then exported them to Iran. This device permitted Iran to circumvent the USA embargo on trade with the Islamic Republic. If this be so, some of the trade between Los Angeles and China was actually trade between Los Angeles and Iran, but an intervening step had been added to circumvent the US embargo. Such a process would involve no violation of American law, but it does raise the possibility that China's *entrepot* role mediated and thus disguised Los Angeles traders' ethnic links with the Iranian homeland. We cannot address that speculative possibility with evidence.

## 7 Summary and Conclusions

Because immigrants are more numerous and successful in the import/export trade than generally in independent business, and because trade with their homeland increases after immigrants arrive, prior researchers have plausibly conjectured that transnational immigrant entrepreneurs have social network contacts abroad that enable them to reduce the otherwise daunting transaction costs of international trade. We share that plausible hypothesis, but note that it is based on conjecture because one-to-one linkages between immigrant traders and overseas counterparts are still missing from the existing literature. These linkages need to be in evidence before we can safely conclude that international social networks provide the necessary connection that links cause and effect.

Additionally, the existing literature has addressed only the social networks that link immigrants with their overseas homelands. Taking a leaf from diaspora studies, we proposed that immigrants would have social links to other countries in their national diaspora not just with their ethnic homeland. If so, the social networks that link immigrants with their homelands should also open into social networks that link immigrants to other countries. In our small and pioneering project, we examined this hypothesis with information obtained from 17 Iranian-born traders in Los Angeles. We tried specifically to ascertain the extent to which Iranian traders in Los Angeles connected with markets *other than* Iran on the basis of social connections.

Although admittedly preliminary, our results offer some encouragement to the hypothesis, but also a plausible modification. We found that the Iranian traders in Los Angeles made extensive, indeed, almost universal use of personal social connections with trading partners overseas. This result confirmed the importance of social capital in the international trade of SMEs. On the other hand, the social capital did not enable the Iranian traders to throw caution to the winds when making commercial agreements with foreign counterparts. The Iranian traders all reported experience with overseas trading partners who did not pay their bills, and they used lawyers to draw up contracts rather than relying on handshakes. From these results, we conclude that international social capital reduced but did not eliminate the transaction cost problems of these transnational immigrant entrepreneurs. Possibly,

there is a difference here between the way social capital links immigrants with their homelands and the way it links immigrants with their national diaspora. Further research would be required to pursue this possibility.

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## References

- Blount, I. Y., Smith, D. A., & Hill, J. A. (2013). Minority business networks as sources of social capital for minority firms. *Journal of Developmental Entrepreneurship*, 18(3), 1–13.
- Brookings Institution. (2012). *Los Angeles Regional export plan/metropolitan export initiative*. Brookings Institution Metropolitan Policy Program. Online: [http://www.brookings.edu/~media/projects/state%20metro%20innovation/export\\_initiative\\_los\\_angeles](http://www.brookings.edu/~media/projects/state%20metro%20innovation/export_initiative_los_angeles). Accessed 12 August, 2014.
- Export-Import Bank of the United States. (2010). *Ex-Im strategic plan, 2010–2015*. Online: <http://www.exim.gov/about/library/reports>. Accessed 8 August, 2014.
- Girma, S., & Yu, Z. (2007). The link between immigration and trade: evidence from the U.K. *Review of World Economics*, 138(1), 115–130.
- Hochberg, F. P. (2011). *Address at secretary Clinton's global diaspora forum, May 18, 2011*. Online: <http://www.exim.gov>. Accessed 23 July, 2013.
- Honig, B., Drori, I., & Carmichael, B. (2010). *Transnational and immigrant entrepreneurship in a globalized world*. Toronto: University of Toronto.
- Istrate, E., Rothwell, J., & Katz, B. (2010). *Export nation: How U.S. metros lead national export growth and boost competitiveness*. Metropolitan Policy Program of the Brookings Institution. Online [http://www.brookings.edu/reports/2010/8726\\_exports\\_istrate\\_rothwell\\_katz.aspx](http://www.brookings.edu/reports/2010/8726_exports_istrate_rothwell_katz.aspx). Accessed 20 July, 2013.
- Light, I. (2001). Globalization, transnationalism and trade. *Asian and Pacific Migration Journal*, 10(1), 53–80.
- Light, I. (2010). Transnational entrepreneurs in an English-speaking world. *Die Erde*, 141(1–2), 1–16.
- Light, I., Rezaei, S., & Dana, L. P. (2013). Ethnic minority entrepreneurs in the international carpet trade—An empirical study. *International Journal of Entrepreneurship and Small Business (IJESB)*, 18(2), 125–153.
- Matthews, M., & Stokes, P. (2013). The creation of trust: the interplay of rationality, institutions and exchange. *Entrepreneurship and Regional Development*, 25(9–10), 845–866.
- Rauch, J. E., & Watson, J. (2004). Network intermediaries in international trade. *Journal of Economics and Management Strategy*, 13(1), 69–93.
- Rezaei, S. (2009). The marginalization of globally-born businesses: ethnically divided trade in Hamburg and the world economy: the case of global Persian carpet trade through ethnic networks. *American Journal of Economics and Business Administration*, 1(3), 79–96 (ISSN: 1945-5488).
- Salganik, J. M., & Heckathorn, D. D. (2004). Sampling and estimation in hidden populations using respondent-driven sampling. *Sociological Methodology*, 34(1), 193–239.
- Smallbone, D., & Welter, F. (2013). Cross-border entrepreneurship. *Entrepreneurship and Regional Development*, 24(3–4), 95–104.
- US Census. (2012a). *Survey of business owners*. Online <http://www.census.gov/econ/sbo/export07/index.html#foot3>. Accessed 12 August, 2014.
- US Census. (2012b). *Top trading partners—December 2012*. Online <http://www.census.gov/foreign-trade/statistics/highlights/top/top1212yr.html>. Accessed 12 August, 2014.

- US Census. (2012c). *Profile of US importing and exporting companies, 2009–2010. Full report.* Online <http://www.census.gov/foreign-trade/Press-Release/edb/2010/index.html.full>. Accessed 12 August, 2014.
- US Census. (2013a). *State exports via California.* Online <http://www.census.gov/foreign-trade/statistics/state/data/ca.html>. Accessed 12 August, 2014.
- US Census. (2013b). *State imports via California.* Online <http://www.census.gov/foreign-trade/statistics/state/data/imports/ca.html>. Accessed 12 August, 2014.
- US Census Bureau. (2007). *Survey of business owners special report. Ownership characteristics of classifiable U.S. exporting firms: 2007.* Online <http://www.census.gov/econ/sbo/export07/index.html>. Accessed 16 July, 2015.
- White, R. (2010). *Migration and international trade: The US experience since 1945.* Cheltenham, UK: Edward Elgar.
- Williamson, O. (1985). *The economic institutions of capitalism.* New York: The Free Press.
- Yeung, H. W.-C. (2002). Entrepreneurship in international business: An institutional perspective. *Asia Pacific Journal of Management*, 19, 29–61.

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# Entrepreneurial Competencies Benefiting Entrepreneurial Intention: Iranian Adults at Home and in the Diaspora

Shahamak Rezaei

**Abstract** Iran is the second largest economy and the second largest population in the Middle East and North Africa (MENA) region, with a stubbornly high unemployment rate of 11.7% in 2015 (The World Bank in The internet users 2015). Entrepreneurship could be a part of the solution to the high unemployment rate in Iran. As a matter of fact, the Iranian diaspora seizes influential positions in technology, business, and financial industries in Europe and North America. Our study is to answer whether the place of residence has an impact on entrepreneurial competencies and entrepreneurial intention, and to examine the relation between entrepreneurial competencies and entrepreneurial intention by providing a comparative study of two groups—Iranian adults in Iran and Iranian diaspora. Using a sample of 3169 native-born Iranian adults in Iran and a sample of 361 Iranian diasporas who are fairly representative of the Iranian diaspora, we find that entrepreneurial competencies in the form of self-efficacy, risk-opportunity and role modeling are more prevalent among Iranian adults at home, but opportunity-alertness is less prevalent among Iranian adults at home. We also found that Iranian adults at home are more likely to start a business compared to the Iranian diaspora. Astonishingly, our study shows that entrepreneurial competency in the form of risk-propensity does not benefit entrepreneurial intention. Only entrepreneurial competency in the form of self-efficacy benefits entrepreneurial intention (in the form of intending phase and starting phase) regardless of where Iranians reside.

## 1 Introduction

International Monetary Fund stated that Iran had the highest rate of “brain drain” in the world (Soltani et al. 2010), because a significant number of Iran’s the most wealthy, educated and highly skilled left for another country after the 1979 Islamic

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Revolution (Mobasher 2012), and because a top-performing young generation actively seeks for opportunities to leave for Europe and North America. By 2010, there have been an estimated four to five million Iranians living outside of Iran, and the number is steadily increasing. The Iranian diaspora is very influential, many of who seize upper management positions in technology, business, and financial industries in North America and Western Europe. For instance, Iranians have been very first employees of such success companies as eBay, Dropbox, Google and Zoosk in the U.S. The Small Business Administration (SBA) found that Iranian-Americans among the immigrant groups that have the highest rate of business ownership and highest annual household income.

However, Iran has experienced economic stagnation due to its government policies and a decade of the sanctions imposed by the Western. Besides high inflation rate, the unemployment rate in Iran is persistently high, reaching 11.7% in 2015. In particular, the unemployment rate for youth even reaches about 25%; one out of four is unemployed. As a matter of fact, more than half of Iran's population is youth, who is supposed to be the major contributor to Iran's economy.

Iranians appreciate education and invest much in higher education; numerous Iranians have their Master degrees. Consequently, education to some extent is not considered as a competitive advantage in job hunting in Iran. It is a huge waste of human capital. Based on the success of the Iranian diaspora, entrepreneurship could be a part of the solution to the high unemployment rate in Iran, through job creation and wealth enhancement. Above all things, we have to have a good understanding of the influence of institutional context on individuals' entrepreneurial performance. This paper is to address this concern by conducting a comprehensive comparative study of Iranian adults at home and the Iranian diaspora.

Entrepreneurship is the process of creating new business ventures which require individuals have the ability to deliver valuable products and services under various mixed market risks. Entrepreneurial activities significantly contribute to creativities and innovativeness, which are the driver of economic developments. Globalization promotes entrepreneurship by increasing integration of products, capital and labour markets across borders. Immigrants are the major active group in ethnic entrepreneurship, which mainly in the form of self-employment. In fact, entrepreneurship used to be the last resort to immigrants (Rezaei 2007) and a high percentage of ethnic entrepreneurs are motivated by necessity (Zhou 2004). Immigrants are blocked from the mainstream, because their credentials are not recognized in host countries, and because they are not integrated into host countries socially and culturally; they find a niche in the ethnic enclave, where shares a common background and cultural traits (Ramadani et al. 2014; Waldinger et al. 1990). Immigrants are more likely to establish trust-based social networks in their own ethnic community because there is no language barrier and culture shock. Ethnic entrepreneurship seems quite narrow-minded business, but it has proved its contribution to the economic developments (Razin and langlois 1996).

In the past three decades, transnational entrepreneurship has been popular due to the advancement of transportation and communication technologies. Transnational entrepreneurship involves entrepreneurs who slide back and forth across

international borders to such an extent and with such frequency that they are said to be simultaneously resident in both places. Transnational entrepreneurs are usually multi-lingual and they feel culturally at home in all the places where they operate. They are more likely to have more than one citizenship or, at least, a visa status that enables problem-free arrival and departures from airports. Transnational entrepreneurship is an alternative mode of immigrants' economic adaption (Portes et al. 2002), in addition to ethnic entrepreneurship. Studies in transnational entrepreneurship theory have drawn attention to migrants' unique dual-habitus to exploit cross-national business opportunities (Drori et al. 2009). Saxenian (2005) conducted a study of U.S. educated Chinese-and Indian engineers in Silicon Valley, and found that they are more likely to build business connections to their home countries while they still maintain professional connections in Silicon Valley.

It is important to mention that entrepreneurship is not for everyone. Being an entrepreneur is hard. It takes much more money, energy, time and effort than being an employee. The research from New York University found that the percentage of high school students who would like to start a business declined after attending a summer entrepreneurship program (Osborne 2015). The society and media promote entrepreneurship with a focus on successful entrepreneurial activities; the public, therefore, may think entrepreneurship is straightforward and profitable. As a matter of fact, entrepreneurship is a complicated process that requires individuals have certain credentials. First, it requires an individual has the desire to be an entrepreneur. Entrepreneurial intention is expressed as a mindset to start entrepreneurial activities. It has long been acknowledged as an important driver of entrepreneurial activity (Krueger et al. 2000). Second, it requires an individual has decent human capital and social capital. Studies have asserted that entrepreneurial skills can be successfully taught through education programs (Henry et al. 2005; Kuratko 2005). Higher education institutions along with some government funded organizations, therefore, offer various courses and training programs to the public. Studies in entrepreneurial theory have identified cognitive characteristics of individuals as critical predictors of entrepreneurial intention (Boyd and Vozikis 1994; Schlaegel and Koenig 2014; Jensen et al. 2015). Third, it requires an individual's quick response to environmental changes. Environmental changes can be on a regional, national and international level. Scholars have reached the consensus that institutional elements greatly affect entrepreneurs' ability to develop and utilize their competencies (Block et al. 2012; Stenholm et al. 2013; Jensen et al. 2015).

However, the institutional context varies one country from another; we still know little about the importance of the institutional context to entrepreneurship. Our exploratory study is to offer an in-depth overview on Iranian entrepreneurs. The central research questions are as below: (1) Are entrepreneurial competencies affected by the place of residence? (2) Do entrepreneurs still actively participate in entrepreneurial activities if they move to host countries? (3) Does the place of residence have an impact on the relation between entrepreneurial competencies and entrepreneurial intention? To examine these research questions, we employ data collected in the Global Entrepreneurship Monitor survey of adults in 2012–2014,

yielding a sample of 3169 native-born Iranian adults in Iran and a sample of 361 Iranian diasporas who are fairly representative of the Iranian Diaspora.

The contribution of this study is three-fold. First, it seems the first comprehensive and global study focusing on Iranians. Studies about Iranian-Americans dominate the literature on the Iranian diaspora, our exploratory study will balance the research interests. Second, Iran is the second largest economy and has the second largest population in the Middle East and North Africa (MENA) region. Iran, a land of opportunities, attracts attentions globally due to the removal of the sanctions and its open-door policies in the economy. Our study provides real-time information about the entrepreneurial environment in Iran. Third, Iranian government aims to reduce the unemployment rate to 7% by 2016 (The World Bank 2015), this study answers the call to see if entrepreneurship is a part of the solution.

We first briefly review theories on immigrant entrepreneurship including the impact of the place of residence on both entrepreneurial competencies and entrepreneurial intention. Then through the proposed framework, we develop hypotheses and examine how entrepreneurial competencies influences entrepreneurial intention and, focus on the impact of residence place on entrepreneurial intention. In the following, we describe the method and the results of analyses. Finally, we draw conclusions and discussions, as well as practical proposals for further research.

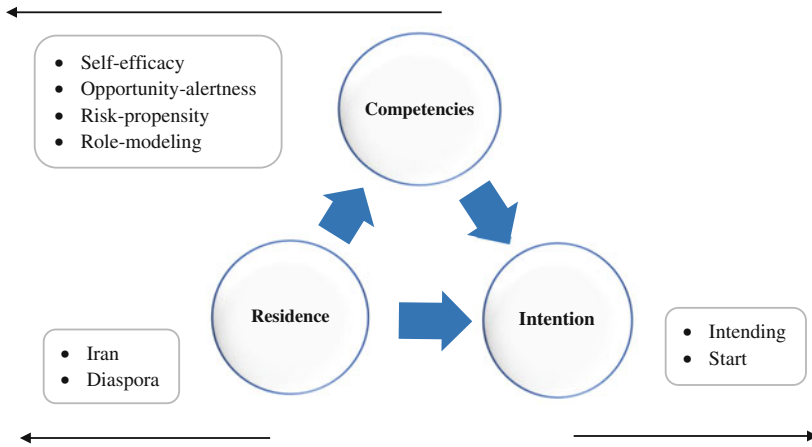
## 2 Theoretical Background and Hypotheses

In this paper, entrepreneurial competencies are defined in the form of self-efficacy, opportunity-alertness, risk-propensity and role-modeling. Entrepreneurial intention is consisted of two phases: intending phase and starting phase. These considerations motivate to consider the relations among the elements: the place of residence, entrepreneurial competencies, and entrepreneurial intention as a conceptual model in Fig. 1.

### 2.1 *Entrepreneurial Competencies Affected by the Place of Residence*

Entrepreneurial competencies include not only these components which deeply root in entrepreneurs' socio-cultural background (i.e. traits, personality, attitudes, self-image, and social roles), but also knowledge, skills and experiences that are required to start a new business (Man and Lau 2005; Jensen et al. 2015).

Self-efficacy is employed to assess the likelihood of an individual being an entrepreneur (Chen et al. 1998). Bandura (1986, p. 391) defined self-efficacy as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performance". Most people are able to identify goals that they would like to achieve, but only a few people are able to



**Fig. 1** Residence impacting the benefit of competencies for entrepreneurial intention

implement their plans into actions. Why? Because a lack of beliefs in their capabilities. People’s motivation, affective states, and actions are mostly based on their beliefs, rather than what objectively is true. In other words, many people try to avoid entrepreneurial activities just because they believe so, not because they lack necessary entrepreneurial skills (Chen et al. 1998). In general, people with high self-efficacy are more likely to pursue and persist in difficult tasks. Studies have proved that those with high self-efficacy perform much better than those who with low self-efficacy (Gist and Mitchell 1992).

Individual’s self-efficacy changes with their place of residence accordingly (Bandura 1977, 1986; Anton and Lawrence 2014). It is the consequence of people’s experiences and feedbacks received from the public; an individual’s self-efficacy is positively related to their previous experiences. Chen et al. (1998) had proved that a supportive environment enhances the personal development of self-efficacy, vice versa. For example, Iranian immigrants are more likely to experience prejudices and stereotype interpretations in a host country, where has completely different cultural traits from Iran; their capabilities, education, and work experience obtained from their homeland are not recognized in the host country. Furthermore, Iranian immigrants need a relatively long time to establish their own social networks, overcome their language barrier and build their credit scores in the host country. Consequently, Iranian immigrants will gradually lose their self-confidence in overcoming difficulties; instead, they will start self-doubt. A recent empirical study by Ashourizadeh et al. (forthcoming) confirmed that the place of residence affects self-efficacy in the way that Chinese adults in China have higher self-efficacy than those in the diaspora. Therefore, we develop our hypothesis as stated,

**H1a** Entrepreneurial competency in the form of self-efficacy is more prevalent among Iranian adults at home than in the diaspora.



Kirzner (1979, p. 48) defined opportunity-alertness as “the ability to notice without search opportunities that have hitherto been overlooked”. Entrepreneurship aims to create new business ventures; therefore, whether an individual has the ability to scan, evaluate and transform information from various sources into new opportunities is a determinate factor of being an entrepreneur (Tang et al. 2012). Individual’s opportunity-alertness is directly related to their personal traits, prior knowledge and experiences, social networks and pattern recognition (Ardichvili et al. 2003; Baron 2006; Shane 2000). Wang et al. (2013) found that entrepreneurial opportunity recognition contributed significantly to individual-level innovation performance. Oviatt and McDougall (2005) also confirmed the importance of opportunity recognition in international entrepreneurship. Autio et al. (2000) specifically stated that an individual’s knowledge plays an important role in aggressive intentional opportunity seeking.

Tang (2008) found that there is a strong relationship between environmental munificence and entrepreneurial alertness. Immigrants do not have much knowledge about the new host country as the native do, such as a lack of familiarity with the culture and formal institutions, legislation and regulations and local market. Furthermore, their language barriers and limited social mobilities block them from the mainstream society. These factors definitely slow down the speed at which the venture internationalizes to exploit an entrepreneurial opportunity. Thus, we develop our hypothesis as follow:

H1b Entrepreneurial competency in the form of opportunity-alertness is more prevalent among Iranian adults at home than in the diaspora.

Risk-propensity is defined as the perceived probability of receiving rewards while an individual tolerates uncertainties. Risk-propensity has traditionally been considered as an important trait of entrepreneurs since entrepreneurship is subject to consequences associated with failure (Kahneman and Tversky 1979; Brockhaus 1980). It is important to mention that nine out of ten startups will fail (Patel 2015). Entrepreneurs display a significantly higher risk taking propensity than did small business owners whose goals are family needs oriented, or managers (Carland et al. 1995). Successful entrepreneurs normally are more likely to succeed in coping with uncertainties and minimizing role stress (Teoh and Foo 1997; Karabey 2012). MacCrimmon and Wehrung (1990) also confirmed that the most successful executives in the business world are typically the biggest risk takers.

Surroundings have an impact on individuals’ tolerance of uncertainties. People are willing to take more risks if they are familiar with the environment (i.e. government policies, financing, market, etc.). It requires immigrants to invest time and efforts in understanding the new business environment. Most immigrants seek for employment opportunities first when landing in a host country. Even those who had sufficient entrepreneurial experience in their home country wait to see if they are ready to participate in entrepreneurial activities. Thus, we develop our hypothesis as stated,

H1c Entrepreneurial competency in the form of risk-propensity is more prevalent among Iranian adults at home than in the diaspora.

Role-modeling in this study refers to individuals' social capital in the form of networking with potential role models or mentors in their field. Entrepreneurs benefit from their social capital. Nasurdin et al. (2009) argued that individuals who experience positive environmental factors are more likely to participate in entrepreneurial activities. Granovetter (1973) also asserted that social capital facilitates individuals in starting their own business. In other words, a role-model may become a source of know-how, tacit knowledge on starting an enterprise, especially, for those who do not have any entrepreneurial experience. If an individual witness his families or friends run successful businesses, then he/she would have greater intention to be an entrepreneur. Moreover, the role of social capital is more significant in the incomplete information environments and weak economic markets (Leff 1979; Davidsson and Honig 2003). In China, *guanxi* is considered as the determinant as a successful entrepreneur.

Studies found that strong ties such as families, friends play an important role at the early of entrepreneurial activities (Aldrich and Zimmer 1986). As a matter of fact, immigrants' strong tie and weak ties in their home country usually get weakened once they leave for another country. Cultural sociologists also stated that social networks to some extent are culturally bound (Vaisey and Lizardo 2010). Immigrants are unlikely to be socially and culturally integrated into host countries (Ghorbani 2011; Hofstede 2001), they mainly build their trust-based relationships in the ethnic community (Salaff et al. 2006; Chu 1996; Portes 1998). Hence, we develop our hypothesis as stated,

H1d Entrepreneurial competency in the form of role-modeling is more prevalent among Iranian adults at home than in the diaspora.

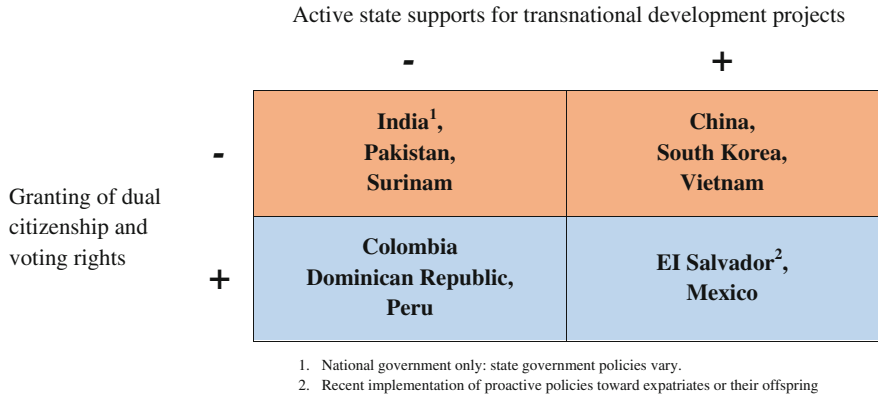
## ***2.2 Entrepreneurial Intention Affected by the Place of Residence***

Katz and Gartner (1988) defined entrepreneurial intention as the search for information to achieve the goal of venture creation. Entrepreneurial intention is the conscious state of mind that guides an individual's attentions toward a specific entrepreneurial activity. It significantly influences individuals' critical strategic thinking and decision making (Bird 1988). Therefore, entrepreneurial intention is considered as the determinant for an individual's career path becoming an entrepreneur (Bird 1988; Bird and Jelinek 1988). In particular, an individual's decision to becoming an entrepreneur is a critical process that positively correlates to actual performance, the stronger the intention to perform an entrepreneurial behavior, the greater the probability of its effective performance (Ajzen 1991).

There are two models widely employed to study individuals' intention. Ajzen's Theory of Planned Behavior (1991) argued that entrepreneurial intent generally is determined by the attitude toward the behavior, subjective norms, and perceived behavior control. Shapero's Entrepreneurial Event Model (1975) argued that entrepreneurial intent depends on perceived desirability, the propensity to act, and perceived feasibility. From a macro perspective, economic developments to some extent increase perceptions of feasibility and desirability. From a micro perspective, being familiar with government policies and regulations, having access to financing support, and having established relations with customers, suppliers and labor force significantly boost individuals' entrepreneurial intention (Bruno and Tyebjee 1982). The critical question is whether individuals' entrepreneurial intention changes accordingly to the environment.

Not only most immigrants still try to remain the same traditional lifestyle after moving to host countries (Vinogradov and Kolvereid 2007), but also some migrants continue to be active in their homeland at the same time that they become part of the countries that received them (Basch et al. 1994). Migrants maintain ties to their countries of origin (Waldinger and Fitzgerald 2004). Immigrants participate in electoral, organizational and non-institutional transnational action, electoral refers to migrants participation in origin-country electoral policies, including voting, campaigning and mobilizing for or against origin-country parties or candidates. Organizational refers to immigrants and diaspora civil society organizations; it includes various types of civic structures, including ethnic and hometown association (Chaudhary and Guarnizo 2016; Godin et al. 2015; Portes and Fernandez-Kelly 2015; Lacroix 2015). The third transnational concerns non-institutional transitional political action such as protests and mobilizing to channel resource to origin-country insurgents (Hockenos 2003). Figure 2, inspired by Portes and Fernandez-Kelly (2015), shows the sending country policies toward the immigrant transnational organization. The activities of sending states and their intervention in the transnational field are varied to different forms. Some sending country governments initially regarded the migrants as little more than defectors from their own national projects; only later did they come to consider them as important contributors to these same projects. Some governments have concentrated on extensive partnerships with migrant organizations to implement development projects. In a number of sending states, although governments have in recent decades initiated greater dialogue with individual members of the diaspora, less actives in engaging with diaspora *organizations* is reported. Other sending states are in no position to take part in this sort of fulfil edged collaborative venture (with individuals or organizations), either because of the feebleness of their resources or suspicion of the intentions of their expatriates (Portes and Fernandez-Kelly 2015).

The local, especially those who share completely different cultural and social norms, will automatically believe that immigrants do not intend to change their behaviors and norms to adapt to new environments. As a matter of fact, immigrants gradually change their behaviors and mindset through the time they spend in host countries, but still remain their traditions. A study by Hamilton et al. (2008) on



**Fig. 2** The sending country policies toward the immigrant transnational organization. *Source* Portes and Fernandez-Kelly (2015, p. 17)

Chinese and Indian migrant entrepreneurs in Manchester and Singapore confirmed that immigrants shift their tradition, norms, and culture in order to adapt to the host country culture.

Differences in socio-cultural context may have an influence on entrepreneurs’ behaviours (Mitchell et al. 2002). The local culture greatly influences the generalized values and norms of entrepreneurship. Busenitz et al. (2000) confirmed that the place of residence associated with its own cultural setting and values and norms affects new venture creation. Dana’s studies on enterprising culture in Hong Kong and China (1995, 1996, 1999) acknowledged how the environment affects entrepreneurship rate. Krueger and Kickul (2006) mentioned that social norms play a role in promoting entrepreneurial intention. Furthermore, Schlaegel and Koenig (2014) found the moderating role of contextual boundary conditions in the development of entrepreneurial intent. Recent studies show that the environment affects entrepreneurial cognition, specifically, the intention to start a business (Jensen et al. 2014; Ashourizadeh et al. forthcoming).

Iran is in-group collectivistic and out-group individualistic. The most distinguishing feature of the Iranian culture is its strong family ties and connections (Javidan and Dastmalchian 2003). It is a fact that most Iranians do not trust people outside of their own small group. They are much more comfortable to be surrounded by their families and close friends. Once move to another country where does not have their strong ties, Iranians will be more individualized. However, it is of importance to have social networking to initiate entrepreneurial activities.

In a survey conducted by the Simorgh Foundation whose founders are a group of Iranians based inside and outside Iran, the most Iranian respondents think that owning a business is a worthy occupation for their children. In other words,

the society thinks highly of entrepreneurship, people are more likely to pursue their career to becoming an entrepreneur. According to Global Entrepreneurship Monitor (2014), 25.5% of Iranians at home intend to participate in entrepreneurial activities, which is significantly higher than in Europe and North America. Hence, we develop our hypothesis as stated: Hence, we develop our hypothesis as stated:

- H2 The place of residence affects entrepreneurial intention, in the way that Iranian adults at home are more likely to intend or start a business than those in the diaspora.

### ***2.3 The Relations Between Entrepreneurial Competencies and Entrepreneurial Intention***

Entrepreneurship is considered as a driving factor for economic developments, the Iranian government has been promoting entrepreneurship in recent years. For example, government agencies in Iran such as the Institute of Labor and Social Security provide extensive training for people at various entrepreneurial stages, as well as Universities in Iran, offer entrepreneurial education program (Ashourizadeh et al. 2014). Previous studies have shown that entrepreneurial education program had a strong impact on the entrepreneurial intention (Fayolle and Klandt 2006). The Iranian government has implemented a major reform on infrastructure developments, such as water, electricity, roads. Besides, the Iranian government has organized several events with the focus on empowering the next generation of Iranian Entrepreneurs. One of the main forces behind developing the startup culture and entrepreneurship spirit in Iran is Startup Weekend, which was first introduced to the community in 2012.

Mitchell et al. (2002) defined entrepreneurial cognition as the knowledge structures that individuals use to judge or make decisions involving opportunity evaluations and make an assessment of their skills and abilities to create a venture. Self-efficacy beliefs develop through rational analytic processes, and holistic, intuitive contextual thinking (Cox et al. 2002). Furthermore, studies in entrepreneurship theory have acknowledged that entrepreneurial intention potentially was affected by contextual factors or social norms (Krueger and Kickul 2006). Bird (1988) also pointed out in his intention model that entrepreneurial intention is significantly influenced by personal traits and contextual factors. Therefore, it is interesting to understand which specific element (i.e. personal attributes and environment) contributes to individuals' decision to start a new venture.

The positive impacts of cognitive characteristics of individuals have been proved by several studies in entrepreneurship (Davidsson and Honig 2003; Schlaegel and Koenig 2014; Cheraghi and Schøtt 2015). Specifically, Ardichvili et al. (2003) proved that high levels of self-efficacy positively have been linked to various behaviors such as innovation, opportunity recognition, and entrepreneurial

intention. Zhao et al. (2005) figured prominently the level of risk-propensity to determine the probability of creating a new business venture. Gelderen et al. (2008) investigated the intention to become an entrepreneur. The study draws on the theory of planned behavior (TPB), it is concluded that individuals are driven to entrepreneurship according to different factors and the level of opportunity-alertness to some extent determined an individual's decision to become an entrepreneur. A recent comparative study of Iran and Egypt (Ashourizadeh et al. 2014) showed that competencies in terms of self-efficacy, opportunity-alertness, risk-willingness and role-modelling had positive effects on intention to be an entrepreneur. We thus develop our hypotheses as stated:

- H3a Entrepreneurial competency in the form of self-efficacy benefits entrepreneurial intention (in both intending phase and starting phase), regardless of where Iranians are.
- H3b Entrepreneurial competency in the form of opportunity-alertness benefits entrepreneurial intention (in both intending phase and starting phase), regardless of where Iranians are.
- H3c Entrepreneurial competency in the form of risk-propensity benefits entrepreneurial intention (in both intending phase and starting phase), regardless of where Iranians are.
- H3d Entrepreneurial competency in the form of role-modeling benefits entrepreneurial intention (in both intending phase and starting phase), regardless of where Iranians are.

### 3 Research Design and Data

#### 3.1 Data Source

Our paper aims to answer whether the institutional context has an impact entrepreneurial competencies as well as entrepreneurial intention, and to test the relationship between entrepreneurial competencies and entrepreneurial intention, through an in-depth comparative study of Iranian adults at home and the Iranian diaspora. The empirical basis of the study is the data collected by the Global Entrepreneurship Monitor (GEM). GEM is the world's major survey of the people's involvement in entrepreneurship (Bosma 2013; Minniti 2011). In 2012, the GEM consortium national teams collected data on adult immigrants in 73 countries around the world, yielding a sample of 3169 native-born Iranian adults in Iran, who were born in Iran and both their parents were born in Iran too, and a sample of 361 Iranian diasporas, who are living outside of Iran but were born in Iran or born abroad and, at least, a parent was born in Iran.

## 3.2 Measures

GEM's survey includes detailed characteristics of adults as below, which will serve as control variables with the following measurements:

- Gender: dichotomy coded 0 if female and 1 if male
- Age: number of years of age
- Education: number of years of education
- Self-efficacy: dichotomy coded 1 if self-efficacious and 0 if not
- Opportunity-alertness: dichotomy coded 1 if opportunity—alert and 0 if not
- Risk-propensity: dichotomy coded 1 if risk-propense and 0 if not
- Role-modeling: dichotomy coded 1 if role-model and 0 if not
- Intention: dichotomy coded 1 if intending to start and 0 if not
- Starting: dichotomy coded 1 if starting and 0 if not
- Income of the household: dichotomy coded as 1, 2, and 3 for thirds in the country.

### 3.2.1 Entrepreneurial Competencies

Entrepreneurial competencies refer to four dimensions, in terms of self-efficacy, opportunity-alertness, risk-propensity and role-modeling. They are measured by the following questions:

- Self-efficacy: *Do you have the knowledge, skill and experience required to start up a new business?*
- Opportunity-alertness: *In the next six months, will there be a good opportunity for starting a business in the area where you live?*
- Risk-propensity: *Would fear of failure prevent you from starting a business?*

Role modeling indicates the potential to role-model a starter and determined by response to the question,

- *Do you know someone personally who started a business in the past two years?*

### 3.2.2 Entrepreneurial Intention

People choose their career paths differently, and they might change their minds during different time periods. In the same vein, entrepreneurship is not for everyone, people's intention to be an entrepreneur is significantly influenced by time. We, therefore, measure it by asking this specific question,

*Are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years?*

## 4 Results

### 4.1 Entrepreneurial Competencies Affected by the Place of Residence

Our sample is about half are male, and the other half are female. The mean age of the respondents at home and in the diaspora is 34 years old and 38 years old, respectively. The mean duration of education of the respondents at home is 11 years; the Iranians diaspora receives more education, which is 13 years.

Table 1 compares variables used in our analysis across Iranian adults at home and the Iranian diaspora. As expected, the finding confirms that hypotheses H1a, H1c, and H1d that the prevalence of entrepreneurial competency in the form of self-efficacy, risk-propensity and role-modeling is more among Iranian adults at home. The result shows that the prevalence of entrepreneurial competency in the form of opportunity-alertness is more prevalent among the Iranian diaspora, it does not support the hypothesis H1b.

### 4.2 Entrepreneurial Intention Affected by the Place of Residence

Table 2 is designed to see if the place of residence has an impact on entrepreneurial intention. We predict that the place of residence affects entrepreneurial intention in the way that Iranian adults at home are more likely to intend or start a business than the Iranian diaspora. The result, surprisingly, shows that there is no significant

**Table 1** Entrepreneurial competencies, among Iranian adults at home and the Iranian diaspora

	Iran	Diaspora
Self-efficacy (%)***	55	46
Opportunity-alertness (%)**	36	42
Risk-propensity (%)**	60	54
Role-modeling (%)**	41	35
N	3022	289

Note \*, \*\*, and \*\*\* denotes level of significance at 0.10, 0.05, and 0.005 level

**Table 2** Entry into entrepreneurship, among Iranian adults at home and the Iranian diaspora

	Iran	Diaspora
Intending to start (%)	25	22
Starting phase (%)**	12	8
N	3144	340

Note \*, \*\*, and \*\*\* denotes level of significance at 0.10, 0.05, and 0.005 level



relationship between the place of residence and the intending phase; but does support that Iranian adults at home are more likely to start a business. Thus, this finding only partially confirms our hypothesis H2.

### 4.3 *Entrepreneurial Intention Affected by Entrepreneurial Competencies*

As illustrated in Table 3, we test whether entrepreneurial competencies have an influence on entrepreneurial intention (in both intending phase and starting phase), through a comparative study of Iranian adults at home and the Iranian diaspora. The result shows that the coefficients of self-efficacy for entrepreneurial intention in the form of intending phase and starting phase are positive and statistically significant for both Iranians adults at home and the Iranian diaspora, which supports our hypothesis H3a that entrepreneurial competencies in the form of self-efficacy benefits entrepreneurial intention (both intending phase and starting phase), regardless of where Iranian adults live. The result also shows that the coefficients of opportunity-alertness for entrepreneurial intention in the form of intending phase and starting phase for Iranian adults at home are significantly positive; however, the coefficient for the Iranian diaspora is significantly positive in the intending phase but not significant in the starting phase. Hence, our hypothesis H3b is not confirmed.

**Table 3** Logistic regressions: entrepreneurial intention affected by entrepreneurial competencies, among Iranian adults at home and the Iranian diaspora

	Iran		Diaspora	
	Intending phase	Starting phase	Intending phase	Starting phase
Self-efficacy	0.75***	0.66***	1.35***	1.40**
Opportunity-alertness	0.37***	0.20**	0.48*	-0.32
Risk-propensity	0.06	-0.09	-0.35	-0.23
Role-modeling	0.01	0.62***	0.20	0.81*
Education	0.03**	-0.01	0.00	0.00
Gender	0.32***	1.04***	0.61*	0.96*
Age	-0.04***	-0.2***	-0.02	-0.06**
Income	-0.33***	-0.10	0.06	0.67**
Intercept	-0.33	-2.49***	-1.52	-3.09**
N	2711	2734	193	184

Note \*, \*\*, and \*\*\* denotes level of significance at 0.10, 0.05, and 0.005 level

Astonishingly, the coefficients of risk-propensity for entrepreneurial intention in the form of intending phase and starting phase are not significant. The result is completely opposite to our hypothesis H3c that entrepreneurial competency in the form of risk-propensity benefits entrepreneurial intention (in both intending phase and starting phase), regardless of where Iranian adults live. It is also interesting to see that the coefficient for role-modeling for entrepreneurial intention in the form of starting phase is positive and significant, but there is no significant relationship between role modeling and entrepreneurial intention in the form of intending phase; thus, this finding only partially supports our Hypothesis H3d.

## 5 Conclusion

Our study is designed to examine whether the institutional context has an impact on entrepreneurial competencies and entrepreneurial intention, and the relation between entrepreneurial competencies and entrepreneurial intention, through a comparative study of two groups: Iranian adults at home and the Iranian diaspora.

Our empirical evidence confirms our predictions that entrepreneurial competency in the form of self-efficacy, risk-propensity and role modeling is more prevalent among Iranian adults at home. However, entrepreneurial competency in the form of opportunity-alertness is less prevalent among the Iranian adults at home. This finding is somewhat surprising, but it can be explained. Iran was almost excluded from globalization because of the sanctions imposed by the Western as well as the government closed-door policies. Iran is a conservative country with many restrictions on information flows. Internet is the major channel for people all the world to exchange and deliver real-time information; as a matter of fact, the Iran Internet penetration in 2014 is only 39%, ranking 135th out of 235 countries (The World Bank 2015). Based on the fact, Iranians at home have difficulty in information seeking and information-gathering. Nevertheless, it will be changed after the removal of sanctions in 2016.

Furthermore, our study finds out that the place of residence, by and large, has an impact on entrepreneurial intention, specifically in the starting phase. That is, Iranian adults at home are more likely to start a business than the Iranian diaspora. This result proves the importance of the environment to the nascent entrepreneurs. The environment refers to financing for entrepreneurs, governmental support and policies, infrastructure development, cultural and social norms, and market etc. These factors greatly affect an individual's decision to be an entrepreneur. It is important to note that close ties (i.e. families, close friends) are critical at the early stage of entrepreneurship because they may provide assistance in financing, marketing, and labor etc. These existing social networks boost individuals' confidence on starting a new business venture.

Our paper also reveals that only entrepreneurial competency in the form of self-efficacy has a significantly positive impact on entrepreneurial intention (both in intending phase and in starting phase), regardless of where Iranians live. In term of role modeling, it has a significantly positive influence only on the starting phase of both groups. Astonishingly, the result shows that there is no significant relationship between risk-propensity and entrepreneurial intention for both two groups, which is completely opposite to the majority of studies in entrepreneurship theory.

## 6 Discussion

The Iranian diaspora is the one of the highly educated ethnic groups in the world and has an influential transnational community, especially Iranian Americans, many of who seize top positions of most major companies in Silicon Valley. What about Iranians at home? Our exploratory study finds that a high percentage of Iranians at home have required entrepreneurial competencies and the desire to be an entrepreneur. Theoretically, entrepreneurship can be a part of the solution to the high unemployment rate in Iran. As a matter of fact, there are not so many entrepreneurial activities in Iran. In other words, the Iranian government is the key player; Iranian government's policies and regulations determine the entrepreneurship's future in Iran.

The Iranian government has been ambitiously working on its economic reforms after the 2013 election of President Hassan Rouhani. In 2015, the Iranian government has significantly improved its entrepreneurial environment (see Exhibit 1, 2, and 3, GEM), which refers to financing for entrepreneurs, public policies, market openness, entrepreneurial education and training, and infrastructure development (Reported by Iran's Ministry of cooperatives, labour and social welfare). However, most Iranian diasporas still do not return to their homeland, because they experienced the consequences of political instability, and because Iran's entrepreneurial environment is still not as good as such developed countries as the U.S., Germany, and Sweden (see Exhibit 4). The World Bank ranks Iran 118th out of 189 countries on the ease of doing business in 2016. It takes time to build up confidence on Iranian's government, but changes in Iran deliver a positive signal to the world.

In January 2016, the United Nations, the EU, and the U.S. announced to remove the economic and financial sanctions on Iran, in exchange, Iranian government agreed to limit its nuclear program. This incredible change will bring Iran back to the world and contribute to economic reforms. Shortly, Iranian government released the sixth five-year development plan for the 2016–2021 period. It predicts an annual economic growth rate of 8% in 2016, which is higher than China's and India's. Iran is the last big untapped consumer market in the world; global investors aggressively look for investment opportunities there.

The presidency of Mr. Rouhani has gradually attracted some Iranian diasporas to return to their homeland; however, the majority of Iranian diasporas do not want to return, because economic development alone is not attractive enough to reverse Iran's brain drain. The key factor is political stability. The Iranian diaspora has witnessed too many ups and downs of political conditions, past experiences have taught them to wait to see. If this can be granted, Iran has the potential to turn "brain drain" to "brain circulation" in a long run. Iran is one of the countries that have the most science and engineering graduates, but more than 50% of them leave for such countries as the U.S., Canada, and Sweden to pursue better opportunities. Iran, as a sending country, suffers from a huge loss in human capital. These receiving countries benefit from the brain drain. For example, Iranian Americans are the active participants in science, engineering, and medical fields. Many of them seize influential positions in the major companies in Silicon Valley. If these Iranian Americans decide to return to their home country or they start to participate in transnational entrepreneurship, then the original "brain drain" eventually transformed into a significant "brain gain" (Saxenian 2005; Portes and Celaya 2013). Seguin et al. (2006) confirmed the role of scientific diasporas in contributing to technological developments.

The Iranian diaspora and policy makers in Iran are the key player in this transformation. According to Portes and Fernandez-Kelly (2015), the sending country policies toward the immigrant transnational organization, Iran could be placed in the group of India, Pakistan and Surinam.

The Iranian legislation does not grant dual citizenship and voting rights are also limited; in addition, the Iranian ministry of Science, Research and Technology does consider the importance of the "reserved brain" among the Iranian Diaspora so this huge potential of huge human capital can end up with becoming "brain waste", in case there is no plan to challenge and address this brain drain situation. In other words, the Iranian government has not given a positive and clear signal to the Iranian diaspora yet. In a long run, Iran is more likely to end up in a similar situation as indicated in Fig. 1 where China, South Korea and Vietnam are placed. The Iranian government may take advantage of its powerful transnational diaspora communities to integrate into the globalization. For example, the Iranian government can promote collaboration with Iranian Diaspora in the Western countries, who can utilize their knowledge, experience and professional ties in Western societies by establishing transnational business activities in Iran by forging bridges between home and host countries. In this way, Iran will formulate its own "talent program

# Appendix

Exhibit 1

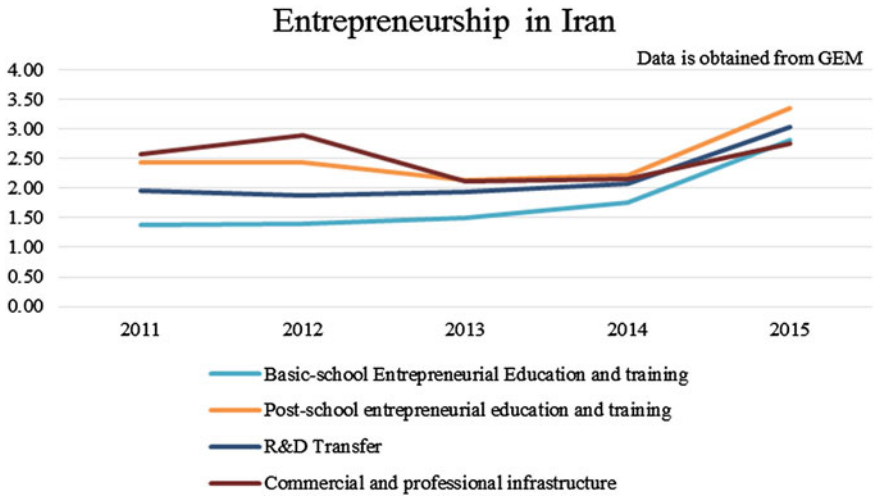


Exhibit 2

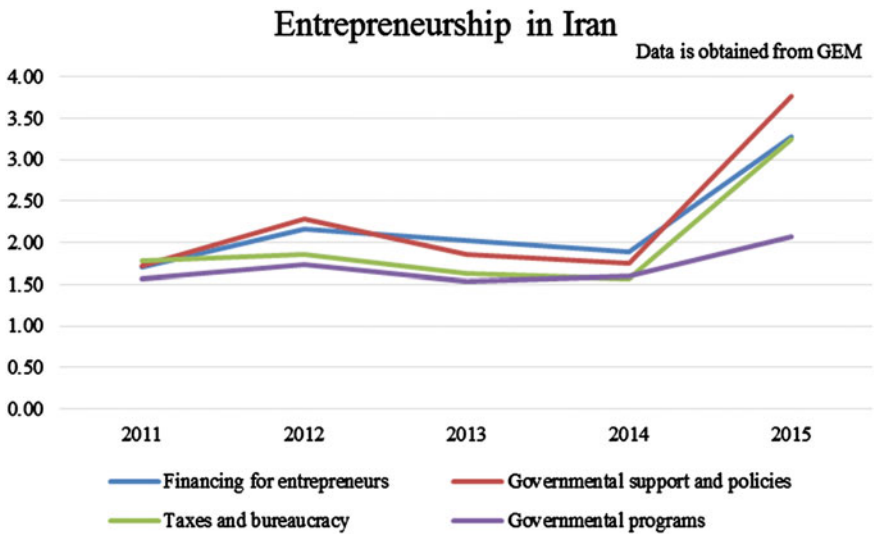


Exhibit 3

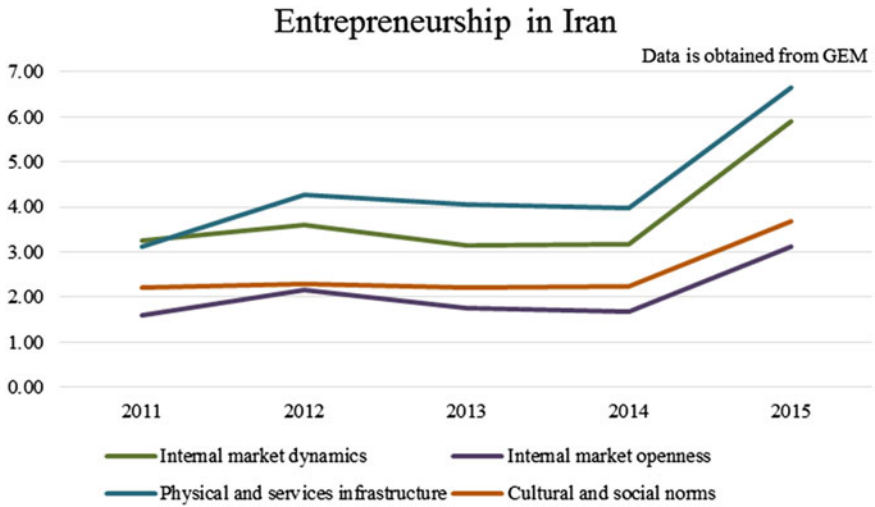
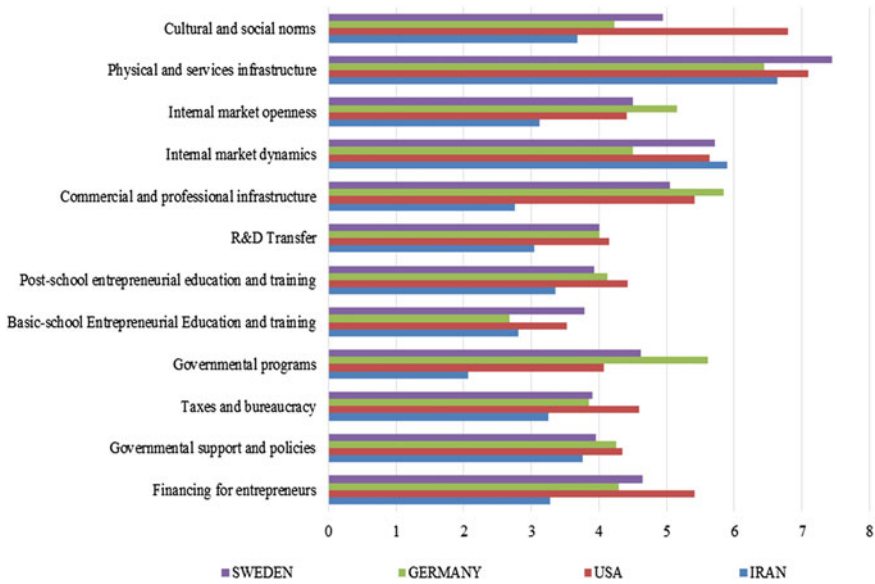


Exhibit 4



## References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Aldrich, H., & Zimmer, C. (1986). Entrepreneurship through social networks. *The Art and Science of Entrepreneurship* (pp. 3–23). Cambridge, MA: Ballinger.
- Anton, C. E., & Lawrence, C. (2014). Home is where the heart is: The effect of place of residence on place attachment and community participation. *Journal Environmental Psychology*, 40, 451–461.
- Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business Venturing*, 18(1), 105–123.
- Ashourizadeh, S., Nasiri, N., & Schött, T. (2014). Higher education and business training benefiting competencies and entrepreneurial intention: Egypt and Iran. *International Journal of Entrepreneurship and Small Business*, 23(1/2), 94–109.
- Ashourizadeh, S., Rezaei, S., Schött, T., & Jensen, K. W. (forthcoming). People's human and social capital benefiting careers in entrepreneurship: adults in China and in the Chinese diaspora. *International Journal Business and Globalisation*.
- Autio, E., Sapienza, H. J., & Almeida, J. G. (2000). Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of Management Journal*, 43, 909–924.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, 84(2), 191–215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Baron, R. A. (2006). Opportunity recognition as pattern recognition: How entrepreneurs “connect the dots” to identify new business opportunities. *Academy of Management Perspectives*, 20(1), 104–119.
- Basch, L., Glick Schiller, N., & Szanton Blanc, C. (Eds.). (1994). *Nations unbound: Transnational projects, postcolonial predicaments, and deterritorialized nation-states*. London: Gordon and Breach.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13(3), 442–453.
- Bird, B., & Jelinek, M. (1988). The operation of entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 13(2), 21–29.
- Block, J. H., Thurik, R., & Zhou, H. (2012). What turns knowledge into innovative products? The role of entrepreneurship and knowledge spillovers. *Journal of Evolutionary Economics*, 23(4), 693–718.
- Bosma, N. S. (2013). The global entrepreneurship monitor (GEM) and its impact on entrepreneurship research. *Foundations and Trends in Entrepreneurship*, 9(2), 143–248.
- Boyd, N. G., & Vozikis, G. S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 18(1), 63–77.
- Brockhaus, R. H. (1980). Risk taking propensity of entrepreneurs. *Academy of Management Journal*, 23(3), 509–520.
- Bruno, A. V., & Tyebjee, T. T. (1982). The environment of entrepreneurship. *Encyclopedia of Entrepreneurship*, 2(4), 288–315.
- Busenitz, L. W., Gomez, C., & Spencer, J. W. (2000). Country institutional profiles: Unlocking entrepreneurial phenomena. *Academy of Management Journal*, 43(5), 994–1003.
- Carland, J. W. III., Carland, J. W. Jr., Carland, J. A. C., & Pearce, J. W. (March 1995). Risk taking propensity among entrepreneurs, small business owners and managers. *Journal of Business and Entrepreneurship*, 7(1).
- Chaudhary, A. R., & Guarnizo, L. E. (2016). Pakistani immigrant organisational spaces in Toronto and New York City. *Journal of Ethnic and Migration Studies*, 42(6), 1013–1035.
- Chen, C. C., Greene, P. G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13(4), 295–316.

- Cheraghi, M., & Schött, T. (2015). Reproduction of gender gaps throughout the entrepreneurial career: Disadvantages and benefits. *International Journal of Gender and Entrepreneurship*, 7(3).
- Chu, P. (1996). Social network models of overseas Chinese entrepreneurship: The experience in Hong Kong and Canada. *Journal of Administrative Sciences*, 13(4), 358–365.
- Cox, L., Mueller, S., & Moss, S. (2002). The impact of entrepreneurship education on entrepreneurial self-efficacy. *International Journal of Entrepreneurship Education*, 1(2), 229–245.
- Dana, L. P. (1995). Enterprising culture in Hong Kong. *Journal of Enterprising Culture*, 3(4), 497–510.
- Dana, L. P. (1996). Boomerang entrepreneurs: Hong Kong to Canada and back. *Journal of Small Business Management*, 34(2), 79–83.
- Dana, L. P. (1999). Small business as a supplement in the People's Republic of China (PRC). *Journal of Small Business Management*, 37(3), 76–80.
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301–331.
- Drori, I., Honig, B., & Wright, M. (2009). Transnational entrepreneurship: An emergent field of study. *Entrepreneurship Theory and Practice*, 33(5), 1001–1022.
- Fayolle, A., & Klandt, H. (2006). *International entrepreneurship education—Issues and newness*. Cheltenham, UK: Edward Elgar.
- Gelderen, M. V., Brand, M., Praag, M. V., Bodewes, W., Poutsma, E., & Gils, A. V. (2008). Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career Development International*, 13(6), 538–559.
- Ghorbani, M. (2011). Immigrant effect in melting pot and multicultural societies: A comparison between the USA and Canada. *Journal of Asia Business Studies*, 5(1), 23–41.
- Gist, M. E., & Mitchell, T. R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review*, 17(2), 183–211.
- Global Entrepreneurship Monitor Report. (2014). Online <http://gemconsortium.org/report>. Accessed August 2015.
- Godin, M., Herman, B., Rea, A., & Thys, R. (2015). Moroccan and Congolese migrant organizations in Belgium. In A. Portes & P. Fernandez-Kelly (Eds.), *The state and the grassroots: Immigrant transnational organizations in four continents* (pp. 189–211). New York: Berghahn Books.
- Granovetter, M. (1973). The strength of weak ties'. *American Journal of Sociology*, 78(6), 1360–1380.
- Hockenos, P. (2003). *Homeland Calling: Exile Patriotism & the Balkan Wars*. Ithaca, NY: Cornell University Press.
- Hamilton, R., Dana, L. P., & Benfell, C. (2008). Changing cultures: An international study of migrant entrepreneurs. *Journal of Enterprising Culture*, 16(1), 89–105.
- Henry, C., Hill, F., & Leitch, C. (2005). Entrepreneurship education and training: Can entrepreneurship be taught Part II. *Education + Training*, 47(3), 158–169.
- Hofstede, G. H. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage.
- Javidan, M., & Dastmalchian, A. (2003). Culture and leadership in Iran: The land of individual achievers, strong family ties, and powerful elite. *The Academy of Management Executive*, 17(4), 127–142.
- Jensen, K. W., Rezaei, S. & Wherry, F. (2014). Cognitive effects on entrepreneurial intentions: a comparison of Chinese émigrés and their descendants with non-émigré Chinese. *International Journal of Entrepreneurship and Small Business*, 23(1–2), 252–277.
- Jensen, K. W., Rezaei, S., Schött, T., Ashourizadeh, S., & Li, J. (2015). Chinese entrepreneurs' human and social capital benefiting innovation: In China and in the Chinese diaspora. *International Journal of Business and Globalisation* (forthcoming).
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–292.



- Karabey, C. N. (2012). Understanding entrepreneurial cognition through thinking style, entrepreneurial alertness and risk preference: do entrepreneurs differ from others? *Procedia—Social and Behavioral Science*, 58, 861–870.
- Katz, J., & Gartner, W. B. (1988). Properties of emerging organizations. *Academy of Management Review*, 13(3), 429–441.
- Kirzner, I. M. (1979). *Perception, opportunity, and profit: Studies in the theory of entrepreneurship*. Chicago: University of Chicago Press.
- Krueger, N. F., & Kickul, J. (2006). So you thought the intentions model was simple? Cognitive Style and the specification of entrepreneurial intentions models. SSRN online: <http://ssrn.com/abstract=1150881> or <http://dx.doi.org/10.2139/ssrn.1150881>. Accessed August 2015).
- Krueger, N. F., Raeilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5–6), 411–432.
- Kuratko, D. F. (2005). The emergence of entrepreneurship education: Development, trends, and challenges. *Entrepreneurship Theory and Practice*, 29(5), 577–598.
- Lacroix, T. (2015). Moroccans in France: Their organizations and activities back home. In A. Portes & P. Fernandez-Kelly (Eds.), *The state and the grassroots: Immigrant transnational organizations in four continents* (pp. 212–35). New York: Berghahn Books.
- Leff, N. H. (1979). Entrepreneurship and economic development: The problem revisited. *Journal of Economic Literature*, 17(1), 46–64.
- MacCrimmon, K. R., & Wehrung, D. A. (1990). Characteristics of risk taking executives. *Management Science*, 36(4), 422–435.
- Man, T. W., & Lau, T. (2005). The context of entrepreneurship in Hong Kong: An investigation through the patterns of entrepreneurial competencies in contrasting industrial environments. *Journal of Small Business and Enterprise Development*, 12(4), 464–481.
- Minniti, M. (Ed.). (2011). *The dynamics of entrepreneurship: Evidence from the global entrepreneurship monitor data*. Oxford: Oxford University Press.
- Mitchell, R. K., Smith, J. B., Morse, E. A., Seawright, K. W., Peredo, A. M., & McKenzie, B. (2002). Are entrepreneurial cognitions universal? Assessing entrepreneurial cognitions across cultures. *Entrepreneurship: Theory and Practice*, 26(4), 9–33.
- Mobasher, M. M. (2012). Iranians and Iranian Americans, 1940–Present. In E. R. Barkan (Ed.), *Immigrants in American history: Arrival, adaption, and integration*. Santa Barbara, California: ABC-CLIO LLC.
- Nasurdin, A. M., Ahmad, N. H., & Lin, C. E. (2009). Examining a model of entrepreneurial intention among Malaysians using SEM procedure. *European Journal of Scientific Research*, 33(2), 365–373.
- Osborne, S. (April 06, 2015). *Harvard business review*. <https://hbr.org/2015/04/young-people-need-to-know-entrepreneurship-is-hard>
- Oviatt, B. M., & McDougall, P. P. (2005). Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship Theory and Practice*.
- Patel, N. (January 16, 2015). Forbes. 90% of startups fail: Here is what you need to know about the 10%. <http://www.forbes.com/sites/neilpatel/2015/01/16/90-of-startups-will-fail-heres-what-you-need-to-know-about-the-10/#6d18253e55e1>
- Portes, A. (1998). Social capital: Its origin and applications in modern society. *Annual Review of Sociology*, 24, 1–24.
- Portes, A., & Celaya, A. (2013). Modernization for emigration: Determinants and consequences of the brain drain. *Journal of the American Academy of Arts and Sciences*, 142(3), 170–184.
- Portes, A., Haller, W. J., & Guarnizo, L. E. (2002). Transnational entrepreneurs: An alternative form of immigrant economic adaption. *American Sociological Review*, 67, 278–298.
- Ramadani, V., Rexhepi, G., Gërguri-Rashiti, S., Ibraimi, S., & Dana, L.-P. (2014). Ethnic entrepreneurship in Macedonia: The case of Albanian entrepreneurs. *International Journal of Entrepreneurship and Small Business*, 23(3), 313–335.
- Razin, E., & Langlois, A. (1996). Metropolitan characteristics and entrepreneurship among immigrants and ethnic groups in Canada. *International Migration Review*, 30(3), 703–727.

- Rezaei, S. (2007). Breaking out: The dynamics of immigrant owned businesses. *Journal of Social Sciences*, 3(2), 94–105.
- Salaff, J., Greve, A., & Wong, S. L. (2006). Business social networks and immigrant entrepreneur from China. In E. Fong, L. Chiu (Eds.), *Chinese ethnic economy: Global and local perspective* (Chapter 6, pp. 2–99). London, UK: Routledge.
- Saxenian, A. (2005). From brain drain to brain circulation: Transnational communities and regional upgrading in India and China. *Studies in Comparative International Development*, 40(2), 35–61.
- Seguin, B., State, L., Singer, P. A., & Daar, A. S. (2006). Scientific diasporas as an option for brain drain: recirculating knowledge for development. *International Journal of Biotechnology*, 8(1–2), 78–90.
- Schlaegel, C., & Koenig, M. (2014). Determinants of entrepreneurial intent: A meta analytic test and integration of competing models. *Entrepreneurship Theory and Practice*, 32(2), 291–332.
- Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science*, 11(4), 448–469.
- Shapiro, A. (1975). The displaced, uncomfortable entrepreneur. *Psychology Today*, 9(11), 83–88.
- Soltani, E., Scullion, H., & Collings, D. (2010). Workforce diversity in Iran: Some case study evidence of private sector organisations. In J. Syed & M. F. Ozbilgin (Eds.), *Managing cultural diversity in Asia: A research companion*. Cheltenham, Glos: Edward Elgar Publishing Limited.
- Stenholm, P., Acs, Z. J., & Wuebker, R. (2013). Exploring country-level institutional arrangements on the rate and type of entrepreneurial activity. *Journal of Business Venturing*, 28(1), 176–193.
- Tang, J. T. (2008). Environmental munificence for entrepreneurs: Entrepreneurship alertness and commitment. *International Journal of Entrepreneurial Behavior and Research*, 14(3), 128–151.
- Tang, J., Kacmar, K. M., & Busenitz, L. (2012). Entrepreneurial alertness in the pursuit of new opportunities. *Journal of Business Venturing*, 27(1), 77–94.
- Teoh, H. Y., & Foo, S. L. (1997). Moderating effects of tolerance for ambiguity and risk-taking willingness on the role conflict—Perceived performance relationship evidence from Singaporean entrepreneurs. *Journal of Business Venturing*, 12(1), 67–81.
- The World Bank. (2015). The internet users. <http://data.worldbank.org/indicator/IT.NET.USER.P2>
- Portes, A., & Fernandez-Kelly, P. (2015). Active state supports for transnational development projects, p. 17.
- Vaisey, S., & Lizardo, O. (2010). Can cultural worldviews influence network composition? *Social Forces*, 88(4), 1595–1618.
- Vinogradov, E., & Kolvereid, L. (2007). Cultural background, human capital and self-employment rates among immigrants in Norway. *Entrepreneurship and Regional Development*, 19(4), 359–376.
- Waldinger, R., Aldrich, H., & Ward, R. (1990). Opportunities, group characteristics and strategies. In R. Waldinger, H. Aldrich, & R. Ward (Eds.), *Ethnic entrepreneurs: Immigrant business in industrial societies* (pp. 13–48). London: Sage.
- Waldinger, R., & Fitzgerald, D. (2004). Transnationalism in question. *American Journal of Sociology*, 109, 1177–1195.
- Wang, Y. L., Ellinger, A. D., & Wu, Y. C. (2013). Entrepreneurial opportunity recognition: An empirical study of R&D personnel. *Management Decision*, 51(2), 248–266.
- Zhao, H., Seibert, C., & Hils, C. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(2), 1265–1272.
- Zhou, M. (2004). Revisiting ethnic entrepreneurship: Convergencies, controversies, and conceptual advancements. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*, 38(3), 1040–1074.

## Author Biography

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# Networks Around Women and Men Entrepreneurs in the Iranian Diaspora: Dual Embeddedness in Iran and in Host-Society

Thomas Schøtt

**Abstract** How are women and men entrepreneurs networking in the private sphere and in the public sphere, in Iran, in the Iranian diaspora, and in their host-societies? Entrepreneurs in Iran and native entrepreneurs in other countries are embedded in their own society, but entrepreneurs in the Iranian diaspora are dually embedded, in Iran and in their host-society. Expectedly, entrepreneurs in the Iranian diaspora are networking in ways that blend ways of networking in Iran and ways of networking in the host-societies. A sample of 8263 entrepreneurs in Iran, in the Iranian diaspora, and in their host-societies, was surveyed in the Global Entrepreneurship Monitor. Women and men entrepreneurs are networking similarly in the private sphere, but men are networking more in the public sphere. Entrepreneurs in traditional society, Iran, are networking more in the private sphere than entrepreneurs in the Iranian diaspora and host-societies. Conversely, entrepreneurs in the Iranian diaspora and host-societies are networking more in the public sphere. The gendering of networking, moreover, is moderated by culture, especially in that networking in the private sphere is especially extensive for women in Iran, whereas networking in the public sphere is especially extensive for men in the Iranian diaspora and in their host-societies.

## 1 Introduction

Fatemeh was among my graduate students in University of Tehran's Faculty of *Karafarini*. Pulled by seeing opportunities in the market, she started a small business. Her parents, siblings, uncles and grandfathers eagerly advised her on business matters, although they had little experience in starting or running a business. Her grandmothers were searching for a potential husband and found one

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who had a job that could support a family. He proposed and Fatemeh and both families accepted, so she closed her nascent business, and started a new family.

Ali was another of my students. He had a boyhood dream of starting a business, inspired by an uncle who ran a successful business. Waking up from his dream to harsh reality, he was pushed by the necessity to make a living and considered starting a small business to be more feasible than searching for a job in industry that was downsizing because of the economic sanctions from foreign powers. His family and relatives were keenly advising him, and he also consulted informally with more knowledgeable people on how to start a business. His grandmothers were searching for a potential wife and found one, but Ali evaluated himself as unacceptable to her family because he did not have an income to support a new family. Instead, he abandoned his up-start, left his family, and migrated to the West where he perceived opportunities for starting to be better. In his new host-country he quickly began working long hours cleaning. He brought with him his dream of starting his own business, and met a native entrepreneur Morgan who became his role-model. Like Morgan, he sought advice on starting from knowledgeable people in his work-place, the professions, the market and he also consulted with fellow-entrepreneurs in the Iranian diaspora. Recently I heard that he was starting a promising business, which renewed the search by his grandmothers.

The stories of Fatemeh, Ali and Morgan frame the research question here, how are women and men entrepreneurs networking in private and public spheres, in Iran, in the Iranian diaspora, and in host-societies?

## 2 Theoretical Background and Hypotheses

This section first conceptualizes migrants' dual embeddedness in home-society and in host-society, then elaborates on networking as networking in the private sphere and in the public sphere, and uses this for developing hypotheses about how gender affects networking, how culture affects networking, and how also gender in combination with culture influences networking.

### 2.1 *Dual Embeddedness*

The young Fatemeh was embedded in her society, networking in the private sphere as may be typical in business life in Iran, and living as women typically do in Iran. Thus she was influenced by institutions in her society, notably by the family as an institution, gender as an institution, and the economy as an institution in Iranian society.

Morgan was embedded in own society, networking as a native entrepreneur in the public sphere as is typical for a business person, influenced by the institutions in the more Western society.

The young Ali was embedded in his Iranian society and networking as is typical for a business man in Iran. He carried his Iranian practices with him when he migrated, and thus his embeddedness in Iranian culture continued in the diaspora. But he also adopted new practices, learning from his role-model Morgan, and thus became embedded in his new society. Ali's entrepreneurial endeavor in the diaspora was shaped by his two contexts, his dual embeddedness, as an embeddedness in his home-society combined with an embeddedness in his host-society.

Dual embeddedness of migrants, more precisely, refers to their embeddedness in their home-society combined with embeddedness in their host-society (Schøtt 2016, 2017). This conceptualization directs attention to the institutions in the two societies, which regulate, channel, enable and constrain the migrants' endeavors such as their vocational choices and networking (Hamilton et al. 2008; Mobasher 2004, 2007, 2012). The concept of dual embeddedness thus goes beyond the concept of mixed embeddedness which denotes embeddedness in the host society combined with embeddedness in the diaspora community (Kloosterman et al. 1999).

## ***2.2 Private and Public Spheres***

Entrepreneurs frequently need a wide spectrum of knowledge for starting a business, more knowledge and information than they have acquired through education, training and practice (Ashourizadeh et al. 2014, 2015a). They may get advice from family and friends and from people in various other environments (Salaff et al. 2006; Schøtt 2014). These many advisors are drawn from two spheres, the private sphere of family and friends and the public sphere encompassing the work-place, professions, market and also the international environment (Cheraghi and Schøtt 2014; Jensen et al. 2015; Jensen and Schøtt 2015; Schøtt and Cheraghi 2015). The distinction between the private sphere and the public sphere is useful for hypothesizing about how networking is affected by gender and culture.

## ***2.3 Gender Affecting Networking***

Gender gaps pervade the various domains of life, with men tending to have higher positions than women (World Economic Forum 2014). Men more frequently than women are intending to start, are starting, and are running a business (Kelley et al. 2015). These are not just overall global tendencies. In every country, of the more than a hundred countries surveyed in the Global Entrepreneurship Monitor, men are more likely than women to be working (running a business or be employed), while women are far more likely than men to be home-makers (as seen in the data; Global Entrepreneurship Research Association 2016). In Iran, for example, 55% of the women are home-makers while only 1% of the men are home-makers; conversely, 27% of the men but only 7% of the women are self-employed, and 37% of the men

and only 14% of the women are employees (as also seen in the data; Global Entrepreneurship Research Association 2016; see also Sarfaraz 2017). Thus women tend to live in the private sphere, while men live more in the public sphere.

Such gender-roles are influencing networking (Ashourizadeh and Schött 2013). In our daily lives, women tend to network extensively in the private sphere, while men tend to network extensively in the public sphere. These tendencies in our daily lives expectedly also prevail in entrepreneurs' networking for advice. We can formulate this as hypotheses about entrepreneurs:

**Hypothesis 1** Gender affects private sphere networking, in that women have more extensive private sphere networks than men.

**Hypothesis 2** Gender affects public sphere networking, in that women have less extensive public sphere networks than men.

These two hypotheses focus on Iran and its diaspora but have been supported in a study of the Middle East and North Africa (Ashourizadeh and Schött 2013) and in a global study (Schött and Cheraghi 2015). The hypotheses will here be retested with a sample of entrepreneurs in Iran, its diaspora and host-countries as a starting point for testing more hypotheses.

## 2.4 *Culture Affecting Networking*

People are networking in the context of their culture and society (McCabe et al. 2005; Portes 1995). Traditional culture gives salience to the family as an institution, whereas the family is less salient in modern culture (Inglehart and Welzel 2005). Culture also influences entrepreneurs, so we expect their networking in the private sphere to be more extensive in traditional Iran than in the more modern societies that tend to host migrants (Cheraghi and Schött 2015; Cheraghi et al. 2014; Schött and Cheraghi 2015). This is stated as a hypothesis,

**Hypothesis 3** Private sphere networking is more extensive in Iran than in typical host-societies.

Iranian entrepreneurs in the diaspora remain embedded in Iranian culture, expectedly, so they will also be networking extensively in the private sphere, we hypothesize:

**Hypothesis 4** Private sphere networking is more extensive in the Iranian diaspora than in typical host-societies.

As the entrepreneurs in the Iranian diaspora become embedded in their host-society, however, their networking in the private sphere will become like that of the native entrepreneurs in the host-society, we should expect.

The public sphere, conversely, is less salient in traditional culture than in modern culture. This culture also influences entrepreneurs, so their networking in the public sphere tends to be less extensive in Iran than in more modern societies, we hypothesize:

**Hypothesis 5** Public sphere networking is less extensive in Iran than in typical host-societies.

The entrepreneurs in the Iranian diaspora carry with them a practice of only sparse networking in the public sphere, so we also hypothesize:

**Hypothesis 6** Public sphere networking is less extensive in the Iranian diaspora than in typical host-societies.

But as the entrepreneurs in the Iranian diaspora become embedded in their host-society, they adopt a practice of extensive networking in the public sphere, like the native entrepreneurs, exemplified by Morgan.

## 2.5 *Culture Moderating the Effect of Gender on Networking*

Gender directly affects networking, and culture directly affects networking, as hypothesized in the above. Furthermore, gender roles vary from one culture to another, so we should also expect that the gender effects depend on culture (Schøtt and Cheraghi 2015).

Family is more salient for women than for men, around the world, but family is especially salient for women in traditional culture (Inglehart 2003). So for entrepreneurs in Iran we hypothesize:

**Hypothesis 7** The effect of gender upon private sphere networking is moderated by Iranian society, in that being woman in Iran boosts the private sphere networking.

The entrepreneurs in the Iranian diaspora maintain some embedding in Iranian culture, so we also hypothesize:

**Hypothesis 8** The effect of gender upon private sphere networking is moderated by Iranian diaspora, in that being woman in the diaspora boosts the private sphere networking.

This effect, though, will expectedly diminish as the entrepreneurs in the diaspora become embedded in their host-society.

The public sphere is less salient for women than men, around the world, but the public sphere is even less salient for women in traditional culture (Inglehart 2003). So for the entrepreneurs in Iran we hypothesize:

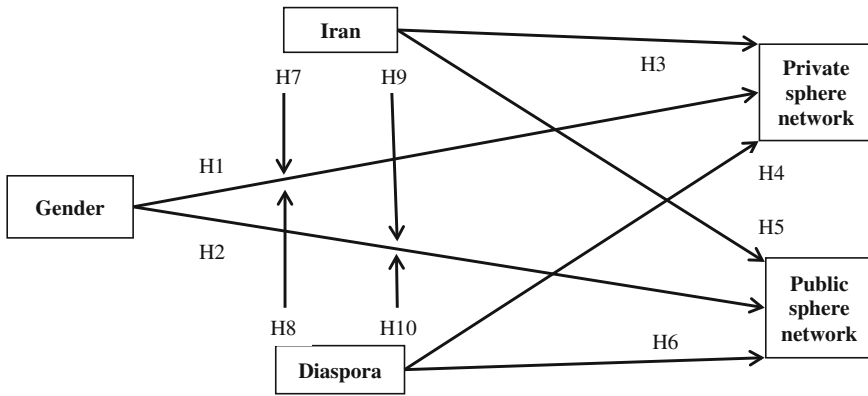
**Hypothesis 9** The effect of gender upon public sphere networking is moderated by Iranian society, in that being woman in Iran reduces the public sphere networking.

The entrepreneurs in the Iranian diaspora carry practices from their home-society with them, so we also hypothesize a similar effect for them:

**Hypothesis 10** The effect of gender upon public sphere networking is moderated by Iranian diaspora, in that being woman in the diaspora reduces the public sphere networking.

This moderating effect, though, will expectedly diminish as the diaspora entrepreneurs become embedded in their host-society.





**Fig. 1** Hypothesized effects

The above ten hypotheses about the two main effects of gender, the four main effects of culture in Iran and the diaspora, and the four effect of gender combined with culture are all represented as ten arrows in Fig. 1.

The ten hypotheses are tested in the following.

### 3 Research Design

Focus is on the entrepreneurs in the Iranian diaspora, but as they have a dual embeddedness in Iran and in their host-societies, the research design involves comparing three kinds of entrepreneurs: those in the diaspora, those in Iran, and those in the host-societies around the world.

#### 3.1 Sampling

Entrepreneurs and other adults around the world are surveyed annually in the Global Entrepreneurship Monitor project conducted by the consortium Global Entrepreneurship Research Association (Global Entrepreneurship Research Association 2016). In 2012 the GEM survey added questions about migration, also asked in a few countries in 2013 and 2014 (Vorderwülbecke 2013). Most data are readily and freely available (Global Entrepreneurship Research Association 2016).

The GEM survey samples in two stages, first selecting countries and then sampling adults within each selected country. In 2012–14 the survey asked about migration in Iran and 71 other countries with a considerable degree of representativeness of the world, which implies that findings can be generalized.

The survey asked for each respondent's country of birth and country of birth of father and also of mother. A respondent is here classified as in Iran if interviewed in

the survey conducted in Iran, and classified as in the Iranian diaspora if interviewed in the survey conducted in other countries and was born in Iran or at least one parent was born in Iran, and classified as in a host-country if interviewed in another country and some in the Iranian diaspora were also in that country. The thereby identified host-countries were primarily countries in the West and secondarily countries in the Islamic world near Iran. The sample was limited to those entrepreneurs who reported on their networking. Thereby the sampled host-societies were the following nine: Denmark, Ireland, Israel, Luxemburg, Pakistan, Palestine, Qatar, Sweden, and the United States. The total sample comprises 8263 entrepreneurs intending to start, starting or owning-managing a business, with 1330 in Iran, 57 in the Iranian diaspora, and 6876 in the host-societies. The number of respondents in the diaspora is small, limiting the statistical power of the analyses of the diaspora.

## **3.2 *Measurements***

This subsection describes the measurement of networking and also some other conditions that will be controlled for in the analyses. The questionnaire is published (Global Entrepreneurship Research Association 2016).

### **3.2.1 *Networking***

The network around an entrepreneur is tapped in the GEM survey by asking the entrepreneur to tell who gives advice on the business,

Various people may give you advice on your new business. Have you received advice from any of the following? Your spouse or life-companion? Your parents? Other family or relatives? Friends? Current work colleagues? A current boss? Somebody in another country? Somebody who has come from abroad? Somebody who is starting a business? Somebody with much business experience? A researcher or inventor? A possible investor? A bank? A lawyer? An accountant? A public advising services for business? A firm that you collaborate with? A firm that you compete with? A supplier? A customer?

The network in the private sphere is measured as the number of advisors among the four: spouse, parent, other family, and friends, a measure going from 0 to 4. The network in the public sphere is measured as the number of advisors among the other 16, a measure going from 0 to 16 (Schött 2014).

### **3.2.2 *Control Variables***

Several conditions are related to networking and to gender or culture, and should be controlled for in the analyses. The regression analyses will use several control variables measured in the GEM survey as follows:

- Age is measured in years.
- Education is measured in years.
- Competence is the mean of three dichotomous measures of self-efficacy, opportunity-alertness and risk-propensity. Self-efficacy is measured by asking *Do you have the knowledge, skill and experience required to start a new business?* (coded 1 if answer is Yes, and 0 if answer is No).
- Opportunity-alertness is measured by asking *In the next six months, will there be good opportunities for starting a business in the area where you live?* (coded 1 if answer is Yes, and 0 if answer is No).
- Risk-propensity is measured by asking *Would fear of failure prevent you from starting a business?* (coded 1 if not fearing failure, and 0 if fearing failure).
- Income is measured by asking each adult for household income, and then classifying the incomes in the sample in each country into thirds, poor third, middle third, and wealthy third in the country, and coding them 1, 2 and 3.
- Household is number of persons living in the respondent's household, transformed logarithmically to reduce skew.
- Phase of the business is measured in three categories, phase of intending to start, phase of trying to start, and operating phase. Dummy variables are used in regression analyses.

## 4 Results

This section describes the sample, then describes the networks, and then tests the hypotheses.

### 4.1 Description of the Sample

The means, standard deviations and correlations are shown in Table 1.

The correlation between being in Iran and being in a host-society is near  $-1$ , of course. Regression modeling considers those in the host-societies as a reference-group, and then uses two dummies as independent variables, namely the dummy for being in Iran and the dummy for being in the diaspora. The correlations among independent variables are all weak (between  $-0.20$  and  $0.20$ ), indicating that there will not be any problem of multicollinearity in the regressions.

**Table 1** Means, standard deviations, and correlations (N = 8263 entrepreneurs)

	Mean	Standard deviation	Private sphere network	Public sphere network	Gender woman	Iran	Diaspora
Private sphere network	2.13	1.34					
Public sphere network	3.00	3.43	0.25***				
Gender woman	0.31	0.46	-0.04**	-0.04**			
Iran	0.16	0.37	0.05***	-0.13***	0.00		
Diaspora	0.01	0.08	-0.05***	0.00	-0.01	-0.04**	
Host-society	0.83	0.37	-0.03	0.13***	0.00	-0.97***	-0.19***
Age	36.6 year	12.4 year	-0.18***	0.06***	-0.02*	-0.15***	0.00
Education	10.7 year	5.2 year	-0.13***	0.19***	0.06***	0.07***	0.03*
Competence	0.66	0.30	0.03*	0.08***	-0.07***	-0.10***	-0.01
Income	2.17	0.77	-0.01	0.11***	-0.06***	-0.20***	-0.03**
Household	1.49	0.63	0.19***	-0.09***	-0.06***	-0.08***	-0.06***
Phase intending	0.44	0.50	0.08***	-0.11***	0.13***	0.03**	0.02
Phase starting	0.21	0.41	0.03**	0.10***	-0.06***	-0.09***	0.00
Phase operating	0.35	0.48	-0.11***	0.03*	-0.08***	0.04**	-0.02*

\* $p < 0.05$ , \*\* $p < 0.005$ , \*\*\* $p < 0.0005$

## 4.2 Networks

Entrepreneurs’ networking in the private and public spheres was measured by the number of advisors drawn from each sphere, as described above. For each gender in each group the average size of each network is listed in Table 2.

Networking in the private sphere is especially extensive for women in Iran, and especially sparse in the Iranian diaspora. Networking in the public sphere is especially extensive for men in the diaspora and in host societies, and especially sparse in Iran.

These averages should not be interpreted causally, or as tests of the hypotheses, because the averages ignore other conditions. Other conditions should be controlled for, as in the next analyses.

## 4.3 Networks Affected by Gender and Culture: Main Effects

To test the hypotheses about effects on networking we use linear regression, Table 3, showing metric regression coefficients. The entrepreneurs in host-societies

**Table 2** Networks in private and public spheres, by community and gender

	Iran		Diaspora		Host-society	
	Women	Men	Women	Men	Women	Men
Network in private sphere	2.49	2.17	1.00	1.35	1.98	2.17
Network in public sphere	2.11	1.93	2.13	3.57	2.95	3.31
N entrepreneurs	414	916	15	42	2134	4742

**Table 3** Networks in private and public spheres, affected by gender and community

	Private sphere network		Public sphere network	
	Metric coefficients	Standardized coefficients	Metric coefficients	Standardized coefficients
Gender female	-0.03	-0.01	-0.28**	-0.04**
Iran	0.14**	0.04**	-1.17***	-0.13***
Diaspora	-0.69***	-0.04***	-0.15	-0.003
Age	-0.02**	-0.14**	0.01*	0.03*
Education	-0.02***	-0.10***	0.12***	0.17***
Competence	0.21***	0.05***	0.38**	0.03**
Income	0.02	0.01	0.21***	0.05***
Household	0.27***	0.12***	-0.28***	-0.05***
Phase intending	-0.07	-0.03	-0.52***	-0.08***
Phase operating	-0.22***	-0.08***	-0.37**	-0.05***
Intercept	2.52***		1.88***	

Linear regressions. N = 7233 entrepreneurs

\* $p < 0.05$  \*\* $p < 0.005$ , \*\*\* $p < 0.0005$

are the reference, against which we compare entrepreneurs in Iran and also compare entrepreneurs in the diaspora.

Hypothesis 1 is that gender affects networking in the private sphere, in that women network more than men in the private sphere. The effect of gender on private sphere networking is not significant. Thus the study provides no support for Hypothesis 1.

Hypothesis 2 is that gender affects networking in the public sphere, in that women network less than men in the public sphere. The effect of being woman on public sphere networking is negative. Thus the evidence supports Hypothesis 2.

Hypothesis 3 is that entrepreneurs in Iran are networking especially much in the private sphere, more than entrepreneurs in the host-societies. The effect upon private sphere networking from being in Iran is positive, supporting Hypothesis 3.

Hypothesis 4 is that entrepreneurs in the Iranian diaspora are also networking especially much in the private sphere. The effect upon private sphere networking from being in the Iranian diaspora is negative, the opposite of the hypothesized effect. This surprising finding calls for rethinking life in the diaspora. An interpretation is that the entrepreneurs in the diaspora have very little family around them, so that they hardly get advice from the private sphere.

Hypothesis 5 is that entrepreneurs in Iran network especially sparsely in the public sphere. The effect upon public sphere networking from being in Iran is negative, supporting Hypothesis 5.

Hypothesis 6 is that entrepreneurs in the Iranian diaspora are networking especially sparsely in the public sphere. The effect upon public sphere networking from being in the diaspora is not significant. Thus the study provides no support for Hypothesis 6.

#### ***4.4 Networks Affected by Gender and Culture: Interaction Effects***

The further hypotheses about culture moderating effects of gender upon networking are tested by including interaction terms in the regressions, Table 4.

Hypothesis 7 is that culture moderates the effect of gender upon private sphere networking, in that women in Iran network especially much in the private sphere. This effect is positive, supporting Hypothesis 7.

Hypothesis 8 is that culture moderates the effect of gender upon private sphere networking, in that women also in the diaspora network especially much in the private sphere. This effect is not significant. Thus the study lends no support for Hypothesis 8.

Hypothesis 9 is that culture moderates the effect of gender upon public sphere networking, in that women in Iran network especially sparsely in the public sphere. This effect is positive, the opposite of the hypothesized effect. This calls for rethinking women entrepreneurs in Iran. An interpretation is that the women

**Table 4** Networks in private and public spheres, affected by combination of gender and culture

	Private sphere network		Public sphere network	
	Metric coefficients	Standardized coefficients	Metric coefficients	Standardized coefficients
Gender female	-0.10 <sup>a</sup>	-0.03 <sup>a</sup>	-0.38 <sup>a</sup>	-0.05 <sup>a</sup>
Iran	0.02 <sup>a</sup>	0.01 <sup>a</sup>	-1.34 <sup>a</sup>	-0.15 <sup>a</sup>
Diaspora	-0.67 <sup>a</sup>	-0.04 <sup>a</sup>	-0.01 <sup>a</sup>	-0.0003 <sup>a</sup>
Gender* Iran	0.37***	0.06***	0.53*	0.04*
Gender* diaspora	-0.13	-0.004	-0.54	-0.006
Age	-0.01**	-0.04**	0.01*	0.03*
Education	-0.02***	-0.10***	0.12***	0.17***
Competence	0.20***	0.04***	0.37*	0.03*
Income	0.01	0.01	0.20***	0.04***
Household	0.27***	0.12***	-0.29***	-0.05***
Phase intending	-0.07	-0.03	-0.53***	-0.08***
Phase operating	-0.22***	-0.08***	-0.37**	-0.05**
Intercept	2.55***		1.93***	

Linear regressions. N = 7233 entrepreneurs

<sup>a</sup>Significance not tested (main effect was tested in previous table)

\* $p < 0.05$ , \*\* $p < 0.005$ , \*\*\* $p < 0.0005$

entrepreneurs in Iran have passed through a selection process which is more selective than the selection among men, so that only very exceptional women have passed, namely women who network extensively in the public sphere, and thereby create a social capital that enable them to succeed in business.

Hypothesis 10 is that culture moderates the effect of gender upon public sphere networking, in that women in the diaspora network especially sparsely in the public sphere. This effect is not significant. Thus the study lends no support for Hypothesis 10.

In short, the analyses of direct effects and interaction effects supported four of the ten hypotheses. Two effects seemed to be in the opposite direction, and called for post hoc interpretations. Four effects were estimated as insignificant.

## 5 Conclusions

This conclusion summarizes findings in the study, pinpoints its contributions, considers its limitations, and suggests further research.

### 5.1 Summary of Findings

The entrepreneurial endeavor in the diaspora was conceptualized as a dual embeddedness, in home-society and in host-society. The networking of entrepreneurs in the diaspora was expected to be a blend of ways of networking in home-society and ways of networking in the host-society. To examine this, a distinction was made between networking in the private sphere and networking in the public sphere.

Gender was found to affect networking, in that women are networking less than men in the public sphere. This finding accords well with the result from a global study (Schøtt and Cheraghi 2015).

Entrepreneurs in Iran are networking especially much in the private sphere and especially sparsely in the public sphere. This finding accords well with the result from global studies of cultural effects (Schøtt and Cheraghi 2015).

Entrepreneurs in the Iranian diaspora are networking especially sparsely in the private sphere. This finding was contrary to expectation. A post hoc interpretation is that entrepreneurs in the diaspora hardly have any family to get advice from.

Women in Iran network especially much in the private sphere. This finding accords well with a global study of effects of gender combined with culture (Schøtt and Cheraghi 2015).

Women in Iran are also networking especially much in the public sphere. This finding is contrary to expectation. An interpretation is that women are highly selected in Iran, and that the process selects women with much social capital in form of a network in the public sphere, which is found to be advantageous (Ashourizadeh et al. 2015b; Cheraghi and Yaghmaei 2017; Schøtt and Cheraghi 2015; Schøtt and Sedaghat 2014).

The significant effects are shown in Fig. 2. A positive effect is symbolized by a solid arrow, and a negative effect is represented as a dotted arrow. The magnitude of an effect, as estimated by the standardized regression coefficient, is shown by the thickness of the arrow.

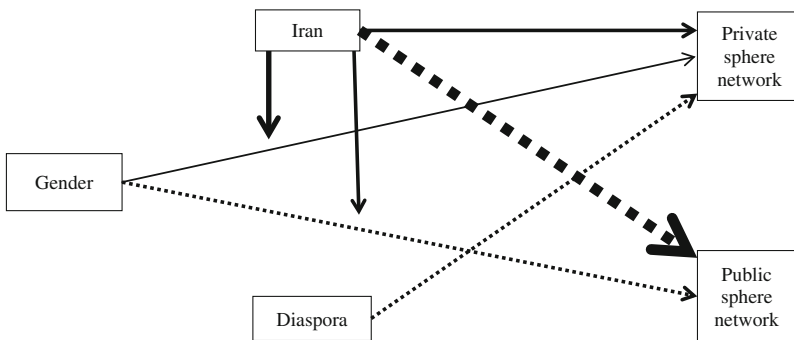


Fig. 2 Estimated effects



## 5.2 *Contributions*

The study makes three specific contributions. First, the study contributes to conceptualization of migrant entrepreneurship, specifically by conceptualizing migrant entrepreneurship as a dual embeddedness in home-society and host-society, a conceptualization that enabled specification and testing of hypotheses about migrant entrepreneurship.

Second, the study contributes to understanding social capital in entrepreneurship, specifically by distinguishing between networking in the private sphere and networking in the public sphere, a distinction that enabled specification and testing of hypotheses about gendering and influence of dual embeddedness.

Third, the study contributes to understanding the distinctiveness of entrepreneurship in Iran and in the Iranian diaspora.

## 5.3 *Limitations*

The focus on gendering in the Iranian diaspora is limited by the small samples of only 15 women and 42 men entrepreneurs in the diaspora. This entailed low statistical power and few findings concerning the diaspora.

## 5.4 *Further Research*

This was a case study focusing on the Iranian diaspora, with its dual embeddedness of gender roles and networking.

One direction of further research is to maintain the focus on Iran and its diaspora and to examine consequences of migration for the adults' competencies and entrepreneurial intentions, as in the article by Rezaei (2017), for the entrepreneurs' competencies affecting performance, as in the article by Ashourizadeh (2017), and for the entrepreneurs' networks affecting performance, as in the article by Cheraghi (2017). Research may broaden the scope from a single country to a region, here the Middle East and North Africa, where a common pressing social issue is inclusion, notably of women, youth and unemployed, into entrepreneurship (Ismail et al. 2017).

Another direction is to investigate migration globally, in the context of institutions and cultures around the world, as currently pursued in the doctoral research by Ashourizadeh. Yet another direction is to examine gender roles globally, in the context of institutions and cultures around the world, as currently pursued in the doctoral research by Cheraghi. Yet another direction is to examine networking globally, in the context of institutions and cultures around the world, as pursued in research by the Schött guys (Hovne et al. 2014).

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## References

- Ashourizadeh, S. (2017). Iranian entrepreneurs at home and in diaspora: Entrepreneurial competencies, exporting, innovation and growth-expectations. In S. Rezaei, L.-P. Dana, & V. Ramadani (Eds.), *Iranian entrepreneurship: Deciphering the entrepreneurial eco-system in Iran and in the Iranian diaspora*. Springer Publishers.
- Ashourizadeh, S., Rezaei, S., Schött, T., & Jensen, K. W. (2015a). People's human and social capital benefiting careers in entrepreneurship: Adults in China and in the Chinese diaspora. *International Journal of Business and Globalisation*, 16(3), 378–400.
- Ashourizadeh, S., Rezaei, S., Schött, T., & Vang, J. (2014). Entrepreneurs' human and social capital: Direct and reinforcing benefits for their exporting. *International Journal of Entrepreneurship and Small Business*, 21(2), 246–267.
- Ashourizadeh, S., & Schött, T. (2013). Entrepreneurs' gender, age and education affecting their networks in private and public spheres: Denmark. *Middle East and North Africa, International Journal of Business and Globalisation*, 11(4), 380–398.
- Ashourizadeh, S., Schött, T., Şengüler, E. P., & Wang, Y. (2015b). Exporting by migrants and indigenous entrepreneurs: Contingent on gender and education. *International Journal of Business and Globalisation*, 16(3), 264–283.
- Cheraghi, M., & Schött, T. (2014). Size, composition and diversity of the network around an entrepreneur: Shaped by culture and shaping embeddedness. F. Can, F. Polat, & T. Özyer (Eds.), *State of the art applications of social network analysis* (pp. 339–358). Springer, Heidelberg. doi:10.1007/978-3-319-05912-9\_16
- Cheraghi, M., & Schött, T. (2015). Conceived globals: Entrepreneurs' transnational networking, across phases and embedded in culture. *International Journal of Business and Globalisation*, 16(3), 209–227.
- Cheraghi, M., Setti, Z., & Schött, T. (2014). Growth-expectations among women entrepreneurs: Embedded in networks and culture in Algeria, Morocco, Tunisia and in Belgium and France. *International Journal of Entrepreneurship and Small Business*, 23(1/2), 191–212. doi:10.1504/IJESB.2014.065308
- Cheraghi, M., & Yaghmaei, E. (2017). Networks around Iranian entrepreneurs at home and in diaspora: Effects on performance. In S. Rezaei, L.-P. Dana, & V. Ramadani (Eds.), *Iranian entrepreneurship: Deciphering the entrepreneurial eco-system in Iran and in the Iranian diaspora*. Springer Publishers.
- Global Entrepreneurship Research Association. (2016). [www.gemconsortium.org](http://www.gemconsortium.org). Accessed February 1, 2016.
- Hamilton, R., Dana, L.-P., & Benfell, C. (2008). Changing cultures: An international study of migrant entrepreneurs. *Journal of Enterprising Culture*, 16(1), 89–105.
- Hovne, A. S., Hovne, B. S., & Schött, T. (2014). Entrepreneurs' innovation benefitting from their education and training and from national policy and culture: A global study. *International Journal of Entrepreneurship and Small Business*, 23(1/2), 127–144. doi:10.1504/IJESB.2014.065312
- Inglehart, R. (Ed.). (2003). *Islam, gender, culture, and democracy*. Willowdale: On De Sitter Publishers.

- Inglehart, R., & Welzel, C. (2005). *Modernization, cultural change, and democracy*. Cambridge: Cambridge University Press.
- Ismail, A., Tolba, A., Ghalwash, S., Alkhatib, A., Karadeniz, E. E., Ouazzani, K. E., Boutaleb, F., Belkacem, L., & Schött, T. (2017). Inclusion in entrepreneurship, especially of women, youth and unemployed: Status and an agenda for research in Middle East and North Africa. In N. Faghih (Ed.), *Entrepreneurship in the Middle East and North Africa*. (accepted).
- Jensen, K. W., Rezaei, S., Schött, T., Ashourizadeh, S., & Li, J. (2015). Chinese entrepreneurs' human and social capital benefiting innovation: In China and in the Chinese diaspora. *International Journal of Business and Globalisation*, 16(3), 350–377.
- Jensen, K. W., & Schött, T. (2015). Start-up firms' networks for innovation and export: Facilitated and constrained by entrepreneurs' networking in private and public spheres. *Journal of Social Network Analysis and Mining*, 5, 1–17. doi:10.1007/s13278-015-0287-8 (Article 48).
- Kelley, D., Brush, C., Greene, P., Herrington, M., Ali, A., & Kew, P. (2015). GEM special report. *Women's entrepreneurship 2015*. GERA. [www.gemconsortium.org](http://www.gemconsortium.org). Accessed 16 September, 2016.
- Kloosterman, R., van der Leun, J., & Rath, J. (1999). Mixed embeddedness: (In)formal economic activities and immigrant businesses in the Netherlands. *International Journal of Urban and Regional Research*, 23(2), 252–266.
- McCabe, I. B., Harlaftis, G., & Minglou, I. P. (2005). *Diaspora entrepreneurial networks: Four centuries of history*. New York: Berg Publishers.
- Mobasher, M. (2004). Ethnic resources and ethnic economy: The case of Iranian entrepreneurs in Dallas. *Migration, globalization and ethnic relations: an interdisciplinary approach* (pp. 297–306).
- Mobasher, M. (2007). Iranian ethnic economy in United States. In L. P. Dana (Ed.), *Handbook of research on ethnic minority entrepreneurship: A Co-evolutionary view on resource management* (pp. 228–248). Edward Elgar Publishing.
- Mobasher, M. M. (2012). Iranians and Iranian Americans, 1940–Present. In E. R. Barkan (Ed.), *Immigrants in American history: Arrival, adaption, and integration*. ABC-CLIO LLC: Santa Barbara.
- Portes, A. (1995). *The economic sociology of immigration: Essays on networks, ethnicity, and entrepreneurship*. New York: Russell Sage Foundation.
- Rezaei, S., (2017) Entrepreneurial competencies benefiting entrepreneurial intention: Iranian adults at home and in the diaspora. In S. Rezaei, L.-P. Dana, & V. Ramadani (Eds.), *Iranian entrepreneurship: Deciphering the entrepreneurial eco-system in Iran and in the Iranian diaspora*. Springer Publishers.
- Salaff, J., Greve, A., & Wong, S. L. (2006). Business social networks and immigrant entrepreneur from China. In E. Fong & L. Chiu (Eds.), *Chinese ethnic economy: Global and local perspective* (pp. 2–99). London: Routledge.
- Sarfaraz, L. (2017). *Women entrepreneurship in Iran*. Heidelberg: Springer International Publishers.
- Schött, T. (2014). Components of the network around an actor. In R. Alhajj & J. Rokne (Eds.), *Encyclopedia of social network analysis and mining*, (Vol. 1, pp. 241–250). New York: Springer Science and Business Media.
- Schött, T. (2016). Entrepreneurs' satisfaction with job and life in the sub-Saharan African diaspora: Dual embeddedness in home-society and host-society. *FUTA Journal of Management and Technology*, 1(1), 75–83.
- Schött, T. (2017). Immigrant and indigenous youth in Europe: Entrepreneurial intention building on human, financial and social capital. *International Journal of Entrepreneurship and Small Business*, 30(3), 374–394.
- Schött, T., & Cheraghi, M. (2015). Gendering pursuits of innovation: Embeddedness in networks and culture. *International Journal of Entrepreneurship and Small Business*, 24(1), 83–116.
- Schött, T., Cheraghi, M., Rezaei, S., & Vang, J. (2014). Innovation embedded in entrepreneurs' networks in private and public spheres: A global study focusing on China and Denmark.

- International Journal of Entrepreneurship and Small Business*, 23(1/2), 145–167. doi:[10.1504/IJESB.2014.065302](https://doi.org/10.1504/IJESB.2014.065302)
- Schøtt, T., & Sedaghat, M. (2014). Innovation embedded in entrepreneurs' networks and national educational systems: A global study. *Small Business Economics*, 43(2), 463–476. doi:[10.1007/s11187-014-9546-8](https://doi.org/10.1007/s11187-014-9546-8)
- Vorderwülbecke, A. (2013). Entrepreneurship and migration. In S. R. Xavier, D. Kelley, J. Kew, M. Herrington, & A. Vorderwülbecke (Eds.), *Global entrepreneurship monitor 2012 global report*. Babson Park, MA, US: Babson College. [www.gemconsortium.org](http://www.gemconsortium.org). Accessed 1 February, 2016.
- World Economic Forum. (2014). *Global gender gap report*. <http://reports.weforum.org/global-gender-gap-report-2014/part-1/the-global-gender-gap-index-results-in-2014/>. Accessed 1 February, 2016.

## Author Biography

**Thomas Schøtt** joined the University of Southern Denmark to become a Professor of Entrepreneurship. He has directed the Danish research program of Global Entrepreneurship Monitor. He teaches and gives workshops around the world on entrepreneurship, organizations, methodology and networks and has published numerous monographs, recently *Future Potential: A GEM Perspective on Youth Entrepreneurship* (2015), *GEM Report on Social Entrepreneurship* (2016), and *GEM Report on Senior Entrepreneurship* (2017), and articles, recently in *International Journal of Entrepreneurship and Small Business* (2013, 2014, 2015), *International Journal of Business and Globalisation* (2013, 2015), *Journal of Chinese Economics and Business Studies* (2014), *Journal of Business and Entrepreneurship* (2014), *Small Business Economics* (2014), *International Journal of Gender and Entrepreneurship* (2015), and *Research Policy* (2016). Thomas Schøtt is as well an Adjunct Professor at the Faculty of Karafarini at the University of Tehran.

# Iranian Entrepreneurs at Home and in Diaspora: Entrepreneurial Competencies, Exporting, Innovation and Growth-Expectations

Shayegheh Ashourizadeh

**Abstract** Entrepreneurs use their competencies to discover and exploit opportunities for doing business. Both entrepreneurial competencies and performance expectedly depend on social circumstances, and specifically differ between natives and emigrants. Here the question is, how do entrepreneurs in Iran and in the Iranian diaspora differ in their competencies and performance? A representative survey of people in Iran and around the world identified entrepreneurs 1639 natives in Iran and Iranians in the diaspora, who were intending to start, starting or operating a business. Statistical analysis shows that entrepreneurial competencies tend to be higher in the diaspora than in Iran, especially alertness to new business opportunities. Partly because of this difference in competencies, performance is higher in the diaspora than in Iran, specifically in terms of innovation, exporting and expectations for growth of the business. Lifting sanctions against Iran, though, will expectedly enhance performance in Iran, and also enhance the Iranian diaspora's exports to Iran.

## 1 Introduction

The increasing number of emigrant population in Europe and United States of America in late 20th century has reformed the immigrant enterprise as an important subject in many national and international agendas (Aldrich and Waldinger 1990; Naudé et al. 2015). In 2013, OECD report has ratified that the level of immigration is rising and it has returned to pre-crisis level. The total foreign-born population in OECD countries was about 117 million in 2013. In addition, global report from UN shows that there were 232 million international emigrants in 2013. Between 1990 and 2013, the number of international migrants worldwide rose by over 77 million or by 50%. Much of this growth occurred between 2000 and 2010. During this period, some 4.6 million migrants were added annually.

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Immigrants are human resources which have potentiality for doing entrepreneurship; entrepreneurship which, in turn, enhances the scale of economy. Therefore, many scholars try to study the effects of immigrants on economy and society and how they can be beneficial in recipient countries (Aldrich and Waldinger 1990; Light 1972; Min and Bozorgmehr 2000; Mobasher 2004; Portes 1987, 1995; Waldinger et al. 1990). For instance, Light (1972) has explored the entrepreneurial activity among Chinese, Japanese and African-American immigrants in United States between 1880 and 1940. Aldrich and Waldinger (1990) claimed that the success of immigrants' business depends on a complex interaction between opportunity structure and resources that lead to immigrants' strategies for enterprising in the host country (Volery 2007). Portes (1987) has also studied the entrepreneurial experiences of Cuban refugees in Miami, Florida and how they had launched retail businesses within their co-ethnic community. Moreover, Mobasher (2004) has explored the ethnic resources among Iranian entrepreneurs for doing business in Dallas, Texas. These research studies have made a significant contribution in the field of immigrant entrepreneurship (Light 1984; Min and Bozorgmehr 2000; Mobasher 2004, 2007). However, most of the research studies were basically case studies and mainly located in United States of America. In these case studies, the primary focus is a particular immigrant and minority group which constrains the generalizability of results and expansion of immigration theories (Min and Bozorgmehr 2000). Specifically, the case studies are only in the United States and this limits our understanding about immigrants in other countries such as European ones which have been become a destination for millions of immigrants and refugees.

But the aim in this study is to examine the entrepreneurial qualities and outcomes not only among the Iranian immigrants in the United States but also all over the world and to compare them with the Iranians inside Iran. In general, we try to investigate the impact of the place of residence (as macro institution) on entrepreneurs' competencies and performance. Performance is considered here as an entrepreneur's export, innovation and expectation for growth, entrepreneurial competencies are including self-efficacy, opportunity alertness, risk-willingness and role-modeling. These considerations lead to our research questions:

*How are entrepreneurs in Iran and in the diaspora using entrepreneurial competencies for their performance?*

The contribution of this study is mainly on the impact of institutions on entrepreneurs' performance in form of innovation, export and growth expectation. Additionally, it gives a better understanding about the theories of emigrant entrepreneurship and global representativeness of the sample which is uniquely worthwhile, enabling findings to be statistically generalized from the sample to the immigrant entrepreneurs and societies around the world (Global Entrepreneurship Monitor).

The following sections first review the theoretical background and specify hypotheses. The data are then described, followed by a report of the findings, and we conclude with considerations for policy and management and suggestions for future research.

## 2 Theoretical Background and Hypotheses

This section reviews the history of Iranians in diaspora and then the characteristics of Iranian emigrants in entrepreneurship and their performance will be described. Following the discussion, theories on emigration and ethnic entrepreneurship will be used to hypothesize the entrepreneurial competencies and performance among Iranians in Iran and diaspora.

### 2.1 *Iranian Emigrants: A Vast Diaspora Abroad*

Iranians did not come to diaspora abruptly; rather, the political, economic or social push and pull factors have motivated them to leave their home country. Factors such as better opportunity for education, work and freedom of speech caused many talented and affluent Iranian leave the country (Hakimzadeh 2006; Mobasher 2007).

Emigration can be divided into three major waves since 1950. It approximately corresponds to socioeconomic status and motivations for migration, including both forced and voluntary departures (Hakimzadeh 2006).

The first important wave of immigration began in 1950 and lasted until the 1979 Islamic revolution. Mainly, it was triggered by Iran's slow economic recovery and resumption of oil production after World War II. Revenue from oil and abrupt change by Kingdom of Iran from traditionalism to modernism instigated middle- and upper-class families to send their children abroad for higher education as a means of ensuring socioeconomic security and political access upon return.

Just before the revolution, in the 1977–1978 academic year, about 100,000 Iranians were studying abroad, of whom 36,220 were enrolled in U.S. institutes of higher learning. The rest were mainly in the United Kingdom, West Germany, France, Austria, and Italy. The number was increasing in the next years in United States; in 1978–1979 around 45,340 and in 1979–1980 up to 51,310 Iranian students were studying in U.S. institutions (Hakimzadeh 2006).

A second significant wave of emigration was after the Islamic revolution. Many intellectual liberals and socialists left the country. This was continued by young men who fled military service and the Iran-Iraq War, followed by young women and families, escaping because of gender restrictions. Accordingly, the term “Brain Drain” was assigned to many of professionals, intellectuals and entrepreneurs who emigrated from Iran to find better opportunities in other countries specifically in United States (Idem).

The third wave of immigration came in the last decade, from roughly 1995 to 2016. Hakimzadeh (2006) reported that this wave was comprised of two very distinct groups—highly skilled individuals who left the Iranian universities and research institutions and it was continuation of a previous trend, and emigrants and economic refugees who were working-class labor and sometimes with lower education levels and less skills than previous emigrants.

## ***2.2 Iranian Emigrants: Highly Educated and Self-employed Minority in Diaspora***

As noted above there was no homogeneity among Iranian emigrants and therefore, they pursued different ways for economic adaptation (Mobasher 2015). The highly educated and skilled emigrants were absorbed in primary economy where they work legally and pay taxes (Idem) while the second group with lower level of education and skill was taken by more inferior who has hard job conditions and lower level of wages. But Mobasher (2015) explained that there is a distinctive group of Iranian emigrants who have capital and connections with their ethnic community and try to be self-employed.

Many studies, specifically in United States have revealed that Iranian emigrants proportionately have higher rate of self-employment (Light 1972; Min and Bozorgmehr 2000; Mobasher 2007, 2015). These studies also confirmed that Iranians roughly have higher level of educational attainment than other groups such as Korean immigrants in United States (Min and Bozorgmehr 2000; Mobasher 2007). Hence, they often occupied the managerial, professional and high status positions in the society. Additionally, Mobasher (2007), in his study on major characteristics of Iranian ethnic economy in United States, has found that Iranian immigrants have higher rate of economic activity particularly among women. It has been shown that one out of every five Iranians in labor force is self-employed and close to 50% of women population is active in labor market and 12% of them are entrepreneurs.

Although these studies have examined demographic characteristics of Iranians in diaspora and its relation to ethnic and class resources (Light 1972; Min and Bozorgmehr 2000), to our knowledge there is no study on the entrepreneurial competencies among Iranian immigrants and their performance. The aim of this study is to investigate the entrepreneurial competencies in the form of self-efficacy, opportunity-alertness, risk-willingness and role-modeling among Iranians in Iran and diaspora. In addition to that, the study will compare entrepreneurs' performance in the form of innovation, export and growth-expectation among Iranians in Iran and diaspora.

## ***2.3 Entrepreneurial Competencies Affected by Place of Residence***

Entrepreneurial competencies affect entrepreneurs' outcomes (Hovne et al. 2014; Jensen et al. 2014). Based on cultural capital theory (Masurel et al. 2004), people in homeland and diaspora have similar ways of life (McCabe et al. 2005; Vinogradov and Kolvereid 2007) and they bring a legacy of qualities and background from their home country to the host societies. For example, if gender matters in the home country, it will be important in abroad too and likewise, for education and other



qualities. If they have, for instance, high self-efficacy in terms of good judgment about their capabilities they will have it in host society as well. But Zukin (1990) explains that individuals will be adapted to their environment (Ács et al. 2014; Ács et al. 2008) either in terms of formal rules and regulations which are imposed from the government or in the form of cultural codes and norms that is enacted informally by the society. It means that Iranian immigrants' way of life may be similar to the major environment which they are hosted in and it will be different from Iranians' way of life in Iran. As an example, if the environment appreciates and supports the individuals to be self-employed, immigrants may also become self-employed. A study by Ashourizadeh et al. (2015) shows that place of residence has influence on Chinese entrepreneurial competencies in China and diaspora for starting a business (Jensen et al. 2014; Schøtt and Ashourizadeh 2014). Therefore, with similar theoretical idea that institutions have impact on entrepreneurial competencies, we hypothesize that:

*H1a: Entrepreneurial competency in form of self-efficacy is different for Iranian entrepreneurs in Iran and in diaspora.*

*H1b: Entrepreneurial competency in form of opportunity-awareness is different for Iranian entrepreneurs in Iran and in diaspora.*

*H1c: Entrepreneurial competency in form of risk-willingness is different for Iranian entrepreneurs in Iran and in diaspora.*

*H1d: Entrepreneurial competency in form of role-modeling is different for Iranian entrepreneurs in Iran and in diaspora.*

## **2.4 Entrepreneurial Performance Influenced by Place of Residence**

Institutional theories have become a crucial foundation for explaining entrepreneurial phenomena (Ács et al. 2014; Bruton et al. 2010), because issues such as culture, tradition and legal environment have notable influences on entrepreneurial performance. For example, if the environment supports innovative ideas, then the entrepreneurs will be more innovative (Ács et al. 2014). Innovation may be different among immigrants and native entrepreneurs in a society. Results of the various studies are conflicting; some proposed that immigrants are a source of innovation (Drori et al. 2009) while some other empirical studies claim that there is no significant difference among immigrants and native entrepreneurs (Jensen et al. 2015).

Similarly, the export may be increased by facilitating rules and regulations for entrepreneurs in the formal framework (Bauerschmidt et al. 1985). Though, the export performance may be different among immigrants and native people in a host society and results are debating. A study by Ashourizadeh et al. (2015) have shown that immigrants is first and second generation have higher rate of export than native

entrepreneurs in the host society. In contrast to this study, a study by Baklanov et al. (2014) found that immigrants in Denmark have no higher rate of export than native entrepreneurs. However, none of these studies have specified whether the immigrants' exporting behavior is different from their counterparts in homeland or not.

Another entrepreneurial performance is growth-expectation that is expectation for expanding the size of the company in future and an entrepreneur may expect to recruit more personnel to expand his/her business in the market. But this entrepreneurial decision is the result of sophisticated interaction of opportunity structures and resources (Aldrich and Waldinger 1990). They decide to develop their company because the dominant institutions provide a place for growth of the firms and support entrepreneurs for growing their company. Therefore, based on this theoretical idea that institutions have influence on entrepreneurs' performance, we hypothesize that:

*H2a: Entrepreneurs' performance in form of innovation is different for Iranian entrepreneurs in Iran and in diaspora.*

*H2b: Entrepreneurs' performance in form of export is different for Iranian entrepreneurs in Iran and in diaspora.*

*H2c: Entrepreneurs' performance in form of growth-expectation is different for Iranian entrepreneurs in Iran and in diaspora.*

### **3 Research Design and Data**

This study is to investigate the impact of place of residence on entrepreneurs' competencies which include self-efficacy, opportunity-awareness, risk-willingness and role-modeling and entrepreneurs' performance in form of innovation, export and expectation for growth. Data used in this research are collected by Global Entrepreneurship Research Association (GERA). It is the world's largest hierarchical study of entrepreneurship and annually conducts a survey of adults and entrepreneurs in participating countries (Global Entrepreneurship Monitor 2013).

The sample is comprised of 1639 intending, starting and operating entrepreneurs at age 18–64, surveyed in Iran and around the world in 2012 (1512 native-born in Iran, and 127 emigrants) and their place of residence has been measured as well.

#### **3.1 Measurements**

##### **3.1.1 Place of Residence**

GEM has measured the place of residence among Iranians in Iran and other countries including United States, Russia, Egypt, South Africa, Greece, Netherlands, Belgium, France, Spain, Hungary, Italy, Romania, Switzerland,

Austria, United Kingdom, Denmark, Sweden, Norway, Poland, Germany, Peru, Mexico, Argentina, Brazil, Chile, Colombia, Malaysia, Singapore, Thailand, Japan, South Korea, China, Turkey, India, Pakistan, Iran, Algeria, Tunisia, Ghana, Nigeria, Angola Barbados, Uganda, Zambia, Portugal, Ireland, Finland, Lithuania, Latvia, Estonia, Croatia, Slovenia, Bosnia and Herzegovina, Macedonia, Slovakia, Costa Rica, Panama, Ecuador, Uruguay, Trinidad & Tobago, Jamaica, Taiwan, West Bank & Gaza Strip Israel, Ethiopia, Namibia, Malawi, Botswana, El Salvador. Iranian entrepreneurs were asked about their place of birth and their parents' place of birth. Native-born Iranians are those who were born in Iran and both parents were born in Iran too and Iranians in diaspora are those who were born in Iran and living abroad or born abroad and a parent born in Iran.

### 3.1.2 Entrepreneurial Competencies

Entrepreneurial competencies are measured by four dimensions, that is, self-efficacy, opportunity-alertness, risk-propensity and role-modeling (Levie et al. 2014). They are covered by four questions as follow:

*Self-efficacy*: Do you have the knowledge, skill and experience required to start up a new business?

*Opportunity-alertness*: In the next six months, will there be a good opportunity for starting a business in the area where you live?

*Risk-propensity*: Would fear of failure prevent you from starting a business?

*Role-modeling*: Do you know some personally who started a business in the past two years?

### 3.1.3 Entrepreneurs' Performance

Performance is a broad concept that here refers to innovativeness, exporting and growth-expectation. We try to understand whether there is a difference in performance among Iranian entrepreneurs in Iran and diaspora.

An entrepreneur's innovativeness in the business denotes newness of the technology, competitiveness and newness to customers. These three aspects of innovativeness are measured by asking the three questions:

*Will all, some, or none of your potential customers consider this product or service new and unfamiliar?*

*Right now, are there many, few, or no other businesses offering the same products or services to your potential customers?*

*How long have the technologies or procedures required for this product or service been available?*

The three measures are positively correlated so they can be combined and averaged into an index. This index of innovation will be used for analyzing how entrepreneurial competencies shape performance in terms of innovativeness.

### 3.1.4 Export

An entrepreneur's performance in terms of exporting is measured by asking,

*What proportion of your customers will normally live outside your country? Is it more than 90%, more than 75%, more than 50%, more than 25%, more than 10%, or 10% or less?*

An entrepreneur's percentage of customers abroad can suitably be measured on a logarithmic scale and then standardized for analyses of how entrepreneurial competencies shape performance in terms of exporting.

### 3.1.5 Growth-Expectation

An entrepreneur's performance in terms of expectation for change in the enterprise is measured by asking about current size and about size expected in the future,

*Not counting the owners, how many people are currently working for this business?*

*Not counting owners, how many people will be working for this business five years from now?*

Size could be measured by this count, but is better measured by the logarithm of the count (plus one, the owner-manager; also because the logarithm is defined only for positive numbers, not 0).

The growth-expectation can then be measured by the difference,  $\text{Log}(1 + \text{future size}) - \text{Log}(1 + \text{current size})$ . Expectation is thus negative if a contraction is expected, 0 if no change is expected, and positive if expansion is expected. This measure of expectation, standardized, will be used for analyzing how entrepreneurial competencies affect performance in terms of growth-expectation.

### 3.1.6 Control Variables

For a better investigation of the causal effect, control variables were inserted as follow:

*Gender*: coded 0 for women and 1 for men.

*Age*: coded in years.

*Education*: coded in years.

*Proprietorship*: coded 0 if shared and 1 if sole.

*Owners*: including the respondent, log of owners.

*Firm age*: log of years plus 1.

*Firm size*: log of number of persons, including respondent.

*Firm phase*: coded as 1 for starting, otherwise 0.

*Reason*: categorical (opportunity, necessity, opportunity and necessity, better opportunity, other). For modeling this categorical variable is recoded into four

dummies, taking the first category ‘opportunity’ as the reference, to which the other reasons are compared.

### **3.2 *Methods of Analyses***

To understand (the) Iranians’ entrepreneurial competencies in Iran and diaspora, the cross tabulation technique has been applied and for examining the Iranian entrepreneurs’ performance in form of innovation, export and growth-expectation in Iran and diaspora, the compare means technique has been used. In addition, the linear regression modeling was utilized to investigate the significant effect of place of residence on Iranian entrepreneurs’ performance.

## **4 Results**

At the start of this section, a general picture about the sample’s proportion of gender (male and female), age (average age of entrepreneurs), education, innovation, export and growth-expectation in Iran and in diaspora will be given. Then, in inferential analyses the impact of place of residence on Iranian entrepreneurs’ innovation, export and expectation for growth will be showed.

### **4.1 *Describing the Sample***

In the sample of entrepreneurs in Iran, and likewise in the sample of entrepreneurs in the diaspora, about 70% are men. The mean age of the entrepreneurs in Iran is 33 years, and the mean age of the entrepreneurs in the diaspora is significantly higher, 37 years. The mean length of education of the entrepreneurs in Iran is 11 years, and the mean duration of education of the entrepreneurs in the diaspora is significantly higher, 13 years.

Table 1 shows the entrepreneurial competencies among Iranians in Iran and diaspora via cross tabulation test. Statistical analysis shows that opportunity-alertness is significantly different among Iranians in Iran and in diaspora, i.e. Iranian immigrants are more alert to recognize opportunities than Iranian entrepreneurs in Iran. So, the hypothesis H1b is supported. Other competencies such as self-efficacy, risk-willingness and role-modeling were the same among Iranians in Iran and diaspora and it was not significant difference among two groups. So, hypotheses H1a, H1c and H1d are not supported.

To explore the proportion of innovation, export and expectation for growth in Iran and diaspora, one-way Anova T-test technique has been used. Result in

**Table 1** Entrepreneurial competency of entrepreneurs in Iran and in diaspora

	Iran	Diaspora	Significance
Self-efficacy	72%	75%	
Opportunity-alertness	42%	57%	***
Risk-propensity	62%	60%	
Role-modeling	48%	54%	
Opportunity-driven	42%	49%	
N entrepreneurs	705–1501	63–127	

\*, \*\*, \*\*\*, denotes level of significance at 0.10, 0.05, 0.005 level when testing difference

**Table 2** Exporting, innovation, and growth-expectation of entrepreneurs in Iran and in diaspora

	Iran	Diaspora	Significance
Exporting	1.3%	18.7%	***
Innovation	1.10	1.78	***
Growth-expectation	0.56	0.94	**
N entrepreneurs	686–717	40–51	

\*, \*\*, \*\*\*, denotes level of significance at 0.10, 0.05, 0.005 level when testing difference

Table 2 reveals that Iranian entrepreneurs’ exporting in diaspora is considerably higher than Iranians’ exporting in Iran. Moreover, Iranians’ performance in form of innovation and expectation for growth is significantly higher in diaspora than in Iran. In other words, Iranians in diaspora are more innovative and they have higher expectation for expanding their business than Iranian entrepreneurs in Iran.

### 4.2 The Place of Residence Effect on Exporting, Innovation and Growth Expectation

To test the hypothesis about the impact of place of residence on entrepreneurs’ performance has been measured by linear regression test. It was linear regressions of exporting (logged), innovation and growth-expectation, with unstandardized coefficients.

Table 3 shows that the place of residence significantly affects entrepreneurs’ export, innovation and growth-expectation. It means that Iranian entrepreneurs in diaspora are more innovative than Iranian entrepreneurs in Iran. So the hypothesis H2a is supported.

In addition, the Iranians do exporting more in diaspora than in Iran and this supports our hypothesis H2b.

Furthermore, Iranian entrepreneurs in diaspora expect to expand their firm more than Iranian entrepreneurs in Iran. Hence, the hypothesis H2c is supported.

**Table 3** Exporting, innovation, and growth-expectation affected by residence in diaspora versus Iran

	Exporting	Innovation	Growth-expectation
Diaspora versus Iran	1.53***	0.66***	0.21**
Self-efficacy	-0.02	0.00	0.04
Opportunity-alertness	0.01	0.00	0.05
Risk-propensity	-0.01	0.00	0.08*
Role-modeling	0.02	-0.01	0.02
Opportunity-driven	0.01	0.08***	0.12***
Sole ownership	0.09	0.03	0.34***
Owners	0.14*	0.07**	0.35***
Phase starting	0.30***	0.05	1.19***
Firm age	0.04	-0.02*	-0.02
Firm size	0.12***	0.04***	-0.15***
Gender male	0.07	0.01	-0.08
Education	0.01*	0.00	0.00
Age	0.00	-0.002*	-0.004*
Constant	-0.29	1.04***	0.07
N entrepreneurs	693	697	666

\*, \*\*, \*\*\*, denotes level of significance at 0.10, 0.05, 0.005 level when testing difference

## 5 Conclusion and Discussion

This study has been done to get a better understanding about the entrepreneurial competencies and performance among Iranian entrepreneurs in Iran and diaspora. There are various studies on Iranian immigrants in United States and Iranian's characteristics and their ethnic and class resources have been examined (Min and Bozorgmehr 2000; Mobasher 2007). These studies have contributed on theorizing the ethnic entrepreneurship but to our knowledge there is no study which compares Iranians' entrepreneurial competencies and performance in Iran and diaspora. Findings have revealed that Iranian immigrants in diaspora have higher alertness to recognizing the opportunities than Iranian entrepreneurs in Iran. However, other competencies namely self-efficacy, risk-willingness and role-modeling were not different among these two groups. But interestingly, the entrepreneurs' performance is remarkably different among Iranians in Iran and in diaspora. Statistical analyses have shown that Iranian entrepreneurs in diaspora are more innovative and they have higher rate of export than Iranian entrepreneurs in Iran. In addition, Iranian entrepreneurs in diaspora have higher expectation to expand their business than the Iranian entrepreneurs in Iran. These results confirm that institutions have effect on entrepreneurs' performance (Ács et al. 2014; Bruton et al. 2010) specifically immigrant entrepreneurs and less on their qualities.

Seemingly, one reason can be the isolation of Iran from much of the outside world since the Islamic Revolution of 1978–1979 and particularly after the sanction

imposed by United States of America and European Union. But the Islamic Republic of Iran can capture the world's attention specifically after the historical agreement with 5 + 1 countries about the nuclear deal. Since the interviews with Iranian entrepreneurs in United States show that they are eagerly waiting for trading with Iran and expanding their business (Hossaini 2015).

This study mainly confirms that the institutional context has effect on entrepreneurs' outcomes. In addition, it gives a better understanding about the theories of immigrant entrepreneurship and their performance in form of innovation, export and growth-expectation. Moreover, the findings can be statistically generalized from the sample to the immigrant entrepreneurs and societies around the world.

This study can be applicable for policy makers to formulate specific rules and regulation in the market which facilitates enterprising and supports entrepreneurs to innovate and export specifically immigrant entrepreneurs who have high potentiality for doing entrepreneurship like Iranian entrepreneurs.

For scholars and researchers in immigration field, it is suggested to examine different aspects of institutions such as culture and governmental rules more closely in original and destination countries and how does it affect immigrant entrepreneurs' performance. This study was limited to one year but the results can be more effective if it examined in a specific period of time or a decade.

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## References

- Ács, Z. J., Autio, E., & Szerb, L. (2014). National systems of entrepreneurship: Measurement issues and policy implications. *Research Policy*, 43(3), 476–494.
- Acs, Z. J., Desai, S., & Hessels, J. (2008). Entrepreneurship, economic development and institutions. *Small Business Economics*, 31(3), 219–234.
- Aldrich, H., & Waldinger, R. (1990). Ethnicity and entrepreneurship. *Annual Review of Sociology*, 16, 111–135.
- Ashourizadeh, S., Rezaei, S., Schött, T., & Jensen, K. W. (2015). People's human and social capital benefiting careers in entrepreneurship: Adults in China and in the Chinese Diaspora. *International Journal of Business and Globalisation*, In press.
- Ashourizadeh, S., Schött, T., Şengüler, E. P., & Wang, Y. (2015). Exporting by migrants and indigenous entrepreneurs: Contingent on gender and education. *International Journal of Business and Globalisation*, In press.
- Baklanov, N., Rezaei, S., Vang, J., & Dana, L.-P. (2014). Migrant entrepreneurship, economic activity and export performance: Mapping the Danish trends. *International Journal of Entrepreneurship and Small Business*, 23(1–2), 63–93.
- Bauerschmidt, A., Sullivan, D., & Gillespie, K. (1985). Common factors underlying barriers to export: Studies in the US paper industry. *Journal of International Business Studies*, 16(3), 111–123.



- Bruton, G. D., Ahlstrom, D., & Li, H. L. (2010). Institutional theory and entrepreneurship: Where are we now and where do we need to move in the future? *Entrepreneurship Theory and Practice*, 34(3), 421–440.
- Drori, I., Honig, B., & Wright, M. (2009). Transnational entrepreneurship: An emergent field of study. *Entrepreneurship Theory and Practice*, 33(5), 1001–1022.
- Global Entrepreneurship Monitor. (2013). Retrieved from <http://www.gemconsortium.org>
- Hakimzadeh, S. (2006). *Iran: A vast diaspora abroad and millions of refugees at home*. Retrieved from <http://www.migrationpolicy.org/article/iran-vast-diaspora-abroad-and-millions-refugees-home>
- Hossaini, S. (2015). *Iranian-American entrepreneurs hope to do more business after nuclear deal*. Retrieved from California Report: <http://ww2.kqed.org/news/2015/12/22/iranian-american-entrepreneurs-want-you-to-taste-the-fruit-of-the-recent-nuclear-deal>
- Hovne, A. S., Hovne, B. S., & Schøtt, T. (2014). Entrepreneurs' innovation benefitting from their education and training and from national policy and culture: A global study. *International Journal of Entrepreneurship and Small Business*, 23(1–2), 127–144.
- Jensen, K. W., Rezaei, S., Schøtt, T., Ashourizadeh, S., & Li, J. (2015). Chinese entrepreneurs' human and social capital benefitting innovation: In China and in the Chinese Diaspora. *International Journal of Business and Globalisation*, In press.
- Jensen, K. W., Rezaei, S., & Wherry, F. F. (2014). Cognitive effects on entrepreneurial intentions: A comparison of Chinese émigrés and their descendants with non-émigré Chinese. *International Journal of Entrepreneurship and Small Business*, 23(1), 252–277.
- Levie, J., Autio, E., Acs, Z., & Hart, M. (2014). Global entrepreneurship and institutions: An introduction. *Small Business Economics*, 42(3), 437–444.
- Light, I. (1984). Immigrant and ethnic enterprise in North America. *Ethnic and Racial Studies*, 7(2), 195–216.
- Light, I. H. (1972). *Ethnic enterprise in America: Business and welfare among Chinese, Japanese, and Blacks*. United States of America: Univ of California Press.
- Masurel, E., Nijkamp, P., & Vindigni, G. (2004). Breeding places for ethnic entrepreneurs: A comparative marketing approach. *Entrepreneurship & Regional Development*, 16(1), 77–86.
- McCabe, I. B., Harlaftis, G., & Minglou, I. P. (2005). *Diaspora entrepreneurial networks four centuries of history*. New York.
- Min, P. G., & Bozorgmehr, M. (2000). Immigrant entrepreneurship and business patterns: A comparison of Koreans and Iranians in Los Angeles. *International Migration Review*, 707–738.
- Mobasher, M. (2004). Ethnic resources and ethnic economy: The case of Iranian entrepreneurs in Dallas. *Migration, Globalization and Ethnic Relations: An Interdisciplinary Approach* (pp. 297–306).
- Mobasher, M. (2007). Iranian Ethnic Economy in United States. In L. P. Dana (Ed.), *Handbook of research on ethnic minority entrepreneurship: A co-evolutionary view on resource management* (pp. 228–248). USA: Edward Elgar Publishing.
- Mobasher, M. (2015). Entrepreneurship. In J. Ciment & J. Radzilowski (Eds.), *American immigration: An encyclopedia of political, social, and cultural change*. USA: Routledge.
- Naudé, W., Siegel, M., & Marchand, K. (2015). *Migration, entrepreneurship and development: A critical review*. (IZA DP No. 9284).
- Portes, A. (1987). The social origins of the Cuban enclave economy of Miami. *Sociological perspectives*, 30(4), 340–372.
- Portes, A. (1995). *The economic sociology of immigration: Essays on networks, ethnicity, and entrepreneurship*. New York, USA: Russell Sage Foundation.
- Schøtt, T., & Ashourizadeh, S. (2014). Pursuing a career as entrepreneur: Adults in China and in the Chinese Diaspora. Academy of Innovation and Entrepreneurship 2014.
- Vinogradov, E., & Kolvereid, L. (2007). Cultural background, human capital and self-employment rates among immigrants in Norway. *Entrepreneurship and Regional Development*, 19(4), 359–376.

- Volery, T. (2007). Ethnic entrepreneurship: A theoretical framework. *Handbook of Research on Ethnic Minority Entrepreneurship*, 1, 30–41.
- Waldinger, R., Ward, R., Aldrich, H. E., & Stanfield, J. H. (1990). Ethnic entrepreneurs: Immigrant business in industrial societies. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*.
- Zukin, S. (1990). *Structures of capital: The social organization of the economy*. CUP Archive.

## Author Biography

**Shayegheh Ashourizadeh** is a PhD candidate in entrepreneurship at University of Southern Denmark, upon finishing her Master at University of Tehran. She researches entrepreneurial processes of migrant entrepreneurs, notably how their human and social capital and culture in home-country and host-country affect their innovativeness, analyzing data from Global Entrepreneurship Monitor. She is presenting her works at international conferences, including RENT. Her recent articles are on 'Exporting by migrants and indigenous entrepreneurs: contingent on gender and education' (*International Journal of Business and Globalisation*), and 'Exporting embedded in entrepreneurs' transnational networks' (*International Journal of Business and Globalisation*). Her earlier works have published in *International Journal of Entrepreneurship and Small Business* (2014) and *International Journal of Business and Globalisation* (2013). She currently researches Chinese migrants, supported by the Sino-Danish Center for Education and Research.

# Networks Around Iranian Entrepreneurs at Home and in Diaspora: Effects on Performance

Maryam Cheraghi and Emad Yaghmaei

**Abstract** Entrepreneurs rely on different types of networks like public and private. One reason for this difference between networks is a difference between cultures. Moreover, networking in public and private spheres has different consequences for entrepreneurial outcomes. The purpose of this study is to analyze effects of Iranian entrepreneurs' network at home and in diaspora upon entrepreneurial outcomes. We used a sample of 1387 intending, starting and operating entrepreneurs, including 1330 native-born in Iran and 57 Iranians in the diaspora in age of 18–64, from Global Entrepreneurship Monitor. Based on the results, Iranian entrepreneurs in Iran receive advice mainly from their private sphere while Iranian entrepreneurs in diaspora use their public sphere. Being in diaspora affects entrepreneurs' innovativeness (use of new technology, newness of product for customers and newness of products in market) and exporting positively. Overall, Iranian entrepreneurs in diaspora have larger and more diverse networks, which affect their innovativeness, exporting and growth-expectation positively. The study contributes to the study of Iranian entrepreneurs' networking at home and in diaspora and the effects of public and private networking on their entrepreneurial outcomes.

## 1 Introduction

This article explores entrepreneurial performance of Iranian diaspora entrepreneurs and native-born Iranian entrepreneurs. While Iranian diaspora entrepreneurs are seeking to recognize opportunities in Iran and exploit such opportunities as “first movers,” Iranian entrepreneurs who live in Iran are creating job opportunities, stimulating innovation, contributing to economic growth, and influencing political

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and financial capital at the same time. Most cases Iranian diaspora entrepreneurs wait until a significant opportunity arises. Following the advantages and the challenges of Iranian market ecosystem as well as its political conditions, Iranian diaspora entrepreneurs have started to consider how they increase their limited success in doing businesses in the country of origin. This is standard way that entrepreneurs from any type deal with. However, rather than wait until the opportunity is there and the way has been paved to back to do businesses, it would be better to think about the effects that influence on the performance of both types of entrepreneurs. Hence, this article starts with the literature of diaspora entrepreneurs and entrepreneurs' networks. It set out to identify the effects that can be expected for a successful entrepreneur in Iran in the next years. These effects are then studied. On this basis, this work evaluates the different effects on the performance of Iranian entrepreneurs' networks at home and in diaspora and investigate likely consequences from them.

## 2 Networks in the Entrepreneurial Process

The networks in entrepreneurship play a significant role in the entrepreneurial initiatives (Aldrich and Zimmer 1986). The effects of social networks on the entrepreneurs, in turn on entrepreneurial process have been already studied in the literature and its outputs have emphasized to a sufficient degree that social networks spur entrepreneurship at innovation processes (Aldrich 1989; Brüderl and Preisendörfer 1998). Such networks may provide necessary resources to the entrepreneurs and enable entrepreneurs to provide their expertise to the networks at the same time. Hence, network and entrepreneur success are tangled in straight relationship with business process, in which one can argue that more successful network you have more successful start-ups you can reach.

While entrepreneurial success depends on the network success, according to the resource dependency theory, network success depends on the level of the exchange of resources (Jenssen and Koenig 2002). This level at start-up companies, however, cannot be that high, as start-up companies need to apply all the required resources to get success and they do not have room for providing their own resources to the networks, who are looking for such contribution from start-up and entrepreneur (Elfring and Hulsink 2003). In essence, while entrepreneurs tend to secure all the required resources at a minimum cost, they also look forward to getting access and obtain the material or non-material resources at a minimum price. Entrepreneurs can benefit then from using to social networks to a large extent, as these networks are providing access to the material or non-material resources at a cheap price.

As stressed above the types of resources that social networks are providing are an important take. They provide different power, information, and knowledge rather other networks (Aldrich and Zimmer 1986), and typically classified differently in the literature. Motivation, information and material resources were mainly categorized in the prior studies, as the main types of resources (Kanter 1983). It is not

the purpose of this work to go into depth into social network provided resources types, but examine the effects of resources on the performance of network around entrepreneur, particularly Iranian networks.

From the literature one can identify that the contribution of networks by including mental and social support help entrepreneurs in mobilizing cognitive and emotional support, increasing entrepreneur self-confidence in decision-making, and subsequently promote entrepreneurial processes (Johannisson 1988; Jenssen and Koenig 2002). Thus, motivation can be named as one of main resources provided by social networks.

Entrepreneurs, venture capitalists, investors, and business leaders can get information about market, capital, human resources, customers, and regulations from social networks in the regular basis (Elfring and Hulsink 2003). Fiet (1996, p. 429) argues that “Networks can be used as a way of tapping into information channels or to obtain risk-reducing signals about a ventures opportunity”.

Findings from the literature claim that material resources such as funds and financial capital have strong impacts on the performance of any business, the success of a new venture, and entrepreneurial process (Marlow and Patton 2005). Hence, social networks, which provide the material resources such as financial capital on helping the stability of start-up business, are in the priority list for entrepreneurs. As stressed throughout the literature, social networks could provide three types of resources including motivation, information and material resources at different levels. In essence, different levels of ties between entrepreneurs and social networks induce different levels of providing resources, subsequently having different levels of business success. Social networks at different levels provide different levels of resources, for instance weak social networks typically enhance entrepreneur’ knowledge by providing information, whereas strong social networks offer motivation and emotional support (Jenssen and Koenig 2002) and financial capital to the start-up businesses (Aldrich et al. 1997). It might, however, not always be the same case in different countries and different business cultures. Egbert (2009), who studied on the effects of social networks on business performance in African and Asian context, claim that close social networks around entrepreneurs in developing countries sometimes do not offer any financial capital, but also use the financial resources of start-up business at some point and its consequence might be the failure of start-up business. As such, one can argue that the business culture also influences on entrepreneur’s networks performance, in turn on the levels gaining through the network.

Different network structure affected differently. One of strongest social networks around entrepreneurs are the networks of family members, spouse or close friends whose support may assist their businesses (Brüderl and Preisendörfer 1998; Schøtt and Sedaghat 2014). Another type of networking as more extended one is networking with supplier, customers, other start-ups, work-place and professionals which mentioned as network in public sphere (Schøtt and Sedaghat 2014). Public sphere provide access to material resources and information while private networks provide more emotional and social support (Burt 2000). Diversity and prominent of types of networking depends on several issues. Networking in private sphere is

prominent for start-ups and small firms than networking in public-sphere (Van Horn et al. 2013). Another issue which affected type networking is culture in society, in way that in countries with traditional culture in contrast to secular-rational culture and collectivism in contrast to individualist culture entrepreneurs received advice mainly from their private sphere than public sphere and this effect is even higher between women entrepreneurs than men. In the other hand trust in society enhance networking in public sphere (Cheraghi and Schøtt 2014; FakhrELDin et al. 2013; Ashourizadeh and Schøtt 2013; Zali et al. 2013).

These different types of networking have different effect upon entrepreneurship outcomes. Public sphere affect innovativeness of entrepreneurs positively but it reduces by networking in private sphere (Jensen and Schott 2015; Zali et al. 2013). Also studies shows networking internationally and with profession affect exporting and growth-expectation positively while networking in private sphere hinder these entrepreneurial outcomes (Sedaghat and Derabi 2013; Sadeq and Setti 2013). Based on these explanation and different types of networking between entrepreneurs in different culture, innovativeness in secular-rational countries is a consequence of networking in public sphere, which is more beneficial for entrepreneurs than networking in private sphere (Schøtt et al. 2014).

Based on this literature, this work indicates the main Iranian network organizations. It explains the drivers and challenges of the Iranian entrepreneurial networks in home and diaspora and discuss on what are the effects on the performance of such networks. It also lists the main recommendations for extant and upcoming networks around Iranian entrepreneurs and explains how they might contribute to Iranian business.

### **3 Iranian Networking Organizations**

Iranian Networking organizations are those that spur entrepreneurship among Iranian communities by providing services for businesspeople to meet each other, follow, and develop potential business opportunities in Iran. In fact, there is a complex relationship between businesspeople. Such networks are seeking to facilitate and foster business partnership in Iran. The following list of networks does not claim to be exhaustive but aims to give a list of Iranian networking organizations who take entrepreneurship activities into account.

#### ***3.1 Center for Entrepreneurship and Development in the Middle East (CEDME)***

The center for Entrepreneurship and Development in the Middle East founded by Haas School of Business University of California, Berkeley. The network targeted

Middle East businesspeople living in their country of origin or outside of that by assisting and supporting their businesses. In fact, the network is seeking to promote the sustainable growth of entrepreneurship in Middle Eastern countries, particularly in Iran. Through a series of workshops, conferences such as iBridge 2015, and a range of seminars, the network has been underpinning a framework that facilitates networking between venture capitalist, investors, entrepreneurs, business leaders, and policymakers and discuss business opportunities.

### ***3.2 Persian Tech Entrepreneurs (PTE) Network***

Persian Tech Entrepreneur's (PTE) network is a community that assists Iranian entrepreneurs to give recognition of Iranian talent pool, developing business plans, and promote ties at high technology businesses between Iran and the rest of the world. The PTE community encourages entrepreneurship in Iran by supporting high-value-added projects at high-tech business development, by providing related services, and by building a high-quality network of investors and technologies to promote innovation initiatives. Among the PTE projects, the network is also working on announcing Influential Iranian entrepreneurs and innovators of the year, where they recently published the list of top 100 Iranian entrepreneurs of 2015.

### ***3.3 Iranian-Swedish Entrepreneurship Network***

The Iranian-Swedish Entrepreneurship Network originally called Persian-Swedish Entrepreneurship Network is a business networking group with the goal of gathering together Iranian-Swedish entrepreneurs and investors to exchange knowledge and build relationships. It was founded in May 2013.

At this point, this group is the 1st and largest of its kind outside the US. It currently has more than 1200 members. These include business Iranian leaders across the world. The group has hosted talks, conferences and networking events. The network's goal, at this stage, is three-fold:

1. Connect Iranian-Swedish entrepreneurs, investors, innovators and creatives to exchange experiences, knowledge, leads and form long-term business relationships.
2. Demonstrate, organize and systematically promote the contribution of successful immigrant Iranians to the Swedish economy. This can have a ripple effect and inspire other ethnicities.
3. Pave the way for Swedish businesses to successfully enter and compete in Iran's massive, tech-savvy and young market esp. leveraging the lift of sanctions, the decline of oil prices and Iran's intent on becoming less dependent on oil.

## 4 Iranian Entrepreneurship Drivers and Challenges

The Iranian entrepreneurs at any kind face numerous challenges in achieving their aims to identify the strengths and weaknesses of the Iranian market, finding out which solutions these were likely to solve challenges, evaluating these solutions and developing recommendations to address these. In order to challenges, capital challenges, human resource challenges, knowledge resource challenges, infrastructure challenges, and governance challenges (Jozi 2015).

Native-born entrepreneurs plus who are sitting in Iran don't really target what is beyond the Iranian market due to having a large local market inside of Iran, whereas Iranian diaspora entrepreneurs aim to expand their choices not only at Iranian market, but also at international level. In addition, for both sides some barriers such as international sanctions against Iran had direct effects on the Iranian entrepreneurial performance over time. Typically sanctions denotes closing the Iranian market doors and get limited access to international markets, which have left any kind of entrepreneurs with difficult situations to deal with. In attempting to attract diaspora entrepreneurs to Iran, Iran face therefore the problem of sanctions at market level. In addition to this critical issue, tax laws and corruption are namely also other barriers to deter individuals, particularly diaspora entrepreneurs, to follow their economic activities in Iran. Moreover, limited access to local financing and local capitals are the typical challenges in a developing market such as Iran. This is a problem that all entrepreneurs at any kind in developing countries face (Lubkemann 2008).

One important issue related to Iranian entrepreneurship activities is that despite having a large talent pool of human resources the entire process is challenging. In essence, while globalization enables different forms of entrepreneurship around Iranian market as like as other markets (Newland and Tanaka 2010), existing talent are not mainly the ones who start-ups are looking for. In addition, the lack of a legal and regulatory structure around network of Iranian entrepreneurs lessens the business success.

Furthermore, Limited academia engagement into start-ups and tech entrepreneurship, lack of opportunities for private sector engagement, and small volume of investment in R&D could be named at knowledge challenge section. In light of these critical challenges at any kind, one can easily identify associated drivers.

Continuing this fashion about challenges and drivers, lengthy process of company registration in Iran comparing to other countries does not look decent for entrepreneur to establish any business. Moreover, due to sanctions on CBI (Central bank of Iran), Iranian banks face limited payment options, which harden entrepreneurial process. As such, despite not having a proper policy and regulation structure to encourage the network of entrepreneurs in Iran and diaspora, Iran itself currently has a strong movement at entrepreneurship side, particularly at tech-oriented entrepreneurial process. Hence, it is worth to identify the main effects that influence on the performance of network activities.



## 5 Data and Method

This existing research has paid considerable attention to effect of networks on Iranians' entrepreneurial activities (in home and diaspora), such as exporting, Innovation and growth-expectation. For testing this effect we used sample of 1387 intending, starting and operating entrepreneurs, including 1330 native-born in Iran and 57 Iranians in the diaspora in age of 18–64 from Global Entrepreneurship Monitor. Native-born Iranians are those who were born in Iran and both parents were born in Iran. Diaspora Iranians are those who were born in Iran and living abroad or born abroad and a parent born in Iran.

We have several dependent variables as exporting, innovation, and growth-expectation. Export is in percent, then logged. Innovation is index of 3 variables. These three variables are “have the technologies and procedures required for this product or service been available for less than a year, or between one to five years, or longer than five years?”, “Do all, some, or none of your potential customers consider this product or service new and unfamiliar?” and “Right now, are there many, few, or no other businesses offering the same products or services to your potential customers?”.

Exporting is based on this question, “what proportion of your customers will normally live outside your country?”. Respondent answer by percentages and we use logarithms of the number. Growth-expectation is about the size of the firm in five future years. We use logarithm of the number.

We used several control variables as follows:

- Gender: coded 0 for women and 1 for men.
- Age: coded in years.
- Education: coded in years.
- Proprietorship: coded 1 in case of sole ownership and 0 for more than one owner.
- Owners: coded number of owners and then logged.
- Firm age: coded in years.
- Firm size: coded in number of employee.
- Phase intending: coded 1 if intending, otherwise 0.
- Phase starting: coded 1 if starting, otherwise 0.
- Phase operating: coded 1 if operating, otherwise 0.
- Self-efficacy: coded 1 in case of yes otherwise 0.
- Opportunity-alertness: coded 1 in case of yes otherwise 0.
- Risk-propensity: coded 1 in case of yes otherwise 0.
- Role-modeling: coded 1 in case of yes otherwise 0.

## 6 Results

In the sample, the mean age among the entrepreneurs in Iran is 32.5 years; and among the entrepreneurs in the diaspora the mean age is significantly higher, 37.2 years. The mean length of education among the entrepreneurs in Iran is 11.5 years; and among the entrepreneurs in the diaspora the mean duration of education is significantly higher, 12.5 years.

In this study we analyze effect of public and private network on Iranians' entrepreneurial activities. In GEM survey, respondents answer to these questions about their network: "various people may give advice on your new business. Have you received advice from Spouse? (Parents? Other family? Friends? Boss? Colleagues? A starter? A business mentor? Someone abroad? Someone from Abroad? A researcher? An accountant? A lawyer? A bank? A potential investor? A public counselor? A collaborating firm? A competing firm? A supplier? Customers?)". We divided network into two types of public and private. The categorization of these two types of networking is shown in Table 1. Also Table 1 shows percentages of each type of network between Iranian entrepreneur in home and diaspora. Based on information in Table 1 Iranian entrepreneurs in home

**Table 1** Advisors used by entrepreneurs in Iran and in diaspora

		Iran	Diaspora
Private sphere	Spouse	40%	27%
	Parent	62%	23%
	Other family	64%	28%
	Friends	61%	47%
Public sphere	Work-colleagues	27%	16%
	Boss	8%	12%
	Starter	18%	21%
	Mentor	31%	46%
	Public counselor	9%	9%
	Researcher or inventor	8%	12%
	Bank	9%	14%
	Investor	13%	23%
	Lawyer	6%	19%
	Accountant	7%	25%
	Collaborator	14%	21%
	Competitor	7%	18%
	Supplier	14%	23%
	Customers	22%	25%
	Someone abroad	3%	16%
Someone from abroad	3%	21%	
N entrepreneurs		1324–1329	56–57

received advice mostly from their family and parents (64 and 62%) and someone abroad and someone from abroad have the lower percentages between people who give advice to Iranian entrepreneur in home (3 and 3%). Between Iranians' entrepreneurs in diaspora percentages of getting advice from friends and other family member is in higher level (47 and 28%) in the other hand receiving advice from public counselor and boss is in lower level (9 and 12%).

Table 2 shows the average of private and public network between Iranian entrepreneurs in home and diaspora. Based on the results Iranian entrepreneurs use private network more than their public network but for Iranian entrepreneurs in diaspora it is the other way around. Iranian entrepreneurs in diaspora are receiving advice more from their public sphere than private sphere.

Table 3 shows effect of residence of Iranian entrepreneurs in Iran or in diaspora on their networks with three models. Model 1 showing the effect of type of residency private sphere. Results from model 1 shows that being in diaspora affects probability of using private network negatively (coefficient is -0.91). Model 2 shows the effect

**Table 2** Advisors in the networks around entrepreneurs in Iran and in diaspora

	Iran	Diaspora	Significance
Private sphere network	2.3	1.3	***
Public sphere network	2.0	3.2	***
Total network	4.3	4.5	
N entrepreneurs	1330	57	

\*<0.10; \*\*<0.05; \*\*\*<0.005

**Table 3** Private sphere network, public sphere network, and total network, affected by residence in Iran or in diaspora

	Model 1	Model 2	Model 3
	Private sphere network	Public sphere network	Total network
Diaspora versus Iran	-0.91***	1.29***	0.38
Self-efficacy	0.15**	0.16	0.31*
Opportunity-alertness	0.01	-0.08	-0.07
Risk-propensity	-0.01	-0.24	-0.25
Role-modeling	0.07***	0.36***	0.62***
Phase intending	0.16	-0.30	-0.15
Phase operating	-0.10	-0.73***	-0.83***
Gender male	-0.21***	-0.07	-0.28
Education	-0.02**	0.06***	0.05*
Age	-0.01**	0.02**	0.01
Constant	2.63	1.10	3.73
N entrepreneurs	1387	1387	1387

Linear regressions, with unstandardized coefficients

\*<0.10; \*\*<0.05; \*\*\*<0.005

of residency on public network on the way that being in diaspora affect using of public networks positively (coefficient is 1.29). Third model shows the effect of residency in diaspora in Iranian entrepreneurs' network in total. Effect of being in diaspora is not significant on network in total. In the other word Iranian entrepreneurs in home are using private network more than Iranian entrepreneurs in diaspora and they are using public network less than Iranian entrepreneurs in diaspora.

Table 4 shows exporting, innovation and growth-expectation between Iranian entrepreneur in home and diaspora. Iranian entrepreneurs in diaspora have higher level of exporting, innovation and growth expectation in compare to Iranian entrepreneurs in Iran.

**Table 4** Exporting, innovation, and growth-expectation, in Iran and in diaspora

	Iran	Diaspora	Significance
Exporting	1.4%	20.9%	***
Innovation	1.10	1.84	***
Growth-expectation	0.57	0.97	**
N entrepreneurs	662–692	20–26	

\*<0.10; \*\*<0.05; \*\*\*<0.005

**Table 5** Exporting, innovation and growth-expectation affected by networking and residence in diaspora versus Iran

	Model 1	Model 2	Model 3
	Exporting	Innovation	Growth-expectation
Diaspora versus Iran	1.40***	0.64***	0.11
Private sphere networking	-0.02	-0.01	0.01
Public sphere networking	0.04***	0.01***	0.02**
Self-efficacy	-0.05	-0.01	0.03
Opportunity-alertness	0.02	0.00	0.08*
Risk-propensity	0.02	0.00	0.06
Role-modeling	-0.02	0.00	0.03
Opportunity-driven	0.05	0.09***	0.10**
Phase starting	0.26**	0.03	1.16***
Sole ownership	-0.02	0.00	0.30**
Owners	-0.02	0.03	0.31***
Firm age	0.03	-0.02*	0.00
Firm size	0.14***	0.02*	-0.17***
Gender male	0.07	0.02	-0.07
Education	0.02***	0.00	0.01**
Age	0.00	0.00	0.00
Constant	-0.20	1.04***	-0.07
N entrepreneurs	654	658	630

Linear regressions, with unstandardized coefficients

\*<0.10; \*\*<0.05; \*\*\*<0.005

Table 5 shows effect of public and private sphere on entrepreneurs' exporting, innovation and growth-expectation. Model 1 shows the effect of network on Exporting. The effect of Private sphere on exporting is negative but not significant on the other hand public sphere effects exporting positively (coefficient is 0.04).

Based on model 2 private sphere effects innovation negatively but this effect is not significant but public sphere effects innovation and positively and this effect is significant (coefficient is 0.01). Model 3 shows the effects on growth-expectation. Based on the result private sphere effects growth-expectation positively but this effect is not significant but public sphere effects growth-expectation positively and this effect is significant (coefficient is 0.02). In overall Based on these results public sphere affects entrepreneurial output (exporting, innovation and growth-expectation) positively.

## 7 Conclusion

Previous studies show different types of networking of entrepreneurs and the different effect of them on entrepreneurial activities. Different reasons influence entrepreneurs networking like individual characteristics like gender, phase of entrepreneurial activity like start-up, and firm characteristics like firm-size. Moreover macro-level characteristics influence type of networking around entrepreneurs as previous studies show in countries with traditional and collectivism culture networking in private sphere is prominent between entrepreneurs than networking in public sphere in compare to countries with secular-rational and individualism culture. These diversity and prominent of different types of network affect entrepreneurial outcomes differently.

In this study we analysed the difference between Iranian entrepreneurs' network at home and in diaspora and the consequences of this difference for their entrepreneurial outcomes. Based on results Iranian entrepreneurs in diaspora are more relying on their public network than private network and as consequence innovation, exporting and growth-expectation is higher in comparison to Iranian entrepreneurs at home. This prominence of private network around Iranian entrepreneurs in Iran may be the results of traditional and collectivism culture.

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## References

- Aldrich, H., & Zimmer, C. (1986). Entrepreneurship through social networks. In R. Smilor & D. Sexton (Eds.), *The art of science of entrepreneurship*. New York: Ballinger.
- Aldrich, H. (1989). Networking among woman entrepreneurs. In O. Hagan, C. Rivchun, & D. Sexton (Eds.), *Women-owned businesses* (pp. 103–132). New York: Praeger.
- Aldrich, H., Elam, A., & Reese, P. R. (1997). Strong ties, weak ties and strangers: Do women business owners differ from men in their use of networking to obtain assistance? In S. Birley (Ed.), *Entrepreneurship in a global context* (pp. 1–25). London: Macmillan, Routledge.
- Ashourizadeh, S., & Schött, T. (2013). Entrepreneurs' gender, age and education affecting their networks in private and public spheres: Denmark, MiddleEast and North Africa. *International Journal of Business and Globalisation*, 11(4), 380–398.
- Brüderl, J., & Preisendörfer, P. (1998). Network support and the success of newly founded businesses. *Small Business Economics*, 10, 213–225.
- Burt, R. S. (2000). The network structure of social capital. *Research in Organizational Behavior*, 22, 345–423. doi:10.1016/S0191-3085(00)22009-1
- Cheraghi, M., & Schött, T. (2014). Size, diversity and components in the network around an entrepreneur: Shaped by culture and shaping embeddedness of firm relations. In F. Can, T. Ozyer, & F. Polat (Eds.), *State of the art applications of social network analysis* (pp. 339–353). Springer Verlag Lecture Notes in Social Networks.
- Elfring, T., & Hulsink, W. (2003). Networks in entrepreneurship: The case of high-technology firms. *Small Business Economics*, 21(409–422), 2003.
- Egbert, H. (2009). Business success through social networks? A comment on social networks and business success. *American Journal of Economics and Sociology*, 68(3).
- FakhrEldin, H., Skoko, H., & Cheraghi, M. (2013). The effect of national culture on entrepreneurs' networks: A comparison of the MENA region and Denmark. *International Journal of Business and Globalization*, 11(4), 353–366.
- Fiet, J. O. (1996). The information basis of entrepreneurial discovery. *Small Business Economics*, 8, 419–430.
- Jensen, J., & Koenig, H. (2002). The effect of social networks o resource access and business start-ups. *European Planning Studies*, 10(8).
- Jensen, K. W., & Schott, T. (2015). Start-up firms' network for innovation and expert: Facilitated and constrained by entrepreneurs' networking in private and public sphere. *Social Network Analysis and Mining*, 5(48), 1–17.
- Johannisson, B. (1988). Business formation—A network approach. *Scandinavian Journal of Management*, 4(3/4).
- Jozi, A. (2015). *Challenges of Iran's startup ecosystem*. TechRasa—The Iranian Tech & Startup Media. Retrieved from <http://bit.ly/20xKqKk>
- Kanter, R. M. (1983). *The change masters*. New York: Touchstone.
- Lubkemann, S. C. (2008). Remittance relief and not-just-for-profit entrepreneurship: The case of Liberia. In J. M. Brinkerhoff (Ed.), *Diasporas and Development: Exploring the Potential*. Boulder, CO: Lynne Rienner Publishers, Inc.
- Marlow, S., & Patton, D. (2005). "All credit to men? *Entrepreneurship, finance and gender*" *entrepreneurship theory and practice* (pp. 717–731). Baylor University.
- Newland, K., & Tanaka, H. (2010). *Mobilizing diaspora entrepreneurship for development*. Washington DC: Migration Policy Institute.
- Sadeq, T., & Setti, Z. (2013). Effects of entrepreneurs' networking with national values on job growth expectations: A two-level analysis for the MENA region and Denmark. *International Journal of Business and Globalization*, 11(4), 443–459.
- Schött, T., Cheraghi, M., Rezaei, S., & Vang, J. (2014). Innovation embedded in entrepreneurs' networks in private and public spheres: A global study focused on China and Denmark. *International Journal of Entrepreneurship and Small Business*, 23(1/2), 145–167.

- Schøtt, T., & Sedaghat, M. (2014). Innovation embedded in entrepreneurs' networks and national educational systems: A global study. *Small Business Economics*, 43(2), doi: [10.1007/s11187-014-9546](https://doi.org/10.1007/s11187-014-9546).
- Sedaghat, M., & Derrabi, M. (2013). Firms' exports promoted by the entrepreneurs' networking: MENA and Denmark. *International Journal of Business and Globalization*, 11(4), 427–442.
- Van Horne, C., Belkacem, L., & Al Fusail, T. A. (2013). "Composition of networks around entrepreneurs: cross-national comparisons in the Middle East and North Africa." *International Journal of Business and Globalisation*, 11(4), 337–352.
- Zali, M. R., Bastian, B. L., & Qureshi, S. (2013). "Promoting innovation in the MENA region: the role of social norms and individual factors in entrepreneurial networks." *International Journal of Business and Globalisation*, 11(4), 413–426.

## Author Biographies

**Maryam Cheraghi** is a Ph.D. candidate in Entrepreneurship at University of Southern Denmark. Her articles examine gender gaps throughout the entrepreneurial career (*International Journal of Gender and Entrepreneurship*, 2015), entrepreneurs' transnational networking (*International Journal of Business and Globalisation*), entrepreneurs' gendered innovativeness (*International Journal of Entrepreneurship and Small Business*, 2015), innovation embedded in private and public sphere networks (*International Journal of Entrepreneurship and Small Business*, 2014), women entrepreneurs' growth-expectations embedded in networks and culture (*International Journal of Entrepreneurship and Small Business*, 2014), network size and diversity embedded in culture (*State of the Art Applications of Social Network Analysis*, 2014), women entrepreneurs in China (*Journal of Knowledge-Based Innovation in China*, 2013), and effects of national culture on entrepreneurs' networks in Middle East and North Africa (*International Journal of Business and Globalisation*, 2013). Her dissertation focuses on age effects and inclusion of youth in entrepreneurship around the world.

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# Future Research Directions for Transnational Entrepreneurship

Vanessa Ratten

**Abstract** More literature about entrepreneurship is focusing on cultural behavior but less is known about more hybrid forms of entrepreneurship that combine culture, ethnicity, immigration and internationalization such as transnational entrepreneurship. This is due to transnational entrepreneurship being an emerging research field that is growing in significance due to increased migration levels and a more global diaspora. This chapter examines transnational entrepreneurship by suggesting a number of research avenues including emphasizing individuals' links to sports and other cultural significant events that encourage their transnational entrepreneurship.

## 1 Introduction

The increasing levels of migration and ability of individuals to travel amongst countries have contributed to academics and policy makers focusing on transnational entrepreneurship (Ratten 2014). Transnational entrepreneurs are good for international commerce due to their ability to capitalize on social capital and cultural knowledge (Mustafa and Chen 2010). As more goods and services are being produced as part of a global supply chain it is becoming more important for transnational entrepreneurs to utilize their market knowledge for business opportunities. For this reason, transnational entrepreneurship represents a significant part of self-employed immigrants whose numbers are increasing globally. Some countries have a high proportion of specific ethnic groups that facilitates transnational entrepreneurship including countries with high immigrant intakes such as Australia. The increase has meant that transnational entrepreneurs are depending more on their associates and contacts for business activities that require international travel (Portes et al. 2002). Transnational entrepreneurs are more likely to be involved in

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business activities than non-transnational entrepreneurs (Ramamurti 2004). This makes transnational entrepreneurship an important area of immigrant, migrant and international business research.

The terms diaspora and transnationalism have been used interchangeably due to the similarity in meaning (Ojo 2012). Despite the connection the words are different. Diaspora refers to a mass scattering of people and typically refers to those with a specific cultural heritage whereas transnationalism is defined as an immigrant entrepreneur who utilizes their home and host country in business ventures. The emphasis in this chapter is on transnationalism, which can have both positive and negative connotations depending on whether the migration was voluntary (Ojo 2012). Voluntary migration occurs when people move freely to another country whilst involuntary usually refers to an economic or political event necessitating movement overseas. Both voluntary and involuntary forms of migration are examined in this chapter because both contribute significantly to transnationalism and resulting entrepreneurship.

In international migration studies, the concept of transnationalism has become more popular as it acknowledges the multiple connections people have to certain countries (Ilhan-Nas et al. 2011). It is becoming more common for individuals to have ties to a number of countries and they live and work in a variety of different geographic locations. This has led to transnationalism becoming a different category of migration as it focuses on cross-border ties individuals have as a result of moving to another country (Portes et al. 2002). Ojo (2012: 146) defines transnational entrepreneurs as “individuals who migrate from one country to another, simultaneously maintaining business oriented relationship with their countries of origin and residence” and this definition is adopted in this chapter.

Transnational entrepreneurs live amongst a community, which can often include diaspora but also people from their host country. These communities are important sources of social and business networks that facilitate entrepreneurship. Maas (2005: 170) defines a transnational community as “a community in which the ties and corresponding resources are no longer embedded in migration flows alone but in other linkages such as political or religious projects as well”. This has led to transnational communities creating business networks due to shared cultural know-how (Wong and Ng 2002). These transnational communities also utilize familial ties that provide a sense of trust and mutual dependency in business matters. For many diaspora but particularly those in transnational communities’ family is a source of comfort and support in terms of linkage with their homeland. This can help with establishing businesses but also provide sources of knowledge and employment opportunities. In addition, it can lead to social ties amongst diaspora that act as a source of transnational entrepreneurship (Ratten 2012).

In this chapter, I explore the role of transnational entrepreneurship in the global economy by focusing on the emerging areas of research. This is important as there has been increased emphasis in policy initiatives but also the global media about the role of immigrants and resulting transnational entrepreneurship. Therefore, this chapter is structured as follows. Firstly, the conceptual underpinnings of ethnic and immigrant entrepreneurship are stated. This leads to a discussion of the field of

transnational entrepreneurship and ways to advance the literature. Finally, suggestions for future research focusing on the diaspora and transnational entrepreneurship are discussed.

## 2 Literature Review

### 2.1 *Culture and Social Networks*

More research concerning entrepreneurship is focusing on the role of culture in explaining business start up rates (Stiles and Galbraith 2004). This means that ethnicity as part of cultural traits influences the propensity to engage in entrepreneurship. Churchill (2016: 3) states, “values such as family ties, trust and thrift are argued to be inherent traits associated with some immigrant groups”. Some entrepreneurs prefer to do business with similar ethnic groups due to shared cultural traits and this influences business development. Cultures with more of an individualistic orientation tend to have more entrepreneurship than those from collectivist countries. This means that often culture will be used as a proxy for entrepreneurial intention when examined in the international business context.

Network relationships are an important part of international entrepreneurship due to the social capital. Social capital has been utilized in many studies of entrepreneurship to understand ethnicity (Ibrahim and Galt 2011). International market entry can utilize network ties to provide business knowledge and this is important for resulting entrepreneurship (Ratten 2013, 2015). Mustafa and Chen (2010: 98) in the context of transnational entrepreneurship define networks as “a set of connected actors and their relationships. The actors could be either organizations or individuals, and the relationships that tie them together may take many forms, such as those between customers, suppliers, service providers or government agencies”. These networks enable transnational entrepreneurs to access a range of information depending on their context.

Social networks are important for transnational entrepreneurship as they facilitate information and knowledge sharing. Trust is a key part of the formation of social networks due to the assurance people gain from mutual reciprocity (McEvily and Marcus 2005). Social networks develop differently depending on the stage of the entrepreneurial process (Greve and Salaff 2003). This means that resource acquisition is a key consideration for the development of social networks as they enable immigrant’s access to support in the form of information that helps them start a business.

Transnational social networks involve a sense of belonging amongst members that despite non-frequent contact and geographic distance are strong (Mustafa and Chen 2010). This can mean there can be differences in the type and extent of social networking depending on the culture and country context. These resources are useful for increasing jobs for other people in the diaspora network thereby

increasing the role of social capital (Pang and Rath 2006). Despite the advantages of diaspora networks there can be disadvantages from the lack of integration in other ethnic groups and creating a sense of entitlement to business opportunities because of ethnicity. This is reflected in Kitching et al. (2009) in a study of ethnic minority businesses in London finding that social networks can be restrictive when recognizing new opportunities. Despite this limitation most diaspora networks help provide resources to transnational entrepreneurs (Ojo 2012).

## 2.2 *Immigrant Entrepreneurship*

Levie (2007) in a study of immigration and entrepreneurship in the United Kingdom suggested four factors that influence new business activity. These factors are ease of resource availability, attitudes towards new business development, perceived market needs and labour market advantages. For transnational entrepreneurs, some resources due to cultural connection to their homeland may be easier to access. This often occurs in terms of sourcing materials and negotiating prices. The attitudes transnational entrepreneurs face towards business may come from entrenched family history and involvement in certain industries. This is also tied to their experience in businesses from their homeland. Perceived market needs for transnational entrepreneurs may stem from pricing differences between countries or lack of access to certain products and services. Labour market advantages involve access to people with a certain type of skill or comparative cost advantage compared to other countries.

Disadvantage theory of entrepreneurship suggests that immigrants go into business because they have limited access to employment (Parker 2004). This means that immigrants lack of education in terms of language and skills means they might not be suitable to traditional forms of employment (Peroni et al. 2016). This helps explain transnational entrepreneurship as form of necessity based opportunity recognition but might differ depending on the type of business activity. Other theories such as the middlemen theory of immigrant entrepreneurship was developed due to many immigrants becoming financial agents (Peroni et al. 2016). This has led to the emphasis on transnational migrants as being “immigrants who develop and maintain multiple relationships (familial, economic, social, organizational, religious, and political that span borders” (Basch et al. 1994: 7). Therefore, migrants are more likely to be involved with self-employment and their businesses have influenced the economic growth and diversity of regions (Light 1994; Ramadani et al. 2014).

Ram (1998) found that there is more self-employment and entrepreneurship amongst ethnic groups in the United Kingdom. This is because often ethnic minority groups focus on businesses as a way they can be economically emancipated (Fairlie and Robb 2007). Some ethnicities such as Cubans have been described as more entrepreneurial. As more ethnic minority groups travel between countries, transnational entrepreneurship has enable them to utilize global

networks for business reasons. Some ethnic groups do not use traditional business support groups preferring to focus more on their social networks. This can limit the extent of the business ventures they engage in depending on their ability to access alternative sources of finance.

Some ethnic groups due to their minority status and lack of integration in mainstream business activities rely more on trust they build from social networks. Nwankwo (2005) in a study of Black African entrepreneurship in the United Kingdom found that there was a distrust of authorities that could be mitigated by support from other business partners. Another study by Nwankwo et al. (2010) also found that ethnic minorities sometimes have a lack of cultural awareness that affects business development. This is supported by Ojo (2012) who in a study of transnational entrepreneurship in the United Kingdom and Nigeria found that circulation and networking helped with business growth. Therefore, it can be hard to evaluate ethnic minority business due to the difficulty in accessing information such as profit levels due to the often informal nature and reluctance to share information (Ojo 2012).

Immigrants have closer links to their home country than in the past due to the cheaper and easier access to communication and travel (Ladolt 2001). Saxenian (2002) in a study of Chinese engineers discussed how information and skills were transferred between California and Taiwan. In addition, Ojo (2012) suggested that environmental constraints and cultural connotations are helpful to understanding transnational entrepreneurship. This has led to some immigrant entrepreneurs capitalizing on their linguistic abilities to offer products to their ethnic group. The language shared by an ethnic group can be utilized to foster certain types of businesses that are conducive to labour market participation of the diaspora. Phan and Luk (2007) in a study of Chinese ethnic entrepreneurs in Toronto found that there is a cohesiveness and mutual trust based on shared cultural traits and linguistic ability. The language skills of an immigrant entrepreneur can influence the impact they have in a region as some ethnicities may have more influence in a society.

### ***2.3 Ethnic Entrepreneurs***

Social capital is a form of solidarity particularly for ethnic entrepreneurs that share similar experiences. This means immigrants often tend to have businesses in a location where they can utilize their complex social networks (Ley 2006). This helps to develop reciprocal obligations that are incorporated into human capital for ethnic entrepreneurs (Valdez 2008). Some countries due to historical events differ in the way certain ethnicities are integrated into society. This is reflected in some countries having a large number of immigrants from countries that were previously under their control but have since become independent (Stone and Stubbs 2007).

Many ethnic entrepreneurs focus on group resources including kinship and family ties to help them establish businesses (Ilhan-Nas et al. 2011). Ethnic

entrepreneurship benefits economies by providing job opportunities that lessen competition with existing residents. This helps foster an entrepreneurial spirit amongst ethnic groups that rely on individual aptitude for business rather than social position in society (Ilhan-Nas et al. 2011). Ilhan-Nas et al. (2011: 614) states ethnic enterprises “represent an important part of modern “multicolor” countries, tend to be enterprises local to these countries”. The increased cultural diversity of countries comes from their ability to integrate different ethnic groups into society. Ethnic entrepreneurs have a pattern of interaction amongst others with the same cultural background (Waldinger et al. 1990). This set of connections helps ethnic entrepreneurs to build an economy by influencing social relationships (Teixeira 2001). The emphasis on ethnic entrepreneurship is on business but in sociology it is on ethnic characteristics (Ilhan-Nas et al. 2011).

Ethnic entrepreneurs have typically been innovative in introducing new food and drink products to the market (Smallbone et al. 2010). There has also been more ethnic entrepreneurs entering the music industry that cater to a certain genre or type of music (Smallbone et al. 2005). Some second generation ethnic entrepreneurs have moved into more profitable arts industries rather than typical retail type of businesses (Smallbone et al. 2010). Smallbone et al. (2010: 181) suggest that “ethnic diversity at the city/region level may enhance the competitiveness of an enterprise by enabling or stimulating business owners to commercially exploit diaspora links”. In addition, Collins (2002) in a study of the Chinese diaspora in Australia found that the mutual trust and shared language help and develop social networks. The Indian diaspora is one of the largest ethnic communities that has influence the economic growth of their homeland (Chand and Ghorbani 2011).

### 3 Future Research Agenda

Future research needs to focus more on the ethnic characteristics of transnational entrepreneurs to see how they differ in type of business established and performance rates. This will help to determine if some ethnic minorities are better transnational entrepreneurs. This could be done by testing nascent entrepreneurship in immigrant enclaves. Longitudinal research amongst different ethnic groups of transnational entrepreneurs would also be helpful to see how the diaspora influences second and third generations of immigrants. This would be a potential avenue for future research that links transnational entrepreneurship with the increasing diverse diaspora. For some diaspora entrepreneurs it may not be ethnicity that bounds them but rather religious belonging. This means that researchers need to examine how the concept of diaspora is changing and the impacts it has on transnational entrepreneurship. Most research on diasporas has been concentrated around ethnicity but other applications could apply including religion and educational attachment.

Ojo (2012) recognizes that there is potential to generalize all transnational entrepreneurs as the same despite diversity within ethnic groups. This means that more research should focus on ethnic diversity within transnational entrepreneurship to see how it might be homogenizing based on globalization. Case study research about transnational entrepreneurs based on cultural attributes would be useful to see if there are more differences or similarities (Ratten 2006). This would enable more focus on areas of transnational entrepreneurship that are insufficiently studied. This might include looking into transnationalism from a sporting perspective to see if connection to homeland increases or decreases after global competitions. An example of this might be including sporting events such as the European Football Championships meaning the diaspora celebrates their home countries win that positively affects business interest in the country.

Other areas of transnational entrepreneurship insufficiently addressed are the role of gender in diaspora networks. The ability of people to work in their host country may be influenced by societal stances towards gender equality. This means that more research should focus on the role of gender in affecting transnational entrepreneurship and the gender dynamics of diaspora entrepreneurs. This may be a sensitive topic for some countries particularly those with a large immigrant population but should be examined in more detail. It might also be useful to look more at demographics such as age of entrepreneur when discussing transnationalism.

Some immigrants never adapt to their host country whilst others integrate quickly. Therefore, more research needs to be conducted using oral history to understand the stories of transnational entrepreneurship and its role in the diaspora community. This could include comparative case studies of young and old transnational entrepreneurs from various countries. This would benefit research about transnational entrepreneurship but delve deeper into societal trends. Due to technology such as the internet and nanotechnology making it easier and more affordable to communicate with people from home countries, transnationalism might be developing more in a electronic environment rather than physical environment. This is seen in the use of online games and communication that have driven many new businesses.

In conclusion, transnationalism is changing society with people becoming more global citizens rather than just belonging to one country. This has significant consequences for policy development, which might focus on how to strengthen intercountry ties rather than limiting them to one geographic location. This means that more research is required on the changing nature of transnational entrepreneurs to see what type of businesses they are moving into and how their global lifestyles are changing. Hopefully more research will look into this interesting area of research and bridge the gap that currently exists between transnational studies and other disciplines such as sport and culture. Therefore, this chapter has suggested some potential research avenues to address that highlight the exciting area of transnationalism.

## References

- Basch, E., Glick-Schiller, N., & Blanc-Szanton, C. (1994). *Nations unbound: Transnational projects, post colonial predicaments and deterritorialized nation states*. London: Routledge.
- Chand, M., & Ghorbani, M. (2011). National culture, networks and ethnic entrepreneurship: A comparison of the Indian and Chinese immigrants in the US. *International Business Review*, 20(6), 593–606.
- Churchill, S. A. (2016). Fractionalization, entrepreneurship, and the institutional environment for entrepreneurship. *Small Business Economics*, 1–21.
- Collins, J. (2002). Chinese entrepreneurs: The chinese diaspora in Australia. *International Journal of Entrepreneurial Behaviour and Research*, 8(1–2), 113–133.
- Fairlie, R., & Robb, A. (2007). Why are black-owned businesses less successful than white-owned businesses? The role of families, inheritances, and business human capital. *Journal of Labour Economics*, 25(2), 289–323.
- Greve, A., & Salaff, J. W. (2003). Social networks and entrepreneurship. *Entrepreneurship Theory and Practice*, 28(1), 1–22.
- Ibrahim, G., & Galt, V. (2011). Explaining ethnic entrepreneurship: an evolutionary economics approach. *International Business Review*, 20(6), 607–613.
- Ilhan-Nas, T., Sahin, K., & Cilingir, Z. (2011). International ethnic entrepreneurship: Antecedents, outcomes and environmental context. *International Business Review*, 20(6), 614–626.
- Kitching, J., Smallbone, D., & Athayde, R. (2009). Ethnic transnationals and business competitiveness: Minority-owned enterprises in London. *Journal of Ethnic and Migration Studies*, 35(4), 689–705.
- Ladolt, P. (2001). Salvadoran economic transnationalism: Embedded strategies for household maintenance, immigrant incorporation, and entrepreneurial expansion. *Global Networks*, 1(3), 217–242.
- Levie, J. (2007). Immigration, in-migration, ethnicity and entrepreneurship in the United Kingdom. *Small Business Economics*, 28, 143–169.
- Ley, D. (2006). Explaining variations in business performance among immigrant entrepreneurs in Canada. *Journal of Ethnic and Migration Studies*, 32, 743–764.
- Light, I. (1994). Beyond the ethnic enclave economy. *Social Problems*, 41, 601–616.
- Maas, M. (2005). Transnational entrepreneurship: Exploring determinants and impacts of a Dutch-based Filipino immigrant business. *Asian and Pacific migration journal*, 14(1–2), 169–191.
- McEvily, B., & Marcus, A. (2005). Embedded ties and the acquisition of competitive capabilities. *Strategic Management Journal*, 26(11), 1033–1055.
- Mustafa, M., & Chen, S. (2010). The strength of family networks in transnational immigrant entrepreneurship. *Thunderbird International Business Review*, 52(2), 97–106.
- Nwankwo, S. (2005). Characterisation of Black African entrepreneurship in the United Kingdom: A pilot study. *Journal of Small Business and Enterprise Development*, 12(1), 120–137.
- Nwankwo, S., Akunuri, J., & Madichie, N. (2010). Supporting black businesses: Narratives of support providers in London. *International Journal of Entrepreneurial Behaviour & Research*, 16(6), 561–580.
- Ojo, S. (2012). Ethnic enclaves to diaspora entrepreneurs: A critical appraisal of black British Africans' Transnational Entrepreneurship in London. *Journal of African Business*, 13(2), 145–156.
- Pang, C.L. & Rath, J. (2006). The force of regulation in the land of the free. The Persistence of Chinatown, Washington D.C. as a symbolic ethnic enclave. In M. Lounsbury & M. Ruef (Eds.), *2006 Volume of RSO (research in the sociology of organizations)*. Greenwich, CT: JAI Press.
- Parker, S. C. (2004). *The economics of self-employment and entrepreneurship*. Cambridge: Cambridge University Press.

- Peroni, C., Riillo, C. A., & Sarracino, F. (2016). Entrepreneurship and immigration: evidence from GEM Luxembourg. *Small Business Economics*, 46(4), 639–656.
- Phan, M. B., & Luk, C. M. (2007). I don't say I have a business in Chinatown: Chinese sub-ethnic relations in Toronto's Chinatown West. *Ethnic and Racial Studies*, 31(2), 294–326.
- Portes, A., Haller, W., & Guarnizo, L. E. (2002). Transnational entrepreneurs. An alternative form of immigrant economic adaptation. *American Sociological Review*, 67(2), 278–298.
- Ram, M. (1998). Enterprise support and ethnic minority firms. *Journal of Ethnic and Migration Studies*, 24(1), 143–158.
- Ramadani, V., Rexhepi, G., Gërguri-Rashiti, S., Ibraimi, S., & Dana, L.-P. (2014). Ethnic entrepreneurship in Macedonia: the case of Albanian entrepreneurs. *International Journal of Entrepreneurship and Small Business*, 23(3), 313–335.
- Ramamurti, R. (2004). Developing countries and MNEs: Extending and enriching the research agenda. *Journal of International Business Studies*, 35(4), 277–285.
- Ratten, V. (2006). Policy drivers of international entrepreneurship in Europe. *Euromed Journal of Business*, 1(2), 15–28.
- Ratten, V. (2012). Entrepreneurship, e-finance and mobile banking. *International Journal of Electronic Finance*, 6(1), 1–12.
- Ratten, V. (2013). Social entrepreneurship and technological innovations: The role of online communities, mobile communication and social networks. *International Journal of Social Entrepreneurship and Innovation*, 2(5), 476–485.
- Ratten, V. (2014). Encouraging collaborative entrepreneurship in developing countries: The current challenges and a research agenda. *Journal of Entrepreneurship in Emerging Economies*, 6(3), 298–308.
- Ratten, V. (2015). Athletes as entrepreneurs: The role of social capital and leadership ability. *International Journal of Entrepreneurship and Small Business*, 25(4), 442–455.
- Saxenian, A. L. (2002). Transnational communities and the evolution of global production networks: The cases of Taiwan. *China and India. Industry and Innovation*, 9(3), 183–202.
- Smallbone, D., Bertotti, M., & Ekanem, I. (2005). Diversification in ethnic minority business: The case of Asians in London's creative industries. *Journal of Small Business and Enterprise Development*, 12(1), 41–56.
- Smallbone, D., Kitching, J., & Athayde, R. (2010). Ethnic diversity, entrepreneurship and competitiveness in a global city. *International Small Business Journal*, 28(2), 174–190.
- Stiles, C. H., & Galbraith, C. S. (2004). *Ethnic entrepreneurship: Structure and process*. Oxford: Elsevier.
- Stone, I., & Stubbs, C. (2007). Enterprising expatriates: Lifestyle migration and entrepreneurship in rural Southern Europe. *Entrepreneurship & Regional Development*, 19, 433–450.
- Teixeira, C. (2001). Community resources and opportunities in ethnic economies: A case study of Portuguese and Black entrepreneurs in Toronto. *Urban Studies*, 38(11), 2055–2078.
- Valdez, Z. (2008). The effect of social capital on White, Korean, Mexican and Black business owners' earnings in the US. *Journal of Ethnic and Migration Studies*, 34(6), 955–971.
- Waldinger, R. D., Aldrich, H., & Ward, R. (1990). *Ethnic entrepreneurs: Immigrant business in industrial societies* (Vol. 1). Sage Publications, Inc.
- Wong, L. L., & Ng, S. M. (2002). The emergence of small transnational enterprise in Vancouver: The case of Chinese immigrants. *International Journal of Urban and Regional Research*, 26(3), 508–530.



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**Part III**  
**International and Marketing Aspects**

# The Reinvigorating of International Entrepreneurship by Open Innovation Strategy for Iranian Businesses

Babak Ziyae and Mohammad Reza Zali

**Abstract** The crucial challenges facing the economic, cultural and social situations of the 21st century are calling for new initiatives and thinking. International mindset and innovative structure of businesses are vital routes for economic growth and for competitiveness of businesses particularly in the foreign markets. A key component to succeed in international entrepreneurship is promoting a new archetype of innovation that is called open innovation which is capable to match knowledge and technology innovation with business challenges and societal development inside alliances, networks, and joint ventures. Open innovation offered a unique outside-in process from suppliers, supply chain, research centers and then transformed into an advanced new process. This setup concurrently entrepreneurs to create and sustain incremental and radical innovative efforts to develop international speed and intensity. Further, the incorporation of open innovation highlights that these not only take form in relation to external partners but also between units of the firm who fill network structural holes. The main contribution of this paper is adding to the body of international entrepreneurship literature by introducing a novel theoretical model for Iranian businesses who wishes to join international trade networks, given the scope of international competition.

## 1 Introduction

The interest in the study of international entrepreneurship is necessitated by today's economic environment that is about knowledge, speed, and accuracy (Runyan et al. 2016). International entrepreneurship is a fundamentally new revolutionary process of business change that many firms are using to renew their structures and methods

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in the foreign markets by focusing on making improvements in all dimensions (Kuemmerle 2015). International entrepreneurship helps, organizations overcome the systemic work barriers that interfere with efforts to achieve higher levels of business success in the global scene (Autio et al. 2015).

A rising trend of consciousness is seen in the capacity international entrepreneurship by business. International entrepreneurship has become a more widespread phenomenon in the past decade. Usually, multinational enterprises (MNEs) are mostly liable for flows of international trade and foreign direct investment (FDI), which are the prime dynamic forces of globalization (Bell 2015). The current growth in international businesses largely from firms that used to concentrate on local markets and not from firms that are international players. One feature of the knowledge economy is that a large number of firms are undertaking international activities and this includes particularly small and new ventures. Another feature of the knowledge globalizing economy is that small and medium sized enterprises (SMEs), are internationalizing at a faster speed. The literature of the international entrepreneurship has received remarkable attention over the last decade. It has been considered as one of the most significant strategies of growth for entrepreneurial firms. Moreover, maintaining a competitive advantage need the capacity to seize opportunities in foreign markets, and it is significant for Iranian firms to be active in international platforms (Barkema and Vermeulen 2014).

## 2 Literature Review

The theories of entrepreneurship have so far been pursued international business and entrepreneurship. “Yet, international entrepreneurship has been enhanced by importing concepts in the field of entrepreneurship” and through integrating it with the internationalization literature (Madsen and Servais 1997). According to Kuemmerle (2015) the detection and exploitation of opportunities is the central point of international entrepreneurship studies. Autio et al. (2015) argued that international entrepreneurship often have to be “developed” by using the international business to symbolize products and markets.

The process of international entrepreneurship influences both international business and foreign markets. The commercial decision to follow an opportunity is enhanced by the presence of both firm competences and market opportunity. International entrepreneurship lies central between opportunity creation and opportunity discovery in terms of influencing in the foreign markets. Speed of influence is also affected by the process of international opportunity formation. Opportunity exploitation takes lengthier when internationalization is involved in the body of the entrepreneurial opportunity—company capabilities and market opportunity. The speed of internationalization depends on the complexities of developing firm capabilities (Barkema and Vermeulen 2014).

International entrepreneurship is a amalgamation of risk-seeking, innovative, and proactive behavior that global borders and is planned to create value in

organizations (Giamartino et al. 2013). It is important to determine the form of relationships among the environment, industry, and entrepreneurial players to achieve a better understanding of how international entrepreneurship in Iranian businesses are discovered and exploited in an foreign marketplace. It is vital to clarify why some businesses crosses foreign markets with greater speed than others (Giamartino et al. 2013).

Figure 1 depicts a model of influences on the international entrepreneurship. As shown, there are three vital aspects to such influences. First driver is the time between the discovery of an opportunity and its first foreign market entry. Second, is the open innovation strategy? Obviously, our model focuses on value creation. International entrepreneurship is a unique and worthwhile process. The model proposed in this study highlights the importance of international entrepreneurship as a mechanism to configure and transform to a firm’s value creation. The international entrepreneurship model, reflected in Fig. 1, clearly shows the key antecedents. These determinants affect the international entrepreneurship and foster it towards value creation. The international entrepreneurship is a key success factor without which a business will not succeed.

According to Kuemmerle (2012), an international entrepreneurship focuses on value creation and reinforces the business intellectual ability by acquiring professional knowledge and exchange it by formal and informal communication channels. One of the most important channels is open innovation. Open innovation is a pattern that thins that companies should implement external networks and alliances, and external paths to market. Alternatively, it is “innovating with partners by sharing brand, platforms, and technology”. The boundaries between a firm and its environment have become more penetrable; innovations can easily transfer inward and outward. The dominant idea behind the philosophy of open innovation is that, firms cannot afford to rely entirely on their own competencies, but should license patents from other companies even competitors to seize international markets (Dvorak and Tamara 2013). According to Marques and Joao (2014), open innovation includes several advantages to firms in a global collaboration such as:

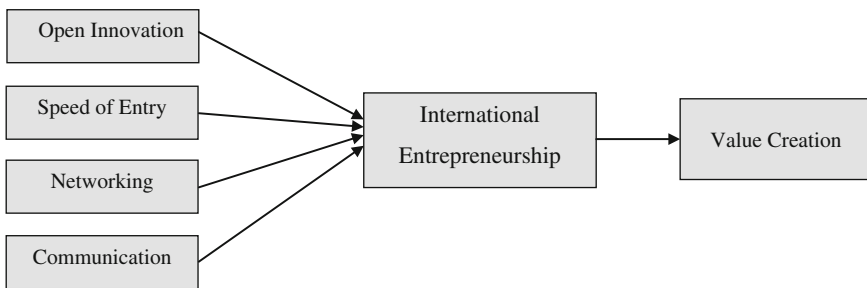


Fig. 1 The international entrepreneurship model

- Reduced cost of conducting international market research
- Potential for improvement in new product/service development
- Integration of customer knowledge in their t process
- Increase in accuracy for market segmentation and niche marketing
- Potential for synergism between suppliers, rivals and distributors
- Potential for international marketing

Similar to the “collaborative innovation strategy,” companies open innovation process deeply integrate external networks and alliances to ensure the effective joint development of foreign markets and to grasp opportunities in the global market (Melese et al. 2009). However, as the required knowledge is widely distributed outside the company’s organizational boundaries, the firm can engage in what we call a “network-based innovation strategy” by engaging and maintaining open innovation logic with various external nodes to foster international entrepreneurship (Marques and Joao 2014). The firms become part of a larger ecosystem consisting of markets, supply chains, value chains and other businesses.

Based on the conceptualization of the business model discussed in the current study, we propose that pursuing open innovation is likely to affect the international entrepreneurship with respect to (1) the speed of internationalization and (2) the intensity of internationalization. Open innovation can affect the “content” dimension of international entrepreneurship as co-creating markets with foreign partners may lead to a new value proposition. Open innovation can further affect the “structure” dimension of of international entrepreneurship as assimilating external sources into the firm’s innovation processes may change the role firms play in their innovation activities (Fig. 1).

### 3 Proposed Linkage that Foster International Entrepreneurship and Its Outcome

The following propositions summarize how International Entrepreneurship may relate to several key determinants variables.

- PI International entrepreneurship is positively affected by open innovation.
- PII International entrepreneurship is positively affected by speed of entry.
- PIII International entrepreneurship is positively affected by networking.
- PIV International entrepreneurship is positively affected by level and type of Communication.
- PV International entrepreneurship is positively related to Value Creation in term of organizational wealth.

## 4 Implications and Conclusion

Organization strategies should create a climate where creative efforts are encouraged. Therefore, the future of organizations depends on their ability to ignite the entrepreneurial spirit within their organization in order to create forward thinking.

The major force behind the concept of international entrepreneurship is a revitalization of innovation, creativity, and managerial development in our corporation to seize foreign markets. It is clear that international entrepreneurship is a complete redevelopment of our traditional strategies and thinking to compete in global markets. Thus, newer and more innovative methods will also accompany this transition in strategies.

Overall, it appears that international entrepreneurship may possess the critical determinants needed for the future productivity of our organizations. So, recognizing how to assess the current environment, creating innovation networks, exploitation of customer immersion, transferring the knowledge and encouraging education activities and communication systems can be an important key for developing international entrepreneurship in today's organizations and can be considered as a prominent architecture of organizational thinking.

## References

- Autio, E., Sapienza, H. J., & Almeida, J. G. (2015). Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of Management Journal*, 43, 909–924.
- Barkema, H. G., & Vermeulen, F. (2014). International expansion through start-up or acquisition: A learning perspective. *Academy of Management Journal*, 41, 7–26.
- Bell, J. (2015). The internationalization of small computer software firms—a further challenge to stage theories. *European Journal of Marketing*, 29(8), 60–75.
- Dvorak, T. (2013). *Co-innovation: Customer motives for participation in co-creation processes via social media platforms*. Faculty of Management and Governance: University of Twente.
- Giamartino, G. A., McDougall, P. P., & Bird, B. J. (2013). International entrepreneurship: The state of the field. *Entrepreneurship: Theory and Practice*, 18, 37–41.
- Kuemmerle, W. (2012). Home base and knowledge management in international ventures. *Journal of Business Venturing*, 17, 99–122.
- Kuemmerle, W. (2015). The entrepreneur's path to global expansion. *MIT Sloan Management Review*, 46, 42–49.
- Madsen, T. K., & Servais, P. (1997). The Internationalization of Born Globals: an Evolutionary Process? *International Business Review*, 6(6), 561–583.
- Marques, J. P. C. (2014). Closed Versus Open Innovation: Evolution or Combination? *International Journal of Business and Management*, 9(3), 196–203.
- Melese et al. (2009). Open innovation networks between academia and industry: An imperative for breakthrough therapies. Nature America, Inc, 15 May.
- Runyan, R., Droge, C., & Swinney, J. (2016). Entrepreneurial orientation versus small business orientation: What are their relationships to firm performance? *Journal of Small Business Management*, 21.

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# Design of the “International Entrepreneurial Marketing (IEM) Pattern”: Entrepreneurial Firms of Food Industries Throughout Iran

Mehran Rezvani

**Abstract** This study aims to present a rational and process-oriented framework originated from the pluralistic standpoint. The primary objective of this framework is to conceptualize the entrepreneurial marketing and entrepreneurs’ marketing methods. For this purpose, a sequential exploratory mixed method was conducted that accomplished two different types of scientific collaborations. Statistical sampling was carried out amongst nineteen out of twenty-one active entrepreneurial firms of Iran’s food industries. Results showed that the pattern of IEM upon an evolutionary basis profited 5 different phases including ‘restricted sales and initial activities of marketing’, ‘suitable and opportunistic sales’, ‘diversified marketing’, ‘profitable and integrated marketing’ and also ‘proactive marketing’. The main components of the considered phases comprised of 6 themes, 23 dimensions and 164 entrepreneurial details supposed to have different specifications during the different periods of time. Meanwhile, a new definition of entrepreneurial marketing has been accordingly presented. The main contribution of this paper is exploring, distinguishing and conceptualizing the “International Entrepreneurial Marketing (IEM)” based on entrepreneurs/owners in this field by using life cycle approach.

## 1 Entrepreneurial Marketing; The Interface of Marketing and Entrepreneurship

Interaction between Marketing and Entrepreneurship goes back to the Scientific Conference of 1987 held in collaboration with American Marketing Association (AMA) and the International Council of Small Businesses (Hills and Hultman 2005; Shaw 2004a; Carson and Coviello 1997; Gruber 2003; Bjerke and Hultman 2002; Morris et al. 2002). In fact, the main purpose of the studied concept was: (1) to understand the interface of marketing and entrepreneurship fields; (2) to comprehend

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the effect of entrepreneurial behaviour on marketing and (3) to reciprocally adopt innovative approaches towards marketing (Carson 2005; Collinson 2002). However, it seems that the previous studies are still in the early stages and there exist a critical lack of theoretical principles regarding the respective subject.

Entrepreneurial marketing, by incorporation of infrastructural aspects of marketing and entrepreneurship, will also involve leadership of the customers towards creating the new markets rather than the mere service-providing in the respective existing ones (Shaw 2004b). Therefore, the main core of entrepreneurial marketing thought is that the firm should be able to liquidate its own product before others (Chaston 2002). Some similar theories were previously taken into account within the classic principles of entrepreneurship and marketing (Cadeaux 2000; Chaston 2002; Carson and Gilmore 1999). Indeed, entrepreneurship is considered as an effective approach in order to create better value in the market by leveraging innovation for developing the products, process and the strategies which can meet the needs of customers and stakeholders in a better way (Fillis 2006; Hills et al. 2008). Marketing is also thought as the heart of entrepreneurship and the essential factor of creating competitive advantage in the firm (Shaw 2004a).

In this concern, some experts do believe that the two subjects of marketing and entrepreneurship are going to have similarities in two different manners. The first is when the market situation is relatively stable and the entrepreneurship will lead to the recognition of the unknown needs. The second is likely to happen in the dynamic and evolved markets where entrepreneurship is leading the marketing strategy to the development of existing needs as well as discovering the new ones (Mankelov and Merrilees 2001; Chaston 2002; Hills and Hultman 2005; Collinson and Shaw 2001; Carson 2005; Stockes 2000, 2002; Fillis 2000, 2004).

Nevertheless, three rather distinctive groups of application fields related to the entrepreneurial marketing are recognisable in the previous studies: the first is that the entrepreneurial marketing is to be imagined in SMEs and at the early stages of the firm's development. In this manner, the entrepreneurial marketing and the marketing of SMEs will be synonymous with one another. This method, most often but not always, is innovative and opportunistic (Chaston and Mangles 2000; Hills and Hultman 2005; Sciascia et al. 2006). However, there is still a critical difference between entrepreneurial firms and SMEs from the standpoint of entrepreneurial behaviour. In a better explanation, the entrepreneurial marketing has relationship with the growth and entrepreneurial behaviour, while, marketing of small businesses is related to the marketing behaviour within those firms regardless of their entrepreneurial situation (Bjerke and Hultman 2002; Morris et al. 2002; Lodish et al. 2001). This type of researches has foundation within the entrepreneurial behaviour of the respective firms.

The second is that the entrepreneurial marketing is considered as a complement and an umbrella term for a variety of different techniques and conventional marketing methods. In this manner, the entrepreneurial marketing, as an integrated concept, will combine the strategic and operational aspects of marketing with the respective aspects of entrepreneurship in a comprehensive framework (Morris et al. 2002). And finally, the entrepreneurial marketing is taken into consideration as a

strategic approach for the purpose of acquiring competitive advantages regardless of the firm’s size. In this matter, the opinions of Krizner (1973), Shumpeter (1934), Ansoff (1984) and Porter (1980) can be applied in order to understand how the internal capabilities can be turned into the competitive situation in the market (Bjerke and Hultman 2002).

Nevertheless, there exist only a few articles in the subject of entrepreneurial marketing and most of the respective articles are still at their early stage. In addition, internationally, no enough attention has been paid to the subject’s area. In other words, although there are a variety of different and scattered viewpoints in the studied field, there still exists a remarkable lack of semantics within the respective parts of an operational model. Thus, it seems that fewer researches have ever had a conceptual and methodological look at this subject, since they have only approached to this matter through a pragmatic outlook in order to specify a particular phenomenon of this field (i.e. advertisement, distribution network and etc.).

The objective of the first part of this research is to find a suitable answer of “concept”, “nature” and “main component” of IEM pattern and the state of each one through execution of a qualitative research by means of cross case study strategy. For the purpose of making sure about enough validity, the following hypothesis has been developed and examined through the execution of the quantitative research.

Hypothesis: “The IEM process within the entrepreneurial firms is evolutionary and consists of 5 different phases including restricted sales and initial activities of marketing, suitable and opportunistic sales, diversified marketing, profitable and integrated marketing and also proactive marketing”.

In this study, using the mixed method research, two types of innovations have been performed; one is from the aspect of conceptualization and theorising and the other one is from the aspect of ontology and methodology of the research’s subject.

## 2 Critical Literature Review

In this section, by a critical look at the available previous studies and based on the existing paradigms over the social sciences and management field, the necessity of this research is defined.

Colinson and Shaw (2001) paid a particular attention to the principles of pluralistic paradigm and hermeneutics considering the convergence of the two sub-categories of the management field, namely marketing and entrepreneurship. In their study, the respective emphasis is mostly put upon the managerial competencies for establishing a different type of marketing comparing the conventional one. They also attempted to consider the concept of networking as an effective tool to reach the respective managerial qualifications. But they have not presented a specific classification of the effective components in the entrepreneurial marketing.

Morris et al. (2002) have explored the concepts of marketing and entrepreneurship. Since they fundamentally attempted to implement the instructions

of the pragmatic paradigm, therefore they have only had an exclusively subjective view in designing the subject's dimensions. In this research, moreover, there has been no attention paid to some particular factors like the internal and external environment's factors and also the appropriate level of entrepreneurial marketing activities has not been defined.

In another research, Mankelow and Merrilees (2001), as per the instructions of the critical theory, have been trying to present a model of entrepreneurial marketing for the rural women. In this study, they have only focused on the entrepreneurship viewpoint and the environmental factors have been neglected. In addition, based on the conventional view, only small and new venture companies have been considered. According to the researchers, weakness of this research is low attention to the validity and reliability of the variables.

The next study relates to the efforts of Cadeaux (2000) based upon the interpretive paradigm and it is concerning 'sliding between the product and/or the entrepreneurial service'. This research, too, has only a subjective attitude to variables. With a post modernistic view, Lodish et al. (2001) did focus on the paradigm shift of the new venture success from the pivotal role of the 'technology factor' to the pivotal role of the 'marketing factor' with an entrepreneurial approach particularly concentrating on high-tech enterprise. Technological factors for advancement of the firm's objectives and success were of great importance in this study.

Carson and Gilmore (1999) examined the entrepreneurs' characteristics within the SMEs. The most important vacuity ahead of this research is that it is only applicable in SMEs. The respective deficiency of this article is that the main components of its examined dimensions have not been separately specified.

Shaw (2004a) has also been trying to specify the relation of entrepreneurship and marketing from the standpoint of social marketing within the public non-profit corporations. But he has presented neither a structure nor an organised framework for the entrepreneurial marketing activities considering the subject proposal to be enough. Kotler (2003) does define the entrepreneurial marketing based on the nature of formalisation of the firm's marketing activities. Hills and Hultman (2001), by solely biographical exploration of the related done studies in the field of entrepreneurial marketing over the last decade, have been trying to classify the pivots of such existing researches but they have not presented any special operational classification.

Meanwhile, some other studies have been conducted by Hills and Hultman (2005), Lodish et al. (2007), Webster (1997), Bjerke and Hultman (2002), Chaston (2000), Bäckbro and Nyström (2006) and others in this field. The most emphasis has generally been on this fact that the main feature of the entrepreneurial marketing is to increase the firm's ability in confrontation with the continuous environmental changes (Bjerke and Hultman 2002). Nevertheless, it is not possible to precisely observe an integrated and suitable pattern of entrepreneurial marketing. In most of these researches, particular lacks of attention paid to the internationalisation process of the firm, nature of the industry, firm size, the internal factors of the firm, the

marketing mix, environmental considerations in small and large scales of national and beyond national levels, methods of entering into the international markets, nature of the firm from the traditional or born global aspects, the entrepreneurs’ specifications and the like are observable.

### **3 Conceptualizing of the ‘Entrepreneurial Marketing’ Term**

There are still a few restricted theoretical principles available in this regard, because of the nascent concept of entrepreneurial marketing. Entrepreneurial marketing is mainly applied for defining the non-programmed, non-linear and highflying efforts of the entrepreneurs’ marketing activities (Hultman 1999; Kotler 2003; Lodish et al. 2001). But, by mulling over the meaning of these two expressions, viz. ‘Marketing’ and ‘Entrepreneurship’, two types of meaning (usage) for interpretation of the ‘Entrepreneurial Marketing’ term will be provided as follows:

From the entrepreneurial marketing, and of course in a minimal (restricted) definition, the meaning of marketing in the newly established businesses with a fast rate of growth is often comprehended (Bjerke and Hultman 2002; Gruber 2004; Hills et al. 2008). But in a maximal definition, the entrepreneurial marketing term is comprehended as a new and yet clears imagination of the marketing philosophy. It consists of ‘A behaviour that is likely to be performed by an individual or an organisation and/or both of them which, by challenging the fixed and established rules of the market, applied as a policy in the process of creating the new solutions’ (Chaston 2000). In this study, the second point of view has been considered as the base of the research execution. Meanwhile, in order to better comprehend the subject, a new definition of the IEM have been presented (see Conclusion part).

### **4 The Research Methodology**

Regarding the theoretical vacuity in the concept of entrepreneurial marketing the sequential exploratory mixed method research has been applied. Since, the qualitative (the research processes) and quantitative (the research findings) points of view, is simultaneously going to provide a more comprehensive concerning a wide range of questions, this method will lead to a better validity and reliability for the collection of findings (Cresswell 2007).

Amongst the benefits of the mixed method, increase of findings more complete details, supplementation of both quantitative and qualitative approaches, development of one another, discovering the antonyms and discrepancies and also developing the area and depth of the research can be accordingly mentioned (Tashakkori and Teddlie 2003).

The purpose of the sequential exploratory mixed method research is that firstly the approach of qualitative research, viz. specifically the strategy of exploratory cross case study, has been used in order to understand the natural situation of ‘the Case(s)’ as well as finding the special meaning that the respective individuals (i.e. the entrepreneurs) do ascribe it to this concept. Then the approach of quantitative research, viz. specifically the strategy of survey method and the tool of questionnaire, has been applied in order to reach an appropriate and dynamic theory for a comprehensive description of the subject.

1. **The Qualitative Research:** The first phase of the study according to the Ghauri’s (2009) and Miles and Huberman (1994) conducted as follows:
  - (a) ***The 1st Phase—Definition of Research Problem (Question):*** As it was mentioned, the main problem (question) of this current study is modelling and conceptualisation of the entrepreneurs’ marketing activities and relations as well as comprehension of the nature and quality of the main components of this concept.
  - (b) ***The 2nd Phase—Selection of the Initial Theoretical Framework and Crafting the Required Instruments and Protocols of the Research:*** In all phases, a theoretical framework for the purpose of enriching the report’s results, organising the interviews and also gathering and management of data has been taken into account. However, some ideas of entrepreneurship knowledge and entrepreneurial marketing have also been considered. Thus, the suggested theoretical framework was considered as a framework including eight essential ‘Themes’, including: organisational factors, marketing mix factor, market research factor, consumer’s behaviour factor, strategy factor, planning factor, market control and assessment factor and international activity factor. In fact, it is supposed that all the subjects relating to the international marketing can be summed up within these 8 themes. The mentioned themes have been the base of designing the open questions for the related individuals and also collection of the needed data. However, the components of this framework became subject to modification after getting the interviews carried out but in order to not being endangered by sole description of the studied phenomenon without having any deep comprehension regarding that, the respective theoretical framework have been adopted.
  - (c) ***The 3rd Phase—Selecting Cases:*** Deep semi-structured interviews as well as asking ‘Open’ research questions from 14 different individuals among the entrepreneurs and senior commercial or marketing managers of 10 different firms of Iran’s food industries have been used in order to extract the research’s criteria and discover the nature of entrepreneurial marketing concept. Food industry is pioneer industry in Iran and after the oil industries has assigned the highest rate of employment, profitability and export and also competitive factor (most important factor).

- (d) ***The 4th Phase—The Systematic Gathering of Data:*** In this study, in order to guarantee the results’ validity and also to take advantage of triangulation benefits, interview has not only sufficed but also multiple resources and existing archived documents for enrichment of the results have been utilised. Nevertheless, it has been carried out in a way to provide the conformity of the triangulation. It should be noted that in the process of data gathering, like the other qualitative researches, instead of Probability Sampling, ‘Purposeful Sampling Strategy’ has been applied. The aim of this sampling is not to obtain a statistical deduction, but to select the best individual among the sampling population in order to better analyse the aspects of the case. Thus, the appropriate strategy is ‘Criterion-Referenced Sampling’. In addition, the ‘Theoretical Sampling’ is used for building a pattern and a theory on the basis of the gathered data. In this study, the targeted individuals comprise a group of entrepreneurs, managing directors and/or senior managers in the field of commerce or marketing of the respective firms. Table 1 shows description of these people.
- (e) ***The 5th Phase—Management and Classification of the Gathered Data:*** Through the interviews, the process of data gathering is continued up to the ‘Saturation Point’. Then, answers of the related questions were being asked from the interviewees to be configured within the proportionate tables due to Nvivo software. In addition, in order to more clarify the answers, the interviewees, through asking the ‘Open’ questions, were also requested to describe the related subject out of the theoretical framework. In addition to the interviewees’ opinions and archived documents, the data have been classified via ‘Inductive Deduction Method’ in the form of themes, dimensions and details (Eisenhardt 1989).
- (f) ***The 6th Phase—Analysing Data (The Research Findings):*** In an exploratory cross case study, the processes of analysis and data collection will together be done in a cyclic process. Thus, the final explanations must be in conformity with several criteria and shall provide a kind of authentic and compatible interpretation from the discovered reality. Therefore, in this study, after classification and management of data, the presupposed theoretical framework was modified and the number of ‘Themes’ accordingly decreased from 8 to 6. Also, four factors of strategy, planning, market research and consumer’s behaviour, in a compound way, did combine with each other as the factor of ‘Strategy and planning’ as well as the factor of ‘Market Research and Consumer’s Behaviour’. In addition, ‘Triangulation’ did result in producing 23 ‘dimensions’ and 164 entrepreneurial ‘details’ as well as IEM components (Table 2). It is worth to mention that the 164 mentioned entrepreneurial details are supposed to have different interpretations in the course of different time periods.
- Examination of the natural situations of the examined firms have revealed that during 1.5–2 years, ‘scope’ and ‘depth’ of the studied firms’ marketing activities have been developed to a great extent and entered into a new stage. Therefore, after 8–10 years since the activities’ commencement,

**Table 1** Statistical population and description of interviewees

Enterprise	Type of production	Firm age (year)	Interviewee position	Education field	Experience (year)	Qualitative research	Quantitative research
e1	Agro-food	32	Public relation manager	Communication	20	✓	✓
e2	Agro-food	14	Marketing manager	Management	6	✓	✓
e3	Macaroni	4	Founder and executive manager	Engineering	10	✓	✓
e4	Dairy	10	Founder	Management	12	✓	✓
			Executive manager	Engineering	7	✓	✓
			Marketing manager	Engineering	5	✓	✓
			Founder	Industries alimentary	20	✓	✓
			Superlative advisor	Industries alimentary/management	23	✓	✓
e5	Agro-food	10	Marketing manager	Engineering	6	✓	✓
e6	Agro-food	11	Founder and commercial manager	Engineering	12	✓	✓
e7	Agro-food	10	Founder and executive manager	Diploma	14	✓	✓
e8	Agro-food	14	Commercial manager	Engineering	6	✓	✓
e9	Saffron	10	Executive manager	Management	8	✓	✓
e10	Beverage	18	Marketing manager	Engineering	25	✓	✓
e11	Chocolate and Cookie	32	Marketing manager	Engineering	28	-	✓
e12	Service	6	Executive manager	Management	12	-	✓
e13	Chocolate and cookie	17	Marketing manager	Management	15	-	✓
e14	Beverage	18	Marketing manager	Engineering	20	-	✓

(continued)



**Table 1** (continued)

Enterprise	Type of production	Firm age (year)	Interviewee position	Education field	Experience (year)	Qualitative research	Quantitative research
e15	Chocolate and cookie	5	Marketing manager	Management	13	-	✓
e16	Dairy	18	Marketing manager and executive manager	Management	8	-	✓
e17	Macaroni	11	Founder and executive manager	Economy	30	-	✓
e18	Agro-food	15	Founder and executive manager	Engineering	17	-	✓
e19	Beverage	24	Founder and executive manager	Diploma	38	-	✓

**Table 2** International entrepreneurial marketing components (themes, dimensions, entrepreneurial details)

1. <i>Organizational factors</i>	Trial and error planning
1.1. <i>Structure</i>	Having sells planning
Informal structure and relationship	Having sells strategy
Just accountant beside entrepreneur	Using new technologies and e-commerce
Establish sells department	Using multi language web site
Conducting structured but tastefully activities	Membership in international export unions
Doing structured and systematic activities	Partnership with banks
Initiating monitoring and control department	Partnership with large organization or government organization for realization of international program
Structured marketing and sells	Market development
2.1. <i>Personnel</i>	Sells flexibility
Experimented employee	Short term and mid-term planning
There is no relevant training to marketing and sale	Planning based on compared with best competitor
Personnel training	Using maximum production capacity for sale
There are some experienced personnel	Increase sells volume
Having marketing and advertising personnel	2.4. <i>Marketing mix</i>
3.1. <i>Style</i>	Using trusted and authentic people for introducing products in market
Having specific vision	Offering products not produced by outsiders or better than them
Production oriented	Using other’s brand for stronger presence in market
Market oriented	Changing attitude toward demand-base producing
Using simple and craft technology	Introducing product as a lateral one of a known product
Using up-to-date technology	Product development by entrepreneur experience
Marketing and selling are full time activities	Product development by R&D activities
Using customer suggestion system	Product development by foreign samples
Network marketing by employee	Developing new product according to friends and family’s proposing
Organizing professional and specific marketing activities	Considering the human’s five senses in designing and developing products
4.1. <i>Systems</i>	The Policy of offering high quality products and avoiding cheap-selling
Getting Implication of personal about products	Seeking new opportunities for new product presentation
Un structured customer knowledge documentation	Receive of international standards

(continued)

**Table 2** (continued)

Structured customer knowledge documentation	Registration of alternative and subordinate brand
Marketing activities documentation	Un cash selling
Deployment of voice of customer system	In cash selling
Using marketing information systems	Choose distribution channel by familiarities not performance
Determine marketing process and activities	Policy making on distribution
Making process-based marketing activities	Special concentration on distribution
<i>2. Marketing mix factors</i>	Initiating distribution channels
<i>2.1. Product</i>	Attending in international exhibitions to introduce products and brands
Attention to have valid standards	Attention to profit margin of sellers
With out branding (non branding)	Special concentration on promotion
Company-based branding	Do not using company products for advertising
Product-based branding	Produce by licensing
Generic branding (non professional branding)	Under internal famous brand production
Concentrate on packaging	Under international famous brand production
Maximum effort for releasing high quality products because of technical and scientific history of entrepreneur	Creation rumour (buzz)/sensitivity about product in market
Brand consolidation	Having slogan
Brand development effort	Presence in some small sector of large market
Produce homogeneous and diverse products to cover customer demands	Presence in large sector of small market
Produce Inhomogeneous and diverse products to cover customer demands	Select niche market
Packaging by using the language of target export country	Development of activities and market penetration and market establishment
Change packaging through voice of customer (convenience packaging)	Finding commercial partner for develop products
<i>2.2. Price</i>	Alliance with competitors for develop products
Low finished cost	Initiating international activities
Use credit facilities for product establishment	<i>3.4. Market penetration</i>
Price policy making like competitors	Market penetration by giving product sample To seller even in imprested form
Price policy making	<i>4.4. Market scope</i>
<i>3.2. Distribution</i>	Concentrate on local markets
Rapid delivery to retailers in first stage	Concentrate on whole markets
Limited distributions	<i>5.4. Market commitment</i>
Direct distribution	Low commitment
Distribution by whole selling	Medium commitment

(continued)

**Table 2** (continued)

Outsource product distribution	High commitment
Initiate special distribution organization	6.4. <i>Customer</i>
Distribution through exclusive representative	Making customer loyalty
4.2. <i>Promotion</i>	Customer intention in produce or improve product
Do not mention on advertising and Do not determine advertisement budget	Customer intention
Special concentration on advertisement and public relation	Continuous customers validation
Using telephone marketing and personal selling by entrepreneurs	5. <i>Market control and evaluation factor</i>
Persistent effort of entrepreneur in embedding product in market	1.5. <i>Systems and methods</i>
Concentrate on sellers profit margin and direct selling	Only financial controls
Attending in specialized exhibitions	Market share control beside financial controls
Developing new products according to entrepreneur's taste	Taking seasonal reports of sells performance
New product development based on market demand	Sale monitoring by market sector
Developing new products on the based on actions of R&D department	Having continuous systematic market monitoring and MKIS
Developing new products according to friends recommendations	Continuous report gathering from market
Creating positive image of brand and assigning a slogan	Relative control over developing same counterfeit brands
Concentrate on indirect advertisement	2.5. <i>Marketing mix</i>
Sales promotion through sales manager's personal and emotional relations with buyers	Just control product's quality
Wide advertising along with considering sellers benefits	Control of price in market
Doing ads on foreign media	Control of distribution channel behaviour
Using sales promotion tools	Control of competitors promotion activity
Attending in international exhibitions	3.4. <i>Competitors</i>
Sponsorship and social responsibility	Monitoring competitors non-professionally by sale manager and entrepreneur
3. <i>Market research and consumer behaviour factor</i>	4.5. <i>Customers</i>
3.1. <i>Systems and methods</i>	Analyzing lost and attracted consumers
Doing market research informally based on social network's recommendations	Customer's validation in terms of familiarity and not performance
Doing market research based on formal information	5.5. <i>Suppliers</i>
Examining news and information of market briefly and unsystematic	Quality control of product and supplier

(continued)

**Table 2** (continued)

Monitoring customers behaviour in shopping canters by entrepreneur	6. <i>International activity factor</i>
Producing based on production capacity	1.6. <i>International market entry decision</i>
Producing based on polling of consumers	The goal of exporting is merely promotion of the name of Iran not profitability
Getting information of markets and industry through membership in specialized unions	The goal of international activities is Profitability
Deployment of customer satisfaction system	There is no images about international activities
Doing markets research according to holding meetings for consultation with whole sellers and market actives	Purpose of international activities is validity attainment in domestic market
Polling customers in specialized exhibitions	2.6. <i>International target market selection</i>
Getting benefits from marketing consultants and institutions in marketing research	Attending in neighbour countries
Creating customer complains system	Attending in similar countries
Temporary monitoring by sells manager and marketing manager	Attending in competitive markets
Having data base of customers, competitors and suppliers	Selecting target market based on its potential size
Hearing market whispers	Selecting target market based on competitors actions
Examining quality of competitors products by entrepreneur	Selecting target market based on marketing mix factors
Identifying and analyzing suppliers based on reviewing social network	Selecting target market base on the expenses of presence
Having cohesive mechanism for market research and analyzing consumer behaviour	Selecting target market based on personal relations
Acquiring information of foreign markets through social network or having a trip to foreign countries	3.6. <i>Market entry modes</i>
Acquiring information of foreign markets through entrepreneur trip to that market	Attending in international exhibitions in order to export products
Using standards for joint to business partners	Export through referring merchants to the company
Using marketing information systems	Using friends network outside the country and granting them representation temporarily
Lack of tracing competitors actions in market	Hiring Iranians as mediator and to organize exports
Constant tracing of competitors in market	Partnership with popular brand in target market based on licensing or joint venture
4. <i>Strategy and planning factor</i>	Using competitors brands for attending in foreign markets or selling products to a similar and foreign producer under the name and brand of original company
1.4. <i>Vision</i>	International brand registration
Conducting marketing activities tastefully	Transferring advertisement to foreign representatives

almost all the marketing activities would be systematic. In explanation of the findings obtained from the exploratory cross case study, the following matters, regarding each of the 8 aforementioned themes, can be mentioned:

- From the aspect of ‘organisational factors’, the entrepreneurial firms are not very integrated during the first 2 years of their activities. Also, the respective activities are mainly organised by the entrepreneur himself or, at most, by another individual with the financial position. Other people who are probably active in this field have mostly been trained empirically and they do not have related scientific experiences.
- In this manner, from the standpoint of ‘marketing mix’, considering the educational and family background of the founder, more stress will be placed on the factor of product’s quality and other factors are not going to be seriously considered. It should be noted that presentation of a new product is also based on the friends’ recommendation and/or as a result of benchmarking from the other countries during travelling overseas. In packing and colour scheme of the products, the clients’ five senses are usually exploited.
- From the standpoint of ‘market research and consumer’s behaviour’ and with a ‘Top-Down’ point of view, production and distribution of a particular product into particular markets is mainly done as per recommendations of the entrepreneur’s social networks and contacts and no methodical and systematic investigations would be done.
- From the standpoint of ‘strategy & planning’, it should also be noted that this factor, to a great extent, is influenced by the entrepreneurial attitudes and spirits of the companies’ founders. Since, most of the planning activities are supposed to be on a short-term basis and no special analysis of the internal and external environment’s factors is actually performed to the confining characteristic of the firm’s newness and novelty (i.e. the state of being unknown in the market, limited financial resources as well as lack of enough skilled and expert staff).
- From the standpoint of ‘control and market assessment’, most of the attention is also paid to the financial controls and no/low attention is paid to the market share and the control of competitors and/or the overview of the processes as well as made decisions of the regional and beyond-regional policy-making authorities. At last, from the standpoint of ‘international activity’, it should also be noted that over the first 2 years of activities, there is a limited amount of attention paid to the international activity and accordingly there is no special action taken in this concern.
- Gradually, with passage of the time, the dominance of technical and manufacturing viewpoints will be overthrown by domination of the ‘market & customer-oriented’ viewpoints. In short, regarding expansion of the company’s activities and also enhancement of the company’s financial capabilities, by means of formation of the marketing department as well as recruitment of expert staff, activities of the marketing field would get much formulated and systematic, so that the individual

innovative actions of the first 3–4 years will be replaced with a series of new organisational innovations after a period of 8–10 years, the zenith of which will be success in the beyond-national markets. Comparative study of the effective factors in marketing activities by qualitative approach reveals the following realities:

- In sole 9 cases, the registered name of the company is as same as its trade name
  - Firms are normally nominated upon the industrial group and the factory location name or compatible with the factory activity. Exceptionally, in a sole case, the founder name was observed as a part of the firm name.
  - Sole for 4 companies, central bureau were located inside Teheran. In other cases, the bureau is placed in the factory
  - Sole in 5 cases, the manager is other than the entrepreneur
  - Amongst the firm’s manager, only 4 mangers are specialist in management field
  - Except in 2 cases, the other ones are private firms
  - The whole firm’s are attended in neighbour, similar and then competitive foreign target market
  - The whole firms are equipped to high technology
  - There exist sole 6 firms which registered their brands internationally
  - Sole 7 firms own advertising slogan
  - There exist sole 6 firms which used product branding
  - firms operate the special responsibilities within the governmental and commercial institutions
  - There exist high level of innovation and creativity throughout the 11 firms.
  - 3 companies sell the products via internet. Moreover, except 4 cases, the other companies are equipped to multilingual websites
  - 12 firms developed important measures in networking to promote their activities
  - Mere one firm has applied the international approach in the nomination process of the firm
  - firms are performing as the international brands supply network
  - Except 5 cases, the other firms provide the raw materials from inside the country
  - Sole 7 firms provide the heterogeneous diversity products.
- (g) **The 7th Phase—Shaping Hypothesis:** In order to develop the theoretical principles of the IEM and also considering the fact that the output of a desirable qualitative research along with the strategy of a exploratory cross case study will lead to a hypothesis; therefore further and more precise analysis of the respective firms did enforce this hypothesis that the process of IEM in the entrepreneurial firms is on an evolutionary basis and does include 5 different stages. It should be noted that for the purpose of re-examination of the processes with the assistance of related individuals and also to create the possibility of being provided with a theoretical and

reliable framework in the future (which were not witnessed in the other researches); these stages were named respectively as ‘restricted sales and initial activities of marketing’, ‘suitable and opportunistic sales’, ‘diversified marketing’, ‘profitable and integrated marketing’ and also ‘proactive marketing’. In the meantime, in order to test this hypothesis as well as creating the possibility of generalization of the results, the quantitative research has been applied.

2. **The Quantitative Research:** In this stage, the originated hypothesis from the qualitative research was examined for reliability purposes. Therefore, at this stage, as per the components of Table 2, from the sixth phase of the qualitative research, a questionnaire was provided in two parts. The objective of the questionnaire was to specify the rate of frequency and importance of the main components of the entrepreneurial marketing segregated by theme, dimension and detail within the five-part stages aforementioned. It was also designed to create an opportunity for a better comparison between the firms and also to achieve a comprehensive operational model for determination of dimensions during each of the five-part stages. The aforementioned questionnaire was distributed among the entrepreneurs and senior commercial managers of 19 firms out of 21 firms of the statistical population. In the coming section, to make short work of the article reporting, only the analyses relating to the ‘theme’ of the marketing mix and its ‘dimensions’ have been cited, segregated by the questionnaire’s parts.

(a) ***Analysis of the 1st Part of the Questionnaire:*** At the first part of the questionnaire, the objective was to verify whether the explored firms had considered the identified components or not, if so, at what stage of the five-part stages, the frequency results of which are as follows:

- Throughout the various stages, the lowest attention was paid to promotion, products, distribution and price, respectively.
- During the first stage, the highest consideration was deserved to the promotion and product elements, whereas the two other factors including price and distribution owing the similar score were recorded in the next step.
- In the second and third phases, the great attention was attracted towards promotion, product, distribution and price, respectively.
- In the 4th phase, the highest consideration was drawn to the promotion, distribution, product and price.
- In the 5th phase, although the promotion and distribution elements gained the greatest attention, price and product elements lack any significant consideration.
- The both elements of product and price attracted an increasing attention in the second and third phases. Then, they had a decreasing trend in the next stages. And finally in the 5th phase, it achieved to zero.
- Distribution element did not pass a clear trend throughout the various phases.



- Promotion element has shown an increasing move in the 1st and 2nd phases. Then, it passed a decreasing trend.

It should be noted that regarding the questionnaire’s nature, only examination of the frequency of the entrepreneurial marketing’s main components as well as the average of their significance will be significant. Therefore, classification of the results obtained from the quantitative research has assisted a better comprehension and also reinforcement of the qualitative research’s analyses.

In this way, it is possible to say that generally paying attention to the theme of marketing mix has decreased after second stage and some other priorities like strategy, organisational structure, consumer’s behaviour and international activities have then become important for the companies. In a better explanation, the total result is that prioritising of the marketing mix details has been changing in the course of the company’s age.

- (b) ***Analysis of the 2nd Part of the Questionnaire:*** At the second part of the questionnaire, the objective was to examine the significance rate of the six-part themes as well as their subordinate twenty-six-part dimensions within the five-part stages together with their frequency rate, detailed results of which are as follows:

Totally, using Lykert scale, it can be said that gradually the company’s challenges regarding some particular issues will decline and some other issues will become important. Then, for instance, for all the factors and all the companies, frequency of the significance rate of 1 with the frequency rate of 138 at the 1st stage has reached the rate of 4 at the 5th stage, while in proportion to the stages of the firm’s age, the significance rate of 5 with the frequency rate of 4 at the 1st stage has reached the rate of 85 at the 5th stage. In the coming section, other results relating to the different stages have been cited.

### 1. Analysis of “marketing mix” themes’ for the whole companies

- The 1st and 2nd degree of importance reduces throughout the fifth phases.
- The 2nd and 3rd degrees of importance have an increasing trend up to 3rd phase and then pass in a decreasing way.
- The 5th degrees of importance have an increasing trend through all phases.
- Although, the 1st degree of importance reduced for companies and reach to zero, but “e8” did pay a little attention to it in 5th phase.
- Solely, 4 companies such as “e1”, “e14”, “e19” and “e12”, have shown a significant importance to marketing mix though with different manner. The three first focus on product aspect, whereas the latter essentially concentrates on promotion factor.
- The highest importance level for each phases is as follows:

- 1st phase (2nd and 3rd degree of importance) has shown 22 frequency
- 2nd phase (3rd degree of importance) has shown 29 frequency
- 3rd phase (3rd degree of importance) has shown 32 frequency
- 4th phase (4th degree of importance) has shown 34 frequency
- 5th phase (4th degree of importance) has shown 37 frequency

These means that marketing mix factor has especial importance for all firms through different phases.

- Normally, in 3rd phase, companies' preferences were different in some subjects.
- In the whole cases, the 4th and 1st degree of importance have been reported as the highest (142) and the lowest (14) one, respectively.

## 2. Analysis of “marketing mix” Dimensions’ for the whole companies

- The frequency of 1st importance degree for product factor equals to zero for all the companies which illustrates a vital role of this element.
- “e15” have had especial attention to product element through all phases
- “e1”, “e15” and “e19” have highly concentrated on the product element which resulted in a good performance in the studied companies.
- In “e6”, “e7” and “e9”, product element in the 5th phase has shown a significant importance due to their activity and foundation precedence.
- In almost all companies, especially newer ones such as “e9”, “e18” and “e19” price element is a considerable factor (“e9” and “e19” are more depend on technology). However, the aforementioned factor is not of high importance for “e2”, “e8” and “e4” in 4th and 5th phases. Though “e9” and “e19” are technology based.
- “e10” drew the lowest attention to the price element. Although, by policies reformation, it had shown more attention to this factor from stage 3 on.
- Distribution element has gradually attracted the whole companies especially in “e6” and “e14”.
- “e12” concentrated poor attention to distribution element.
- “e3” and “e19” drew a full attention to the aforementioned element from the nascent stage.
- Distribution element found the highest importance in the 5th phase For “e1”, “e5”, “e6”, “e10” and “e14”.
- In all cases, except “e8” the promotion element has gradually lighted. Maybe, it is due to the company’s activity sort.
- Due to the reform in management throughout the “e14” and “e16”, the importance of promotion element has changed.

- “e5” and “e12” devoted a remarkable consideration to the promotion element (particularly “e12”).
- “e2”, “e4”, “e14” and “e16” did not greatly account on the promotion element which is due to the low financial capability of them. Moreover, these companies are listed among the traditional entrepreneurs in country.
- The poorest attention to the promotion factor is related to the “e8” in 5th phase.

## 5 Conclusion and Implication

Upon the results, qualitative and quantitative data not only are complementary to one another, but also their interactions with each other will provide a type of extra information regarding the process of IEM within the explored firms. In a way that in-depth qualitative explorations of each of the cases will result in multiple information for an effective interpretation of the respective quantitative analyses used in constructs assessment.

On contrary to most of the previously researches, this study considered the maximal definition of entrepreneurial marketing. Besides, different formative criteria of the IEM were conceptualised in an operational way and sheer theoretical specification of the subject, which could cause a malfunction in validity, was refrained. Thus, in conceptualisation of IEM can be mentioned that the International Entrepreneurial Marketing consists of applying the capabilities of the entrepreneur’s social network in creation of the new needs, designing and presentation of the new products and services, obsolescent of one’s own existing products, developing various methods to service-providing as well as make satisfaction of the customers and consumers’ and also creating a value more than the competitors’ by means of adopting innovative approaches in the foreign target markets.

Referring to the paper objectives and questions, it is worth to mention that the nature of IEM is evolutionary based includes 5 phases, which can be survived for 8–10 or 4–5 years within the traditional entrepreneurial firms or entrepreneurial modern firms, respectively.

Besides, it can classify the components of the IEM into 5 Themes, 23 Dimensions and 164 entrepreneurial Details which differ typically during the variable periods. Eventually, positioning of each elements of the IEM is shown in a 3 dimensional model (Fig. 1). The first, second and third dimensions trace ‘Themes’, ‘Dimensions’ and ‘entrepreneurial Details’, respectively. In this regard, due to disability in tracing 164 elements, it is sufficient to mention the two first aspects.

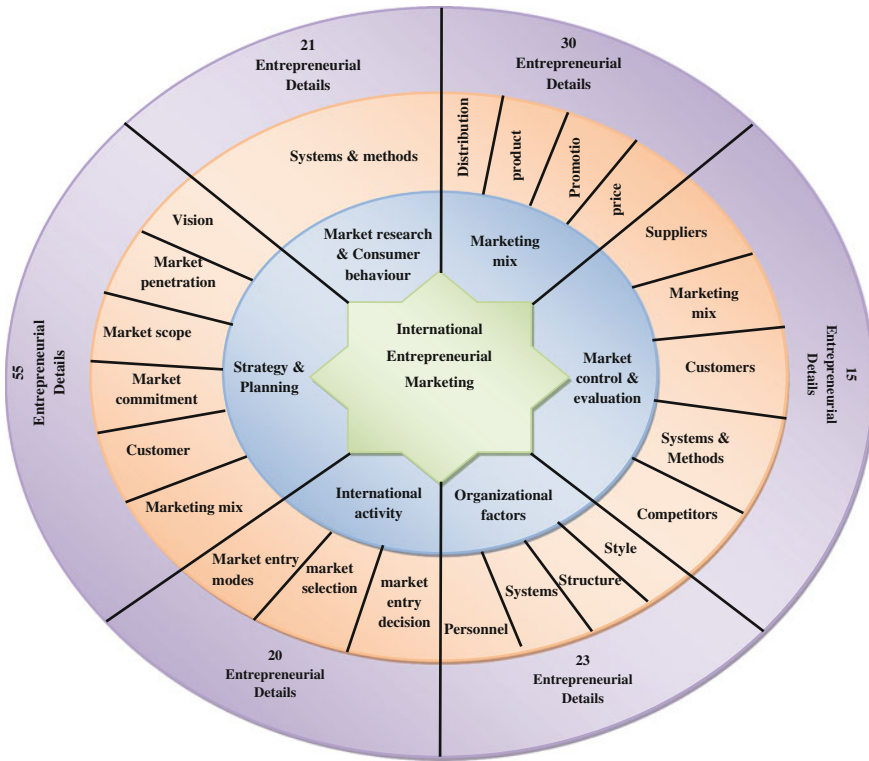


Fig. 1 Conceptual schematic model of IEM

On the other side, considering the results obtained from the quantitative research, the shaped hypothesis of ‘evolutionary basis of the IEM’ was approved.

This general result provided that the nature of selected sample firms from among the sampling population can be separated in the form of ‘within the traditional entrepreneurial firms’ and ‘within the modern entrepreneurial firms’. The meaning of within the ‘traditional entrepreneurial firms’ refers to the firms usually considered as the entrepreneur’s first career and have a close relation with the family and educational background of the entrepreneurs. On the other hand, the process of entrepreneurial marketing has taken place on a gradually evolutionary basis over a time period of 8–10 years. But the meaning of within the ‘modern entrepreneurial firms’ does refer to the firms which are not the first career of the entrepreneur and have been formed due to the entrepreneur’s manufacturing, commercial and industrial experiences or because of financial capabilities and/or the management knowledge of the entrepreneur and have a particular nature like that of born global firms in which the process of entrepreneurial marketing has taken place in a leaping way and in the course of 3–4 years. Below In Fig. 2 is shown conceptual model of IEM based on organization life cycle that include five-part stages of IEM beside 3 dimensional model of IEM.

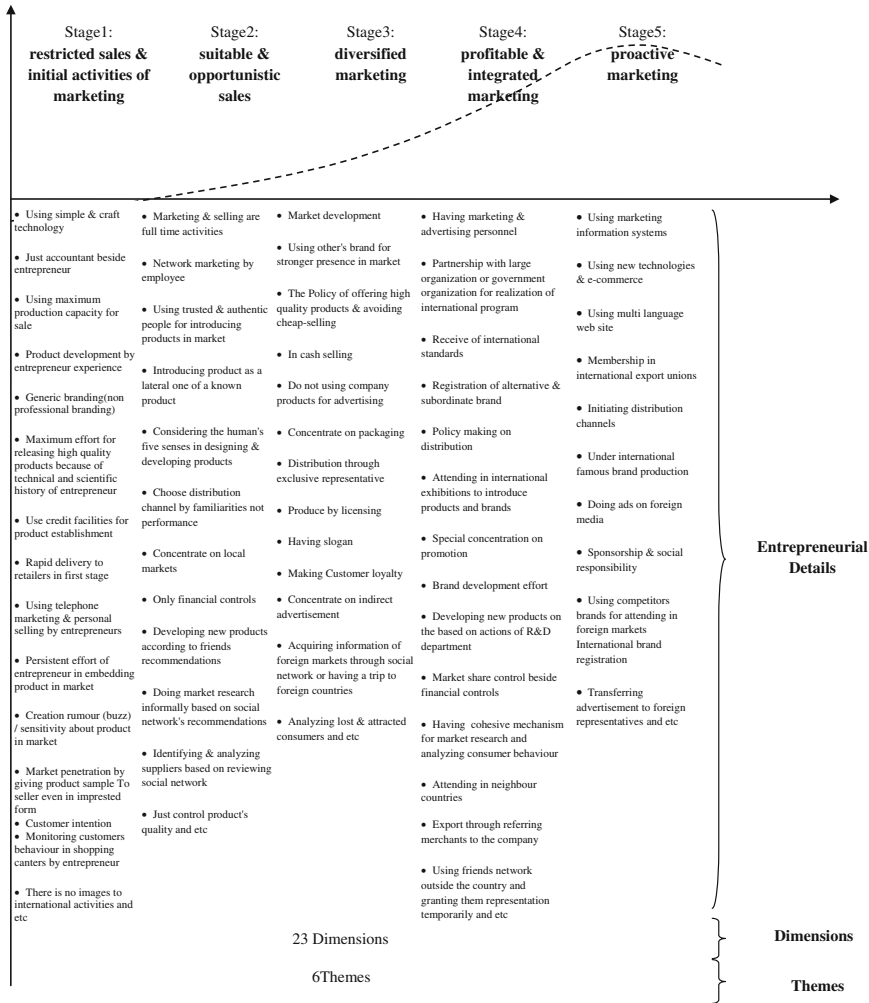


Fig. 2 Conceptual model of IEM based on organization life cycle

Nevertheless, it can be said that generally from the 3rd stage of the five-part stages, the working priorities of both types of firms have changed.

Finally, regarding this fact that this study, with this level of extent and depth, the following Implication are hereby presented in order to more develop this field of knowledge:

1. Doing exploratory researches using other strategies of qualitative research.
2. Doing confirmative studies in the form of organising some researches with the mixed method research.

3. Implementation of this study's achievements in other fields of industries and creating the possibility of doing comparative studies.
4. Implementation of this study's achievements in the high tech-based companies.
5. Implementation of this study's achievements in the industrial clusters.

## References

- Ansoff, H. I. (1984). *Implanting strategic management* pp. 41–46. Prentice Hall.
- Bäckbro, J. & Nyström, H. (2006). *Entrepreneurial marketing: Innovative value creation*, JÖNKÖPING International Business School, MA thesis, January.
- Bjerke, B. & Hultman, C. (2002). *Entrepreneurial marketing—the growth of small firms in the new economic era*, Edward Elgar.
- Cadeaux, J. M. (2000). Sliding between service time and product space: Entrepreneurial marketing. *American Marketing Association Conference Proceedings*, 11, 310.
- Carson, D. (2005). Towards a research agenda, Paper discussed at UK Academy of Marketing/Entrepreneurship Interface SIG, Southampton, UK, January, 5–7.
- Carson, D., & Coviello, N. (1997). The marketing/entrepreneurship interface: A distinct paradigm for research and education. In G. E. Hills, J. J. Giglierano, & C. M. Hultman (Eds.), *Research at the marketing/entrepreneurship interface* (pp. 59–67). Chicago: The University of Illinois.
- Carson, D., & Gilmore, A. (1999). Entrepreneurial marketing by networking. *New England Journal of Entrepreneurship*, 2(20), 31.
- Chaston, I. (2002). *Entrepreneurial marketing: Competing by challenging conventions* (p. 6). New York: Palgrave Publishers.
- Chaston, I. (2000). *Entrepreneurial marketing: Successfully challenging market convention*, McMillan.
- Chaston, I. & Mangles, T. (2000). *Small business marketing management*, McMillan.
- Collinson, E. (2002). The marketing/entrepreneurship interface. *Journal of Marketing Management*, 18(4), 337–340.
- Collinson, E., & Shaw, E. (2001). Entrepreneurial marketing—a historical perspective on development and practice. *Management Decision*, 39(9), 761–766.
- Creswell, J. W. (2007). *An Introduction to Mixed Methods Research*, pp. 1–27. University of Nebraska-Lincoln.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532–550.
- Fillis, I. (2000). Being creative at the marketing/entrepreneurship interface: lessons from the art industry. *Journal of Research in Marketing and Entrepreneurship*, 2(2), 125–137.
- Fillis, I. (2004). The entrepreneurial artist as marketer: Drawing from the smaller-firm literature. *International Journal Of Arts Management*, 7(1), 9–21.
- Fillis, I. (2006). A biographical approach to researching entrepreneurship in the smaller firm. *Management Decision*, 44(2), 198–212.
- Ghuri, N. P. (2009). *The formalization of case study research in international business*, Springer.
- Gruber, M. (2003). Research on marketing in emerging firms: Key issue and open questions. *International Journal of Technology Management*, 26(5/6), 600–620.
- Gruber, M. (2004). Marketing in new venture: Theory and empirical evidence. *Schmalenbach Business Review*, 56(2), 164.
- Hills, G., & Hultman, C. (2001). Teaching marketing principles for rapidly growing firms: Student employment by the gazelles. *Marketing Education Review*, 11(2), 43–52.

- Hills, G., & Hultman, C. (2005). *Marketing, Entrepreneurship and SMES: Knowledge and education revisit, paper presented at the Academy of Marketing Special Interest Group on Entrepreneurial & SME Marketing*. UK, January: Southampton.
- Hills, G. E., Hultman, C. M., & Miles, M. P. (2008). The Evolution and development of entrepreneurial marketing. *Journal of Small Business Management*, 46(1), 99–112.
- Hultman, C. V. (1999). Nordic perspectives on marketing and research in the marketing/entrepreneurship interface. *Journal of Research in Marketing and Entrepreneurship*, 1(1), 54–71.
- Kirzner, I. M. (1973). *Competition and Entrepreneurship*, p. 195. University of Chicago Press.
- Kotler, P. (2003). *Marketing management*. Edition: Prentice Hall.
- Lodish, L., Lee, M. H. & Kallianpur, A. (2001). *Entrepreneurial marketing*, Wiley.
- Lodish, L. M, Morgan, H. L. & Archambeau, S. (2007). *Marketing that works; How entrepreneurial marketing can add sustainable value to any sized company*, pp. 29–31. Portland.
- Mankelov, G., & Merrilees, B. (2001). Towards a model of entrepreneurial marketing for rural women. *Journal of Developmental Entrepreneurship*, 6(3), 221.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage.
- Morris, M., Schindehutte, M., & LaForge, R. W. (2002). Entrepreneurial marketing: A construct for integrating emerging entrepreneurship and marketing perspectives. *Journal of Marketing Theory and Practice*, 10(4), 1–19.
- Porter, M. E. (1980). *Competitive strategy: Techniques for analyzing industries and companies*. New York.
- Schumpeter, J. A. (1934). *The theory of economic development*, pp. 141–164. Harvard University Press.
- Sciascia, S., Naldi, L., & Hunter, E. (2006). Market orientation as determinant of entrepreneurship: An empirical investigation on SMEs. *Journal of International Entrepreneurship and Management*, 2(1), 21–38.
- Shaw, E. (2004a). Entrepreneurial marketing: The growth of small firms in the new economic era. *Journal of International Small Business*, 22(1), 110–113.
- Shaw, E. (2004b). Marketing in the social enterprise context: Is it entrepreneurial? *Qualitative Market Research*, 7(3), 194.
- Stokes, D. (2000). Entrepreneurial Marketing: A Conceptualization from Qualitative Research. *Qualitative Market Research*, 1(3), 47–54.
- Stokes, D. (2002). Entrepreneurial marketing in the public sector: The lessons of head teachers as entrepreneurs. *Journal of Marketing Management*, 18(3–4), 397–414.
- Tashakkori, A., & Teddlie, C. (2003). *Handbook of mixed methods in social and behavioural research*. USA: Sage Publications Inc.
- Webster, F. E. (1997). The future role of marketing in the organization. *Journal of Marketing Science*, 28(1), 39–66.

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# Identifying Factors Affecting Export Performance of Sports Equipment and Sportswear Firms

Reza Mohammadkazemi

**Abstract** Export marketing experts believe that “identifying the factors that affect export performance” is important for firms in today’s competitive markets in that it helps them improve export performance. This research was conducted with the goal of identifying and prioritizing the factors that affect the export performance of sports equipment and sportswear firms. Also, the research used the Lee and Griffith’s model (International Marketing Review 21(3):321–334, 2004). In terms of purpose and method, the research falls into the applied-quantitative category. As the number of exporting firms in the area of sports equipment was limited (32 firms), a minimum number of 23 firms were selected based on the Morgan table among which 60 copies of the research questionnaire were distributed in order to collect data. Then, using the PLS software, the collected data was analyzed so as to assess each of the 5 factors in the model for the intended industry. Finally, the research provides some recommendations and suggestions that could help improve export performance in the sportswear and sports equipment industry.

## 1 Introduction

Exporting constitutes one of the most vital elements of every economy. Having its finger on the pulse of a dynamic and active economy, exporting goods and services is the most important source for generating foreign exchange earnings in every country (Aaby and Slater 1989). Assuming that the export of non-oil products is the most effective and important approach to improving an economy, it will be essential to formulate a sound plan and observe the countries that have been successful on their path to development. As the country’s oil resources are limited and they will be completely exhausted by 2095 according to an Oil Ministry report, there is no alternative but to promote and improve export performance of non-oil products in the context of interaction with global markets in order to ensure economic

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development and employment growth. Exporting has been recognized as the most common approach that firms, particularly SMEs, may use to enter international markets (Mohammadkazemi et al. 2014). One of the main reasons for this is that international trades, in comparison with other forms of internationalization, require fewer resources. Therefore, export sales have been increasingly considered as a suitable approach for business growth. International trades play an important role in economic development of countries. The development of the sports industry has led to an important output, i.e. the qualitative and quantitative development of sport-related jobs. For example, the growth of sports-related jobs by 2010 in the United States led to the creation of 20 million jobs, while the number of the employed in sports-related jobs (not the number of jobs) were 4.5 million persons by 1998 (Hoang 2000).

Previous research about SMEs indicate that these enterprises have the capacity for international trades; therefore, by providing incentives and promoting behaviors and efforts that encourage exporting activities, it would be possible to motivate non-exporting firms to engage in exports (Bani-Hani and Al-Hawary 2009).

This is especially important because most of the firms in the present research population are SMEs. The number of export incentive programs for SMEs have increased dramatically on the local and national levels in the past three decades. However, the poor results indicate that due to lack of funds, these firms were not particularly motivated to engage in international trade. In general, export capacity is still very important for these firms, hence the need to identify the factors that encourage them to engage in export (Cadogan et al. 2003). The emergence of a world without borders, which would facilitate the flow of information and resources, is like a double-edged sword that would generate opportunities as well as threats (Krasnikov and Jayachandran 2008).

Given the demand for and importance of export activities development, firms need to identify factors affecting their survival and success as well as evaluating the effect of these factors on their export performance. Furthermore, due to lack of thorough and comprehensive research on sports equipment, it is essential to conduct a thorough investigation of the factors that affect export performance in order to improve it.

The purpose of this study is to identify the factors that affect export performance in the sports equipment manufacturing firms and to evaluate the impact of each factor on export performance of sports equipment manufacturing firms.

Research hypotheses:

- The organizational objective characteristics may affect the export performance of firms in the field of sports.
- Export incentives may affect the performance of export firms in the field of sport.
- Export commitment may affect the export performance of firms in the field of sports.
- Marketing strategies of Export incentives may affect the export performance of firms in the field of sports.

## 2 Theoretical Background and Literature Review

### 2.1 Sportswear and Sports Equipment Industry

By the end of the 19th century, sport was regarded especially important as a major element and an indicator of development. The regeneration of the modern Olympic Games and emergence of various sports federations in the world, increased people's participation in sports and encouraged spectatorship; this newly gained popularity, brought about a diversity of sports organizations. Also, with the large investments in sports, the sports have turned into a multi-billion-dollar industry.

Since 1990, the sports industry has undergone dramatic change and stands presently as a 500-billion-dollar industry. Sports industry development has led to a consequential output of sports-related jobs quantitative and qualitative development. For example, the growth of sports-related jobs by 2010 in the United States led to the creation of 20 million jobs, while the number of the employed in sports-related jobs (not the number of jobs) were 4.5 million persons by 1998 (Mohammadkazemi 2015).

There are numerous studies that have addressed the subject of exports at the macro level. These studies offer different classifications, some of which will be reviewed below:

Axinn (1988) classified their study on exporting into three categories:

- (1) Studying factors that help distinguish exporting firms from non-exporting firms;
- (2) Studying external factors that affect the export behavior such as the government's incentive programs;
- (3) Studying factors related to firm behavior in accordance to exports and results. This category deals directly with the macro literature of trade in the field of growth, development, improvement, and management on the global scale.

Cadogan et al. (2009) describe various studies that have addressed the behavior of exporting firms as follows:

1. One of these studies investigate the internationalization process of firms and divides it into two categories:
  - (a) One group of researchers emphasizes the ability to identify the behavior of the company prior to exporting. Other than their interest in the firm's behavior prior to exporting, these researchers try to identify the factors that could encourage a firm to take the initiative in undertaking exporting. In this school, the researchers seek to introduce incentives that encourage the company to engage in exporting or to stop it. The purpose of these incentives is to develop a model that would facilitate the decision-making process toward engaging in exporting. The research on export intention deals with the factors that affect a firm's intention to engage in exporting. The intention to export involves motivation, attitudes, beliefs, and expectations about the effect of exporting on firm's growth. Export intention among firms can be

classified into strong and weak and its determining factors can be found inside or outside the organization. Internal factors include the management's perceptions and motivations, firm's in-house capacities, and organizational culture, while external factors include the government's incentive policies, business problems and barriers, etc.

- (b) Another group of researchers consider the internationalization process as a gradual outcome of decision-makings. Believing in the gradual development process, they argue that export decisions are made following several stages with each stage indicating a step further into the firm's involvement in the exporting activity.

Even so, some studies have questioned the *stage theory*. For instance, these studies have examined firms' internationalization process without taking into account the element of time and considering adequate and comprehensive results.

2. Adherers to this school of thought discuss and study the factors that affect export performance. They emphasize that should the requirements and success factors be identified, the potential export firms can be selected based on these criteria. Furthermore, it can be determined what factors have the most influence on firms' export success. In the related literature, the export success of firms is evaluated under the term "export performance".

Basically, different models have been offered about the evaluation of export performance. Based on their research requirements and dependent and independent variables, many researchers have developed different models for unique settings. In general, the impact of the factors that influence export performance can be divided into two categories: direct and indirect. Some researchers contend that some factors have a direct impact on export performance, while others believe that these factors affect export performance indirectly through influencing other factors (Dow 2000). For example, in a model developed by Leonidou et al. (2002), the authors maintain that the export marketing strategy affects export performance directly while several other factors plus managerial, organizational and environmental characteristics have an indirect impact on export performance through export marketing strategies. In contrast, there are other researchers who argue that all factors whether internal or external have a direct impact on export performance (e.g. the model proposed by Baldauf et al. (2000)). This study adopts an external outlook (contingency approach) in order to evaluate the effects of government incentive programs on export performance.

## 2.2 *Research Model*

The model used for this study is a combination of models proposed by Katsikeas et al. (2005) and Lee and Griffith (2004) (Fig. 1):

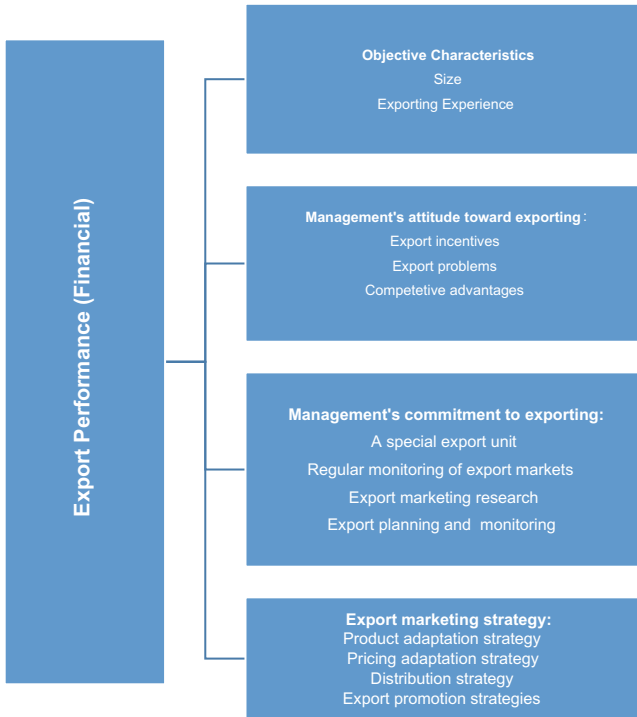


Fig. 1 The conceptual model

### 3 Methodology

The present paper falls into the applied category of research and employs the quantitative method. That is to say, reviewing the related literature, the factors affecting export performance were identified; then the required data was collected, in the context of a causal-relational study, by distributing a questionnaire designed by the authors followed by testing the theoretical framework and prioritizing the factors.

A questionnaire was used, consisting of three sections, to collect data: (1) the first section includes four demographic questions; (2) the second section includes five parts which poses 23 questions about the factors that affect export performance and; (3) the third section includes three questions which measure export performance based on the Likert scale.

*The descriptive indicators of the research variables:* In this section, the measures of descriptive statistics such as mean and standard deviation are provided for each pertinent question of the questionnaire (Table 1). Table 2 shows that the export marketing strategy received a score higher than the other dimensions with an

**Table 1** Descriptive statistics

Dimension	Mean	Standard deviation
Management's commitment to export	27.82	4.98
Export marketing strategy	27.86	5.17
Export incentives	15.78	2.56
Objective characteristics	16.06	2.95
Export performance	12.34	2.32

**Table 2** Correlation between commitment to export and export performance

Correlation coefficient	Sig. level	Error margin	Test result
0.79	0/0	0/01	H <sub>0</sub> rejected

average score of 27.86, while the export performance dimension received the lowest score with an average score of 12.34.

In order to verify the research validity, the questionnaire was examined and modified by experts before distribution to ensure a correct assessment of the characteristics.

To assess the reliability of the constructs, composite reliability coefficients and the Cronbach's alpha are used and provided they are suitable it can be said that the research questionnaire is reliable, because acceptable level of composite reliability coefficient should be at least 0.707. Moreover, the Cronbach's alpha coefficient should be greater than 0.7.

In order to measure the goodness-of-fit for the indicators, a general model containing all the constructs, dimensions and research questions was developed using the Smart PLS 2 software. The figure below illustrates the standardized coefficients. As can be seen in Fig. 2, the factor loadings are all greater than 0.4 for all the questions.

The research statistical population includes the present entrepreneurs engaged in manufacturing sports equipment who also have a history of exporting activities. The sample includes only a small number of 23 sports equipment export firms due to the limited number of firms in this line of work.

Correlation between the research variables:

*Correlation between commitment to export and the export performance*

H<sub>0</sub>: There is no significant linear relationship between commitment to export and export performance.

H<sub>1</sub>: There is a significant linear relationship between commitment to export and export performance.

According to Table 2, it can be seen that since the calculated significant level is smaller than the error margin at the 99% significant level, hence H<sub>0</sub> is rejected. In other words, there is a significant linear relationship between commitment to export and export performance.

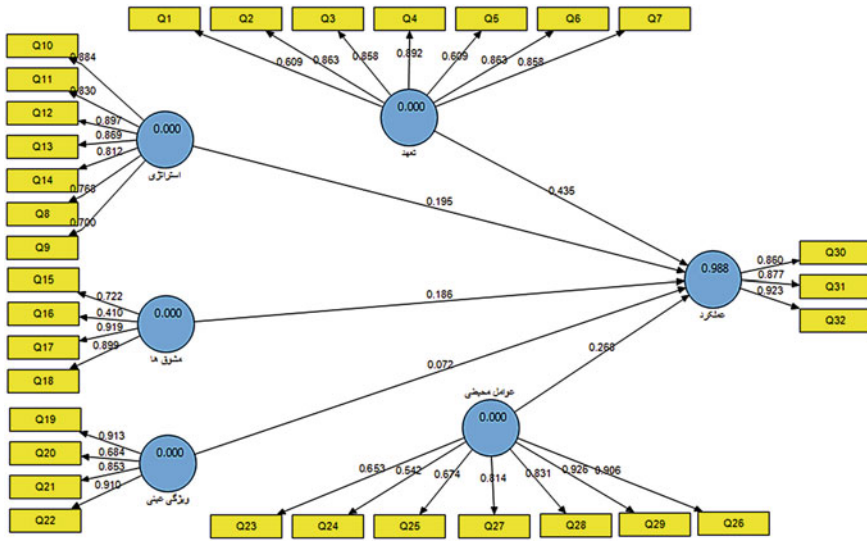


Fig. 2 Research model with standard coefficients

Table 3 Correlation between marketing strategy and export performance

Correlation coefficient	Sig. level	Error margin	Test result
0.39	0/005	0/01	H <sub>0</sub> rejected

*Correlation between marketing strategy and export performance*

H<sub>0</sub>: There is no significant linear relationship between marketing strategy and export performance.

H<sub>1</sub>: There is a significant linear relationship between marketing strategy and export performance.

According to Table 3, it can be seen that the calculated significant level is smaller than the error margin at the 99% significant level, hence H<sub>0</sub> is rejected. In other words, there is a significant linear relationship between marketing strategy and export performance.

*Correlation between incentives and export performance*

H<sub>0</sub>: There is no significant linear relationship between incentives and export performance

H<sub>1</sub>: There is a significant linear relationship between incentives and export performance

According to Table 4, it can be seen that the calculated significant level is smaller than the error margin at the 99% significant level, hence H<sub>0</sub> is rejected.

**Table 4** Correlation between incentives and export performance

Correlation coefficient	Sig. level	Error margin	Test result
0.82	0/000	0/01	H <sub>0</sub> rejected

**Table 5** Correlation between objective characteristics and export performance

Correlation coefficient	Sig. level	Error margin	Test result
0.84	0	0/01	H <sub>0</sub> rejected

**Table 6** Reliability of research constructs

Construct	Cronbach's alpha	Composite reliability
Commitment	0/84	0/87
Strategy	0/86	0/88
Incentives	0/73	0/83
Objective characteristics	0/78	0/86
Export performance	0/75	0/85

In other words, there is a linear relationship between incentives and export performance.

*Correlation between objective characteristics and export performance*

H<sub>0</sub>: There is no significant linear relationship between objective characteristics and export performance.

H<sub>1</sub>: There is a significant linear relationship between objective characteristics and export performance.

According to Table 5, it can be seen that the calculated significant level is smaller than the error margin at the 99% significant level, hence H<sub>0</sub> is rejected. In other words, there is a linear relationship between objective characteristics and export performance.

In order to measure the goodness-of-fit for the indicators, a general model containing all the constructs, dimensions and research questions was developed using the Smart PLS 2 software. The coefficients of the factor loadings were greater than 0.4 for all the questions. Table 6 illustrates the Smart PLS software output for the main constructs of the model.

The higher Cronbach's alpha coefficient and composite reliability values greater than 0.7 for the main research constructs confirm the reliability of the research constructs.



**Table 7** Average variance extracted values (AVE)

Construct	AVE
Commitment	0/71
Strategy	0/52
Incentives	0/76
Objective characteristics	0/76
Export performance	0/66

**Table 8** R<sup>2</sup> values and cumulative index for the research constructs

Variable	R <sup>2</sup> value	Cumulative index
Commitment	0/0	0.71
Strategy	0/0	0.52
Incentives	0/0	0.76
Objective characteristics	0/0	0.76
Environmental characteristics	0/0	0.66
Export performance	0.98	0.66
Mean	0.98	0.66

Table 7 offers the average variance extracted (AVE) values for each construct. As shown in this table, the AVE for each construct is greater than 0.5 which indicates a suitable convergent validity of the model.

**Structural model assessment:** two methods are used to evaluate the goodness-of-fit for the structural model i.e. determining R<sup>2</sup> and t-value significance coefficients.

### 3.1 T-Value Significance Coefficients

The most basic criterion for measuring the relationship between constructs for structural models is the t-values. Should these values be greater than 1.96, they demonstrate a viable relationship between constructs.

R<sup>2</sup> is the second criterion that was used for testing the goodness-of-fit for the research’s structural model. R<sup>2</sup> indicates the impact that a exogenous variable may have on an endogenous variable. Higher R<sup>2</sup> values of endogenous constructs in a structural model signify better goodness-of-fit. R<sup>2</sup> test was used to analyze the goodness-of-fit for the present research model. Table 8 offers the calculations for this test which require the cumulative mean index and R<sup>2</sup> mean:

In the present study, the model’s fitness indicator was calculated to be 0.81 which suggests a very strong goodness-of-fit for the research model.

$$\sqrt{0.98 \times 0.67} = 0.81$$

## 4 Analysis and Conclusions

Table 9 summarizes the impact of each construct:

In this study, we examined the factors that could affect export performance in the sportswear and sports equipment industry. The identification of the determining factors was made based on a model which introduces firm's objective characteristics, export incentives, management's commitment to export, and export marketing strategies as its determining factors.

Many studies have examined factors that could affect firms' export performance. Slater and Olson (2000) and Madsen (1987) proposed two important theories in this regard. According to Slater, there are three factors that could affect export performance, i.e. firm characteristics, competency, and export strategies. His study findings suggest that the firm's objective characteristics have the lowest impact while management's attitude and commitment have the highest impact on export performance. Madsen introduced export performance as the result of continued interaction between three groups of factors related to the organizational structure, external environment, and strategies. The present paper has not considered the external environment, however, it confirms Madsen's theory with regard to the firm's internal environment and strategies.

Lack of a significant relationship between firm size and exporting experience and its effect on export performance is a message to small businesses with limited exporting experience in that managers of such firms should not consider the firm size as an impediment to access to global markets. Rather, developing competencies in other influential aspects that could enhance export performance could result in higher levels of performance in global markets.

This study shows that, through commitment, a higher export performance could contribute to adaptive market strategies. Adapting export marketing strategies such as tailoring export products based on international customer preferences allows an export firm to not only satisfy international customers' needs but also create a competitive position in the market.

Practical recommendations:

- Developing a marketing-based approach to exporting is an integral part of export performance improvement plans. Therefore, it is necessary for firms that seek to conduct regular exporting to enhance their export marketing skills.

**Table 9** Prioritization of the indices

Construct	Impact
Management's commitment to export	0.25
Export marketing strategy	0.16
Export incentives	0.16
Firm's objective characteristics	0.01

- Firms should visit export markets regularly and during these visits they should focus on gathering valuable information and developing close relationships with key members of the distribution network.
- Firms should focus on countries that are within their reach so they could fulfil their obligations in time, on the one hand; and to reduce the transportation costs to ensure a competitive price compared with products from other countries, on the other hand.
- Firms should offer products of quality according to customer preferences to export markets. This is an important factor in determining firm success which could, in turn, bring the firm a good reputation and market position.

## 5 Future Research Suggestions

- This study addressed only one industry. In order to achieve more decisive results, it is recommended that future studies address other industries in several provinces.
- It is recommended that the future research also investigate other factors such as political, social and cultural environments.
- It would be better for future research to consider financial and non-financial factors simultaneously in order to measure export performance more effectively.

## References

- Aaby, N.-E., & Slater, S. F. (1989). Management influences on export performance: A review of the empirical literature 1978–1988. *International Marketing Review*, 6(4), 7–26.
- Axinn, C. N. (1988). Export performance: Do managerial perceptions make a difference. *International Marketing Review*, 5(2), 61–71.
- Baldauf, A., Cravens, D. W., & Wagner, U. (2000). Examining determinants of export performance in small open economies. *Journal of World Business*, 35(1), 61–79.
- Bani-Hani, J., & Al-Hawary, F. (2009). The impact of core competencies on competitive advantage: Strategic challenge. *International Bulletin of Business Administration*, 6, 93–104.
- Cadogan, J., Cui, C., & Li, E. (2003). Export market-oriented behavior and export performance: The moderating roles of competitive intensity and technological turbulence. *International Marketing Review*, 20(5), 493–513.
- Cadogan, J. W., Kuivalainen, O., & Sundqvist, S. (2009). Export market-oriented behavior and export performance: Quadratic and moderating effects under differing degrees of market dynamism and internationalization. *Journal of International Marketing*, 17(4), 71–89.
- Dow, D. (2000). A note on psychological distance and export market selection. *Journal of International Marketing*, 8(1), 51–64.
- Hoang, B. P. (2000). A causal study of relationships between firm characteristics, international marketing strategies, and export performance. *Management International Review*, (Special Issue 1), 73–94.

- Katsikeas, C. S., Piercy, N. F., & Ioannidis, C. (2005). Determinants of export performance in a European context. *European Journal of Marketing*, 30(6), 6–35.
- Krasnikov, A., & Jayachandran, S. (2008). The relative impact of marketing, research-and-development, and operations capabilities on firm performance. *Journal of Marketing*, 72, 1–11.
- Lee, C., & Griffith, D. (2004). The marketing strategy-performance relationship in an export-driven developing economy. *International Marketing Review*, 21(3), 321–334.
- Leonidou, L. C., Katsikeas, C. S., & Samiee, S. (2002). Marketing strategy determinants of export performance: A meta-analysis. *Journal of Business Research*, 55(1), 51–67.
- Madsen, T. K. (1987). Empirical export performance studies: A review of conceptualizations and findings. In S. T. Cavusgil (Ed.), *Advances in international marketing* (pp. 177–198). JAI Press.
- Mohammadkazemi, R. (2015). Sports marketing and social media. In N. Hajli (Ed.), *Handbook of research on integrating social media into strategic marketing* (pp. 340–358). Hershey, PA: Business Science Reference.
- Mohammadkazemi, R., Soheili, S., Taherkhani, F., & Jafari-Moghadam, S. (2014). Impact of organizational climate on innovation, a case study of the ministry of sports in Iran. *Middle East Journal of Management*, 1(4).
- Slater, S. F., & Olson, E. M. (2000). Strategy type and performance: The influence of sale's force management. *Strategic Management Journal*, 21, 813–829.

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# A DNA Business Model for the Internet of Things: A Value-Creating Ecosystem in Iranian Small and Medium-Sized Enterprises

Babak Ziyae and Mohammad Reza Zali

**Abstract** The Internet of Things inspires a wealth of innovative business models, which forces firms across industries to adjust their strategies in order to succeed in digital market environments. Many companies have difficulties to capture the unprecedented ecosystem complexity and to develop adequate business models. In the field of entrepreneurship, Small and Medium Size Enterprises (SMEs) are focusing mainly on platform solutions which companies can use to enhance the efficiency of their business process management systems, supply chain management, marketing strategies, and alliances. Many SMEs are working on future mobility solutions in the form of E-mobility. For Entrepreneurs in Iranian SMEs the artifact will serve as tool for depicting, analyzing and envisioning business models in Internet of Things. By making recent Internet of Things-driven market dynamics and specifics of digitized goods explicit, the artifact is able to decidedly support business model development in complex Internet of Things ecosystems.

## 1 Introduction

In the era of knowledge economy, innovation is becoming more and more open and businesses need to build an open collaborative innovation. Collaborative innovation which takes knowledge value-added as its core is a kind of innovative business pattern to realize the integration and the innovation of science and technology. Today, companies are exposed to highly dynamic business environments, driven by rapid developments and ever-increasing pervasiveness of digital technologies. The increasing pervasiveness of digital technologies, also referred to as “Internet of Things” (IOT), offers a wealth of business model opportunities, which often involve

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an ecosystem of partners (Li 2011). In this context, businesses are required to look at business models beyond a firm-centric lens and respond to changed dynamics. The concept of the Internet of Things is to make every single 'network enabled' object in the world network connected, and represents a vision in which the internet extends into the real world embracing everyday objects. Moreover, the concept of 'things' in the network infrastructure refers to any real or virtual participating actors such as real world objects, data mining, marketing issues and business intelligence. The purpose of the Internet of Things is to create an ecosystem in which the basic information from any one of the networked autonomous actors can be efficiently shared with others in real-time (Zhang et al. 2007). The Internet of Things definition may arise from the word 'Internet' and lead to an 'Internet oriented' vision, or 'things' and lead to a 'things oriented' vision. Putting the world 'Internet' and 'Things' together semantically means a world-wide network of interconnected objects uniquely addressable, based on standard communication protocols.

Internet of Things brings an opportunity for the creation of innovative applications that integrate all too familiar traditional digital technologies (Zhang 2010). The Internet of Things is about interfacing the autonomous devices to communicate and generate integrated big data. Intelligence is then required to process this integrated big data, monetize additional streams, derive more actionable insights, and make it available to the firms for decision-making. With data traditionally contained in information silos within applications or databases, taking advantage of big data is initially a tedious and complex process. To effectively gather and use big data, a cloud computing as background or basic architecture is required to capture, manage, and process the big data and enhances the business rapid elasticity.

In the field of entrepreneurship, Small and Medium Size Enterprises (SMEs) are focusing mainly on platform solutions which companies can use to enhance the efficiency of their business process management systems, supply chain management, marketing strategies, and alliances. Many SMEs are working on future mobility solutions in the form of E-mobility (Jiang et al. 2005). The application of Internet of Things and cloud computing, in particular, is undergoing changing in today's SMEs. It becomes a possible application model with large number of objects and cloud technology that turns from a basic research and concept to the realistic usage. Numerous key features are provided by integrating cloud computing application, open data and internet of things as follows:

- Solutions for integrating, visualizing and analyzing data
- Serves a multitude of industries with custom solutions
- Extract data from multiple sources
- Share data among multiple sources
- Simplify workflows by integrating data into a single dashboard

Using Internet of Thing, SMEs can use big data to better understand their customers, mobilize their workforce, tap into the new market niches, agile their businesses structures, select better supply chain, seize opportunities, and form their ideal competitive intelligence, all in real-time. SMEs should absolutely be taking advantage of big data and that the Internet of Thing is the perfect place to do it.

The Internet of Things inspires a wealth of innovative business models, which forces firms across industries to adjust their strategies in order to succeed in digital market environments. However, many companies have difficulties to capture the unprecedented ecosystem complexity and to develop adequate business models. According to Yang (2011) one reason is the “absence of formalized means of representations to allow a structured visualization of business model”.

The socioeconomic impacts of the Internet of Things are expected by many industry analysts to develop rapidly over the next five to ten years into an important element of the contemporary business models (Yang 2011). In order for business to realize the potential of the Internet of Things and meet its challenges, its application must be accepted and trusted in a proportionate, reasoned and effective manner. This requires both accurate and comprehensible information and the operationalization of principles. The current research underscores the fact that there are nearly infinite opportunities for SMEs to develop innovative business models. Some highlights from this research will include:

- Business Model Transformation—selling results, outcomes or performance.
- New Value-Added Services—providing peer benchmarking, targeted personalization services, predictive systems optimization based on analytics and modeling.
- Sales, Fulfillment and Supply Chain Services—developing a better understanding of installed base characteristics and behaviors for predictive modeling of demand for channel partners and ecosystem participants.
- Ecosystem Orchestration—developing brokerage services for multiple, parallel vendors for orchestration of services around machines and systems.
- New Product/Service Development Design—designing more effective mechanism and/or systems based on more intimate understanding business behaviors.

To create and capture value, SMEs need to recognize the new opportunities for innovation driven by collaboration and participation—from customers, from partners, and from competitors. The critical supporting activity of the internet of things collaborative innovation is knowledge sharing which is an important way for businesses to acquire external knowledge and realize value creation. This will require new thinking.

The smart ecosystems we are describing here have no managerial hierarchy, command and control decision-making or proprietary ownership of ideas (Qu 2010). These new value networks will be self-organized by companies who are motivated to explore and develop ideas they care deeply about. Collaborative innovation will extend beyond ideas about new products and services to the very manner in which business is conducted. To discover, design and develop smart systems, organizations will need new tools and methods. This therefore addresses the need for a business model type for Internet of Things ecosystem one that recognizes the affordance and attributes of digital objects to allow companies to fully tap into the opportunities.

All in all, the current research at its completion will represent a value based business model framework, which contributes to both theory and practice: For theory, our work adds to the current business model research in the context of Internet of Things by providing both grounded theory and field-tested business model framework. In this way researchers can readily use the framework to for example analyze Internet of Things business model patterns in an efficient and structured way.

For Entrepreneurs in SMEs the artifact will serve as tool for depicting, analyzing and envisioning business models in Internet of Things. By making recent Internet of Things-driven market dynamics and specifics of digitized goods explicit, the artifact is able to decidedly support business model development in complex Internet of Things ecosystems (Li 2011). This is relevant, as without a clear view on market dynamics and collaborative value creation logic, it is hard to create sustainable Internet of Things ecosystems and be a competitive part of it, which is the situation today for many companies, with roots in SMEs in particular.

The current research aims to help Iranian SMEs understand the continuity of adoption and affective reasons which would prompt the further width and depth of IOT usage (Li 2011). This research will also focus on a comparative study between a UK as a developed economy, and Iran as a developing economy, working on SMEs for Internet of Things architecture and evaluate them according to the design goals and principles identified in the above.

## 2 Problem Statement

In today's networked world, businesses are becoming parts of complex global ecosystems. This complexity increases when transforming from centralized towards decentralized and distributed network structures. Different structures emphasize different types of activities in the ecosystem, and a continuously increasing level of complexity calls for new types of value systems. In this line, SMEs must learn to exploit Internet of Things to access market behavioral data, establish a better communications network, exploit supply chain knowledge, monitor their processes, and make their businesses more responsive to customer needs. These are all benefits that Internet of Things can bring to SMEs.

"The Internet of Things brings about an opportunity to measure, collect and analyze an ever-increasing variety of behavioral statistics, trends and actions that can allow businesses to better target their marketing and control their operations. According to Hisrich and Ramadani (2017), by 2020 there will be 26 billion connected devices around the world. Some of them could be products or services produced by SMEs. For example, SMEs need to know that exactly where, when and how a product is used, and the implications of that for design and marketing. On the other hand, there will be opportunities to develop such applications, or niche products using networked sensors that will lead to the birth of many new SMEs. Internet of Things in general inspires new business models, which frequently



involve diverse partners of thereby arising cross-industry ecosystems. This fact requires companies to rethink their firm-centered lenses in order to stay ahead in Internet of Things driven market environments. However, many companies have difficulties to capture and tap into the unprecedented ecosystem complexity around products and services in a structured way. Zhang and Yao (2011) generally identifies the “absence of formalized scientific means of representations to allow a structured visualization of business model” as a major research gap.

Despite its youth, the Internet of Things is seen as one of the fastest growing business segments. By 2020, upper estimates of its annual global economic potential across all affected sectors range from \$1.4 trillion to \$14.4 trillion. Some of the most promising and interesting opportunities come from the linkage of the Internet of Things to other systems and technologies, such as clouds, smart grids, nanotechnology and robotics. The potential economic implications of a rapidly developing Internet of Things reflect the changing pattern of horizontal and vertical relations among the businesses that supply, use and serve the Internet of Things. Of particular interest is the competitive tension between large market players from these other sectors and the potential for a more open environment for SMEs and innovative entrants within and beyond the Internet of Things. By reviewing previous studies on business ecosystems, as well as the process view discussed above, this research argues that these studies have addressed only a section of the ecosystem domain and its strategies (e.g. Zhang and Yao (2011)) and the extant literature has not yet provided actionable business model framework to effectively depict business models in Internet of Things ecosystems. We see this gap in sharp contrast to the overall importance of the topic. This research therefore will try to fill this gap in the body of knowledge and address the need for a value based business model framework that captures the specifics of Internet of Things-driven ecosystems particularly for SMEs.

It has also been observed and verified in many studies that SMEs are actively looking for suitable solutions and methods of adopting and integrating Internet of Things into their business. Although there is a growing body of literature dedicated to the analysis of the technical aspects of Internet of Things, there is little empirical research to date that examines the success of Internet of Things deployments in SMEs. If Internet of Things implementation is successful, potential benefits to SMEs can include increased sales, improved profitability, increased productivity, reduced costs associated with inventories, procurement and distribution, improved quality of service, and secured competitive positions.

Applying Interpretative structural modeling, or ISM for short, method as an integrative scientific design approach, the present study will describe (a) dimensions in the framework include the value network of collaborating partners, (b) sources of value creation, (c) benefits from collaboration and (d) the evaluation of a business model framework that enables researchers and practitioners to visualize, analyze and design business models in Internet of Things context in a structured and actionable way.

### 3 Significance of the Study

This section briefly introduces the potential impact of IOT for business and clarifies why SMEs need to understand IOT. Many companies see an opportunity in IOT. According to Deloitte (2014), IOT has the potential to offer business value that goes beyond operational cost savings. Providers in the IOT ecosystem have a largely unexplored opportunity to develop compelling IOT solutions, that might transform the business by exploring how the ability to collect and analyze disparate data, in real-time and across time. These developments will play out within and across enterprises, offering opportunities for sustained value creation and even disruption for those who can imagine possibilities beyond the incremental (Deloitte 2014). This will produce big data sets that may be analyzed computationally to reveal patterns, trends, and associations, especially relating to human behavior and interactions. Cloud computing system emerges for this purpose. It means that data is stored in servers but is connected to the Internet so that it is accessible by web-based tools and applications. New business models, improve business processes and reducing costs in the resulting information network. SMEs transform big data into smart data and subsequently optimize their products or services.

According to the IOT index report on 2013 by The Economist Intelligence Unit:

- Three-quarters of companies (75%) are either actively exploring the IOT or already using it.
- The majority opinion (61%) among senior executives is that companies slow to integrate the IOT into their business will fall behind the competition.
- Almost all senior executives (96%) expect their business to be using the IOT in some respect.

However, there is still very little knowledge as to where the IOT leads. IOT is not just hype in an isolated industry, but everyone is looking for new opportunities to enter the IOT ecosystem: healthcare, building and home, infrastructure, retail, transport to mention a few. According to Hisrich and Ramadani (2017) there is definitely a need for improving economics of delivery, and increasing technical capabilities is forcing SMEs to think about innovation in IOT. In the future more and more players and developers will emerge to address the IOT in smart SMEs, which will naturally increase competition.

### 4 Research Objectives and Questions

The main objective of this research is to designing a value based business model for Internet of Things in Small and Medium-Sized Enterprises. These following are the two main objectives and their supporting sub-questions:

Objective (1) To better understand the IOT business opportunities through value propositions.

- (a) What are the main functional components of an IOT value based business model?
- (b) What is an ideal architecture makes the usage of IOT more desirable and easier to deploy?
- (c) What are the needs of different SMEs pertaining to IOT or its products and services?
- (d) How can SMEs capture the value in the IOT ecosystem?

Objective (2) To better understand what the business landscape looks like for IOT at the moment?

- (e) Who are the players and who are the developers in the IOT ecosystem?
- (f) What businesses are there in the IOT ecosystem?
- (g) How can the different companies within the IOT ecosystem help each other create value?

## 5 Literature Review

Nowadays, theories of IOT are developing in a rational pace. What remains the same in all levels, company and research, is the fact that none has yet come up with an ideal business model. This suggests that there are yet many open factors and obstacles to overcome. Theories suggest that the readiness for IOT differs greatly in different geographical locations, which also links to the different needs of the networks and businesses. In order to understand the opportunities and challenges of an IOT, we will start by looking into the value that IOT offers. We will consider concepts such as value creation and value capture.

Small and Medium Sized Enterprises see the changes in business models due to the shift in value creation. The differences in SMEs traditional mindset and their IOT mindset are increasing when it comes to value creation, which is an important aspect to understand in order to revise or generate new business models and pursue business opportunities in IOT. Despite the importance of developing IOT business models, the mainstream of the IOT research has focused on technology and different technology layers (i.e., Zhang 2010). There only have been sparse scholarly attempts to increase understanding structural approaches, including identifying value chains in ubiquitous computing environments, IOT value drivers' identification, IOT value chain analysis, and digital business ecosystems discussion.

## 6 Research Method

The research approach best suited for this research would be inductive, bearing in mind the purpose of the study, and the methods that are best suited to explore the emerging area in this research. Inductive approach lets researcher first understand the nature of the problem. In an inductive approach, formulation of the theory comes afterwards when the data is analyzed. The flexible methodology of an inductive approach allows for alternative explanations of what is going on.

This is also an exploratory study, which focuses on seeking new insights to a certain phenomenon and assesses topics in new light. An exploratory research is suitable for when the phenomenon or a part of it is not so well understood yet (Su 2011). Further considerations for the exploratory research are that the topic may be more or less understood.

In this research, we will choose an Interpretive Structural Modelling (ISM) approach to design a “Internet of Things value based business model for SMEs”. Interpretive structural modeling is an interactive learning process. In this technique, a set of different directly and indirectly related elements are structured into a comprehensive systematic model. The model so formed portrays the structure of a complex issue or problem in a carefully designed pattern implying graphics as well as words. Interpretive structural modeling is a well-established methodology for identifying relationships among specific items, which define a problem or an issue. For any complex problem under consideration, a number of factors may be related to an issue or problem. However, the direct and indirect relationships between the factors describe the situation far more accurately than the individual factor taken into isolation. Therefore, interpretive structural modeling develops insights into collective understandings of these relationships.

Interpretive structural modeling starts with an identification of variables, which are relevant to the problem or issue, and then extends with a group problem solving technique. Then a contextually relevant subordinate relation is chosen. Having decided on the element set and the contextual relation, a structural self-interaction matrix (SSIM) is developed based on pairwise comparison of variables. In the next step, the SSIM is converted into a reachability matrix (RM) and its transitivity is checked. Once transitivity embedding is complete, a matrix model is obtained. Then, the partitioning of the elements and an extraction of the structural model called ISM is derived. In this approach, a systematic application of some elementary notions of graph theory is used in such a way that theoretical, conceptual and computational leverage are exploited to explain the complex pattern of contextual relationship among a set of variables. ISM is intended for use when desired to utilize systematic and logical thinking to approach a complex issue under consideration. Interpretive Structural Modeling is a computer-aided method for developing graphical representations of system composition and structure.

The various steps involved in interpretive structural modeling are as follows: (i) identify the elements which are relevant to the problem. This could be done by a survey or group problem solving technique; (ii) Establish a contextual relationship

between elements with respect to which pairs of elements would be examined; (iii) Develop a structural self-interaction matrix (SSIM) of elements. This matrix indicates the pair-wise relationship among elements of the system. This matrix is checked for transitivity; (iv) Develop a reachability matrix from the SSIM. (v) Partition the reachability matrix into different levels; (vi) Convert the reachability matrix into conical form; (vii) Draw digraph based on the relationship given in reachability matrix and remove transitive links; (viii) Convert the resultant digraph into an interpretive structural modeling based model by replacing element nodes with the statements; (ix) Review the model to check for conceptual inconsistency and make the necessary modifications.

Interpretive structural modeling offers a variety of advantages like: (i) the process is systematic; the computer is programmed to consider all possible pair wise relations of system elements, either directly from the responses of the participants or by transitive inference. (ii) The process is efficient; depending on the context, the use of transitive inference may reduce the number of the required relational queries by from 50 to 80%. (iii) No knowledge of the underlying process is required of the participants; they simply must possess enough understanding of the object system to be able to respond to the series of relational queries generated by the computer. (iv) It guides and records the results of group deliberations on complex issues in an efficient and systematic manner. (v) It produces a structured model or graphical representation of the original problem situation that can be communicated more effectively to others. (vi) It enhances the quality of interdisciplinary and interpersonal communication within the context of the problem situation by focusing the attention of the participants on one specific question at a time. (vii) It encourages issue analysis by allowing participants to explore the adequacy of a proposed list of systems elements or issue statements for illuminating a specified situation. (viii) It serves as a learning tool by forcing participants to develop a deeper understanding of the meaning and significance of a specified element list and relation. (ix) It permits action or policy analysis by assisting participants in identifying particular areas for policy action which offer advantages or leverage in pursuing specified objectives.

## 7 Findings

This study concentrated on understanding what IOT business models are, which types of business models there are, and how they are connected to the fundamental ecosystem.

The success of IOT depends on the business models and suitability to users. This justifies techno-economic, value networks, and ecosystems creation. In the study, we recognized a framework to identify and analyze different IOT business models. The research counted that the previous studies on IOT business ecosystems or business models propose three divergent approaches: structural, methodology, and design. The study concluded that the design approach is helpful for our purpose, as it provides specific items to use in our business model framework. Consequently,

the framework was based on two dimensions: ecosystem and customers. As a result, the current study identified four distinct IOT business models in SMEs. The study reveals that there is a continuing trend in the business from closed to open ecosystems, which follows the all-inclusive phenomenon of open innovation. Many closed private models are increasingly connected to new open ecosystems and become a part of open networked business models. Furthermore, the current study found that there are more and more B2C solutions among IOT technology in the SMEs by leveraging of three contemporary challenges of the IOT, comprising the diversity of objects, the immaturity of innovation, and the unstructured ecosystems.

## 8 Conclusion

The study concludes by proposing the grounds for a new design tool for ecosystem business models and suggesting that “value design” might be a more appropriate term when talking about business models in ecosystems. Furthermore, it describes business ecosystems as foundations of participation “where groups and individuals typically self-identify as an ecosystem, both in their own internal discourse and in the brand identity they convey to others”. The study also points out that a business ecosystem refers to an organization of economic actors whose individual business activities are anchored around a platform, and that a platform is an organization of things.

## References

- Deloitte (2014). Making an impact that matters. Available at: <file:///C:/Users/Ramadani/Downloads/gx-gr14-main-final.pdf>. Accessed April 27, 2017.
- Hisrich, D. R., & Ramadani, V. (2017). *Effective entrepreneurial management*. Cham: Springer.
- Jiang, Y., et al. (2005). The research summary of the internet of things based on EPC. *Guangdong Communication Technology*, 8, 23–29.
- Li, H. W. (2011). Planning and design of logistics information platform based on Internet of Things. *Information Technology*, 9, 13–16.
- Qu, X. L. (2010). Internet of things technology-based logistics management system for emergency. *Computer CD Software and Applications*, 13, 107–109.
- Su, Y. H. (2011). Design and implementation of logistics and vehicle monitoring system based on the internet of things. *Computer & Digital Engineering*, 7, 75–78.
- Yang, W. Y. (2011). Intelligent medical home system based on internet of things. *Journal of Foshan University*, 29, 33–37.
- Zhang, F. L., Wang, C., & Huang, J. (2007). Military logistics SCM operations model based on process. *Logistics Sci-Tech*, 4, 97–99.
- Zhang, F. S. (2010). *Internet of things: Open a new life of intelligent era*. Shan Xi People Press.
- Zhang, X. F., & Yao, Z. H. (2011). Chronic disease management system based on the internet of things. *Journal of Yi Gu*, 17, 28–34.

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# Marketing and Branding for Iranian Home-Based Businesses

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**Abstract** Home-based businesses play a major role in economic development of countries, but because of their small sizes and limited budget encounters with threats such as dealing with great. The majority of these businesses were destroyed in the first 5 years and the most important factor is the competition and low sale. Brand is the only thing that will keep the business operation for long time and gives them a competitive advantage and this study which has been performed qualitatively, grounded theory, and by multiple cases, the model has been presented for branding model for home-based businesses by the study of reputable and brand items in the food industry. This model has 5 main components of brand value, emotional performance of brand, brand marketing plans, brand positioning and brand evaluation and 17 indicator and sub-components. After the performed surveys among 17 sub-components and indicator the factor of capabilities and competence of owner-manager, viral marketing, positioning based on product advantage has the greatest role in business reputation and its branding, respectively.

## 1 Introduction

In many references, branding is considered as creating business, and as the best selling American author, King (1991) says, no matter how good a product is, it can be copied; Specially for home-made products which have a limited market entry (for regulations, limited financial resources and limited information access). That is why if a business can't make itself known to a customer, it's doomed to fail.

According to a report by the American institute of small businesses, In 2005, among 23.7 million registered small businesses in the US, more than half of them (11.8) are home-based businesses. In the same year in the UK, 3.1 million people are involved in home-based businesses which has grown by 35% since 1997. (Ruiz and Walling 2005). Home-based businesses have a long tradition in Iran as well,

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and many of the country's industries started as home-based businesses themselves. Reports of the OCED countries show that between 25%–40% of the educated labor force are occupied with home-based businesses, though this number for Iran is 11% (Ministry of labor and social welfare, Aug 2013).

Starting a business is always risky, with small chances of success. According to a report by the American institute of small businesses, more than 50% of small businesses fail in the first few initial years, and 90% of them are destroyed within the first 5 years. As Gustav Brell has said it, among the reasons for the failure of these businesses, one can mention low competition and low sales (From the website of the American institute of small businesses) or as Silvia Lefort mentions it in her Brand Management book: "Is it possible to build a successful business without a brand? The answer is no. Although there are non-brand successful businesses, but they all realize, sooner or later, that they need a brand, depending on their goals and growth plans. In an ever growing globalized market, the only thing that guarantees long term success and a competitive edge, is a brand." A brand is the most important factor for competitiveness. Therefore, ignoring the branding for home-based businesses can be an important contributing factor to their failure.

## 2 Defining Home-Based Businesses

Home-based businesses, traditionally have been the center of attention for entrepreneurs. In the past centuries, individuals mostly created agricultural home-based businesses, but with industrialization and the possibility of mass production, followed by the IT revolution, a whole new approach to growth and the development of home-based businesses has emerged. This approach has provided a wide toolbox for small businesses with no access to non-home-based production so that they can easily continue their production at home (Edwards and paul 2005).

Though home-based businesses have been subjected to studies since Hakim and Blackstone (1997) or Falstad (2001). Home-based businesses, as defined by Carter et al. (2004) is "any business unit which is involved in transactions of products or services with the market and is run by an independent individual, with or without a labor force. The owner of the business must use his personal residence or home to manage the business." This definition involves a wide range of businesses, whether agricultural, hotel management or restaurant ownership. Activities which are done casually at home, which also generate money are also included in this definition. These businesses help with economic development, social progress, improving the job market and work conditions and eventually social health as a whole.

Home-based businesses, is referred to any economic-financial activity in one's residence which is done only using the facilities and instruments available at one's home. The term home-based businesses is mostly used to classify business activities which are done in a private residence or at least concentrated in a home-based

institution. The place of residence for these businesses is often the owner's home (Muske and Woods 2003).

In some business literature (Carter et al. 2004), the residence (home) is considered a business incubator which allows the entrepreneur to test his ideas in a small environment without a considerable capital and get enough feedback to make preparations for the expansion of the business. Researchers also emphasize that home-based businesses are growing, due to factors such as better services, easier transportation of the labor force, technologic advancement and the globalization of markets. Even though these businesses are considered the smallest form of businesses, and their owners often prefer to manage them on their own, or with the help of one more individual.

According to the findings of Carter et al. (2004), about 75% of the owners of home-based businesses, spend more than 40 hours per week, attending their businesses. To manage their affairs, these owners often use their personal credits such as their personal bank accounts or personal loans. The main place for their business is their home. According to different studies, the owner of these businesses choose their homes as their business place to reduce the costs and to avoid complications such as registering their company.

Carter et al. (2004), has identified self-employment as the major characteristic of a home business. He believes that the entrepreneur, by establishing a home-based business, can in effect take control of everything and lead his business personally. On the other hand, because a home-based business is essentially a low-cost one, the entrepreneur can easily pass the initial stages quickly and save most of his capital for later expenses such as extended marketing, expanding the products or services and increasing their quality.

In the entrepreneurship literature, it is pointed out that an entrepreneur starts his business by forming an idea, or recognizing an opportunity which has been mostly ignored by others up to that point (Carlson et al. 2006). But in the case of home-based businesses, the entrepreneur often starts a business aligned with his own knowledge and professional expertise. In other words, starting a home-based business is a way which allows the entrepreneur to capitalize on his own experience and personal talents, using his own personal means (Newbery and Bosworth 2010). On the other hand, according to Ben Habib and Spiegel (1994), the process of self-employment and entrepreneurship requires ambition, talent, professional optimism and to a certain degree, luck. It also requires effective research and planning and the entrepreneur would only succeed if he/she sets straight goals and plans for it accordingly. Carter et al. (2004) believe that individual entrepreneurs who end up being successful, often have certain characteristics such as patience, resilience, rationality, core competencies, being inspiring, focus, ambition, adaptability and flexibility and studies suggest that most owner/managers of home-based businesses often start their businesses based on such characteristics.

It's worth mentioning that home-based businesses, because of their small sizes, have certain opportunities such as an increase in demand in one section of the market, using the internet to access new markets and using technologies to improve the quality of their products/services, while they also face certain threats such as the

competition with big companies, regulatory expenses, a reduction in demand caused by economical downturn (Nicholson 2010). Therefore, they need to systematically capitalize on their opportunities while avoiding threats, and among different approaches, marketing is one of the best ways to ensure success and more sales (Newbery and Bosworth 2010).

### 3 Defining “Brand”

The word “Brand” comes from an old Norse word, “Brander” which literally meant branding with hot iron. Even today, some livestock keepers use branding as a method to seal their animals (Keller 2008). A “brand” is the feeling that the customer has about a product, services or the company itself. (Marty Neumeier) and as Greg Norman has put it, success is the direct result of figuring out to supply the market with a brand, as simply as possible. The identity of a brand is an indicator of a set of promises made to potential customers about their demands and expectations, which will eventually lead to trust. A brand is a set of intangible features of a product: Its name, its packaging, price, its history, its fame and its advertising methods (David Ogilvy).

Author	Stages, elements and themes of brand creation	Key concepts	View
Aaker and Juaquim Stiller (2000)	<ol style="list-style-type: none"> <li>1. Vision</li> <li>2. Establishing institution and differentiation</li> </ol>	A brand’s identity as a vision is formed with respect to customer’s need	Brand identity
Aaker (2004)	<ol style="list-style-type: none"> <li>1. Strategic analysis of brand</li> <li>2. Brand identity system</li> <li>3. Establishing the brand identity</li> </ol>	Brand is treated and managed as a strategic asset	Brand identity
DeChernautony (2003)	<ol style="list-style-type: none"> <li>1. Brand vision</li> <li>2. Organizational culture</li> <li>3. Brand goals</li> <li>4. Managing brand circle</li> <li>5. Brand nature</li> <li>6. Internal deployment</li> <li>7. Brand resources</li> <li>8. Evaluation</li> </ol>	Brand is treated as a product/service in itself so the consumer understands the added value and how it benefits him/her	The brand represents all the unified efforts towards the added value of the product

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Author	Stages, elements and themes of brand creation	Key concepts	View
Evertte (2003)	<ol style="list-style-type: none"> <li>1. Mission</li> <li>2. Vision</li> <li>3. Organizational values</li> <li>4. Brand architecture</li> <li>5. Product features</li> <li>6. Personality</li> <li>7. Brand positioning</li> <li>8. Communication strategy</li> <li>9. Internal identity of brand</li> </ol>	The core element of the brand is its main functionalities	Key values
Schultz (2005)	<ol style="list-style-type: none"> <li>1. Representation</li> <li>2. Organize</li> <li>3. Involvement</li> <li>4. Unification</li> <li>5. Supervise</li> </ol>	A brand is defined as a process, where the firm can work on its eventual goals	Organizational change
Wheeler (2006)	<ol style="list-style-type: none"> <li>1. Research</li> <li>2. Strategy</li> <li>3. Identity designing</li> <li>4. Relatability</li> <li>5. Asset management</li> </ol>	Brand is defined as a set of promises, ideas and expectations which lure the customers in	Brand identity
Merrilis and Miller (2008)	<ol style="list-style-type: none"> <li>1. Revising</li> <li>2. Reassurance</li> <li>3. Installation</li> </ol>	Rebranding a firm, to represent the change in management	Rebranding

A brand signals the customer about the product source, and will protect both the customer and the developer from competitors who are trying supply seemingly similar products (Aaker 1992). As defined by the Inter-brand company, a brand is a set of tangible and intangible elements, mixed together with a trademark which enables the company to create competitive advantage in the market and provides added value for the customers (Clifton and Moughan, 2000).

By creating perceptive advantages between different products, by branding and gaining loyal customers, marketers create more value than just financial returns for the companies. In reality, the most valuable assets of a company are not its buildings, workshops and etc, but it is their intangible assets such as management capabilities, marketing, financial and operational expertise which are all reflected in their brand. This was first pointed out by John Stewart, the CEO of the Quaker company in 1992. In his famous words, he says: “If this company is to be sold one day, I will give away all my financial assets and production facilities, but I’ll keep the brand and I guarantee that I’ll be the one benefiting more from the deal.” (Keller 2008). Brands offer a platform on which the consumer can differentiate between different sets of products and services. From the customer’s point of view, a brand

represents all his/her previous experiences with the product. A successful brand is one that is fully recognized and reinforced for the customer, according to his needs. (McDonald and Chernatony 1998). As mentioned by Keller (2003), brands can have personal meanings for customers and it would contain all the information and qualifications regarding the product. Different levels and sources of acknowledgment from the customer's part such as familiarity, features, benefits, images, thoughts, feelings and etc... is crucial to the understanding of a brand by the consumer. Brands act as guarantees for the consumer and help them recognize products with truly added value. (Murphy 1998). Powerful brands guarantee long term secure growth, stable high returns and added asset value because they provide higher sales, superior competitiveness, lower marketing costs and a higher demand. (Temporal and Lee 2000). "The Promise" is the essence of the benefits (both practical and emotional) that the consumer can expect to enjoy by experiencing the product/service provided by the company, which is the heart and soul of that brand. According to Park and his colleagues (1986), many brands suggest a mixture of symbolic, practical and functional benefits. As Keller (2008) puts it, a brand is beyond the product itself; because a brand can include dimensions in which the product is differentiated from other competing products. This differentiation can be rational and tangible (specifically regarding the functional differences) or it could be symbolic, emotional and intangible (regarding what the brand itself represents).

#### **4 Marketing for Home-Based Businesses**

Starting a home-based business requires a certain set of essential skills. Although starting a business like this wouldn't require a large capital, making money from the small capital available still requires skills such as financial management, time management, organization skills, personal management and most importantly, marketing mentality or in other words, having the entrepreneurship spirits. In fact, it doesn't matter how much capital or products the owner possess, or how efficiently the production processes were done, because if the owner lacks the ability to present the products properly, the opportunities are lost and this is what is called marketing skills (Edwards and paul 2005).

Developing a marketing strategy is among the most vital elements for any business. In fact, without a comprehensive marketing plan, all the efforts of an organization would essentially rendered blind and fruitless. According to Carson and Gilmore (2000), marketing is the process which determines all other organizational processes. They believe that most entrepreneurs, not only see marketing beyond a single function, but they see it as their main way of finding customers. For them, in other words, marketing is the main core of their business.

For home-made businesses, marketing activities are tactics for capitalizing on business opportunities. In these businesses, marketing is not considered as a sort of an organizational philosophy, or a strategic process, but merely a method to sell their products (Stokes 2000). Most home-based businesses sell their products

without specific planning for marketing (Stokes and Wilson 2010). Their marketing methods do not follow regular contractual methods and they're highly unique and dependent on the specifics of the businesses themselves.

The nature of small businesses affects their unofficial methods of marketing. These firms, due to their limitations, concentrate on short term goals and prefer immediate action to long term planning (Duncan and Moriarty 2006). Edwards and his colleagues (2005) point out that these firms, whenever asked about their most important policy, give the same answer; making sure that that the customers have a satisfying experience.

Therefore, the first step of marketing for these firms is to fully inspect the market and determine the target audience of their products (Stokes and Lomax 2002). In truth, the main goal of marketing in home-based businesses is to recognize the potential needs of their target customers and then establishing a mutual interactive connection with them in order to fulfill these consumer needs. Therefore, constant surveillance of the market, suppliers, customers and competitors, and an efficient use of the collected information would lay out the proper foundation for a successful home-based business (Nicholas 2010).

Considering that a home-based firm usually puts a lot of effort into forming its consumer base, whenever they decide to enter a new market, they try to keep their customers. The owner is always trying to sell their products to their current customers while trying to ensure their loyalty. That is why they concentrate their efforts on analyzing the different needs of different customer groups, focusing on a market section which they can easily penetrate, or even focusing on 20% of their customers which generate 80% of their returns. They also try to use competitive prices and fast growth methods (Nicholas 2010).

One of the main challenges of home-based businesses is competing with existing, or emerging companies. In a modern market, the nature of competition is ever changing and customers can access their desired products through different mediums such as the internet. (Newberry and Bussworth 2010). Therefore, home-based business owners would soon realize that they not only need to compete with other local businesses, but they have to be able to compete on a wider, even global market if they wish to succeed. On the other hand, the exponential advancement of technology could easily out-date a product and put a business out of work, therefore such competitions are the main threats a home-based businesses faces (Edwards and paul 2005).

All this is true while a home-based business, due to limited capitals, cannot afford specific budgets for marketing or dealing with competitors. That is why they must constantly look for cheaper, for economical ways of detecting and dealing with competitors (Edwards and paul 2005). According to Nicholson (2010), home-based businesses try to stay updated by interacting with the local suppliers, participating in seasonal exhibitions, being active online, staying in touch with their customers, observing their competitors and the market.

## **5 Branding for Home-Based Businesses**

A qualitative study was conducted on Iranian home-based businesses in the food market, aimed at finding a pattern of branding in home-based businesses. After analysis, they recognized 5 main elements and 17 sub-elements which are influential in the branding process among these businesses.

### ***5.1 Creating Value for the Brand***

Aaker has defined brand value as the collection of assets and debts of the brand, added to the value of the product/service offered by that brand. Keller (2008) points out that the brand value is the effect its recognition has on consumer response to marketing. In these classifications, there are numerous definitions and elements, therefore it is usually referred to as “creating value for the brand”. Elements such as the management skills of the owner, securing a future for the business, or having a clear plan for the sustainable expansion of the business are all among the elements which add value to a home-based business.

#### **5.1.1 Skill and Core Competency**

Skill, in this context means the ability of transferring knowledge and expertise to new situations. As Martin and Staines (1994), put it, core competency means efficient functionality within a professional environment. In other words, “core competency includes the knowledge and the skills required to successfully function within a real life situation.”

#### **5.1.2 Vision**

To achieve success, one must have a clear vision for the future. This means, the vision not only needs to be long-term, it should also portray a clear image of the future the desired future. The vision of a firm is basically its long term goal. Emphasizing on such an image also boosts morale which helps directing the potential skills and resources towards its realization more efficiently. Of course, having a clear vision doesn't mean living in a fantasy about a firm's future, but it means having clear short-term, mid-term and long-term goals that are to be met on a schedule. Goals that can be measured and judged rationally.

### **5.1.3 Mental Planning**

A mental plan is basically one's thoughts about the business, often put down on paper to mix out intuitive, traditional intelligence with rational planning. It's a technique by which the planner can connect and merge different ideas with each other. It's often suggested that one needs to put down such ideas, along with his/her long term vision and try to connect them in meaningful, practical ways. By writing them down on paper or on a blackboard, one is enabled to shed light on more complex issues and simplify the whole process.

## **6 The Emotional Function of a Brand**

Considering the cognitive role of human emotions during the process of decision making, making an emotional connection with the customers through the brand means more returns for the business. Such connections make sure that the customer wouldn't be tempted by the marketing efforts (such as lower prices) of the competing businesses. This is important especially for home-based businesses since they can show less pricing flexibility compared to their industrial competitors. The emotional aspect of a brand is what makes the difference for the consumers as well. People like to pay for an emotional experience. According to the mentioned study, the elements of the emotional function of a brand are as followed:

### **6.1 Brand Associations**

This simply means what the brand itself resembles for the customer, must be deep, powerful, pleasant and unique. This factor would effectively increase the customer's loyalty as he tries to bond with the brand, by purchasing more of it, and it would eventually lead to a good name for the brand. What the brand associations, just like the brand itself, is a valuable asset for the business owner(s) which differentiates them from their competitors, and it could be an effective element in the expansion of the business. If the business itself (or its product/service) is unique and original, it would help with the strength of the brand as well.

### **6.2 Naming the Business and the Brand**

Without a doubt, choosing the proper name for a business is one of the determining factors for success. Studies show that choosing the proper name would effectively increase the emotional functionality of a brand. Businesses in the study, have managed to gain the customers' trust and loyalty by choosing the right name.



### **6.3 *Knowing the Customers' Insight***

Knowing the consumers insight is defined as gathering, and processing the information regarding the consumer base which leads to ensuring their loyalty. A customer insight is the correlation between a brand's characteristics and the consumer benefits. To understand it, is to understand how the consumer thinks and sees the product, and why would he/she want to buy this product. A proper understanding of the consumer insight would ensure a loyal customer base.

## **7 Evaluation**

Control and evaluation are integral parts of any functioning business, or any activity for that matter. Evaluation is the set of efforts and activities done in order to increase the efficiency levels of resource usage, and an economical approach towards increasing the overall effectiveness. The term we chose in this study, due to its conceptual aspects, is "marketing intelligence" which we will explain further in the next section.

### **7.1 *Marketing Intelligence***

The concept of intelligence is part of the marketing strategy that is considered as the constant effort to increase the competitive capabilities and the processes of strategic planning. In the available literature on the subject, it is considered to be an essential requirement for strategic planning. (Dishman and Calof 2008). Marketing intelligence results in an increase in competitive capabilities of the business and a better processing of the strategic plans. Kotler believes that marketing intelligence helps the managers with integrating everyday information about the market within their plans. In home-based businesses, which there is no dedicated unit to analyzing the market environment, paying attention to what others say and asking friends and relatives to pay attention to the business environment would be a good starting point for assessing the positive and negative factors affecting the business.

## **8 Marketing Plans for the Brand**

Choosing the elements wisely would help increase the special value of a brand. But the true factor in determining a brand's strength and its positive effects on the consumer is the marketing plans regarding the brand, and how the brand is presented to the market. A marketing plan is essentially a written document containing

guidelines for future plans regarding marketing and the credits of a business unit within the period of the plan. (Lehmann and Winer 2002). In creating a brand, the first step is always preparing a reliable platform for effective interaction with the consumers. Most of the marketing efforts done by home-based businesses are:

### ***8.1 Online Marketing***

Online advertising, because it is cheap, durable, constant, widespread and easily adjustable, is very popular among home-based business owners. It being cheap, specifically makes it useful to emerging home-based businesses which often lack the funds for more traditional ways of marketing. It is highly recommended to all entrepreneurs that before starting a home-based business, they should make sure that they have the expertise required to work with online marketing tools.

### ***8.2 Direct Marketing***

Kotler and Armstrong (2007) believe that direct marketing is any effort by the business owner to directly get in touch with the customers to deliver the product or the service, without the use of marketing middlemen. Direct marketing allows the marketer to receive for direct feedback from the consumer, target the destined market more effectively and sell the product without invoking the traditional long and expensive chain of sales. Receiving direct feedback and the interactive nature of this method, specifically for home-based businesses, is a major helping factor for increasing the marketing intelligence and gaining insight into the market and the consumer base.

### ***8.3 Viral Marketing***

The effectiveness of a firm's advertisement can significantly increase if they manage to convince their consumers to tell their friends about the product. In truth, in this method, the firm is using each customer as a marketer and the consumer, simply by using the product is also becoming a sales agent for it as well. If a considerable amount of the users successfully transmit the message to their contacts, it will spread with significantly high rate. There are two key points regarding this method:

First, a world in which a marketer can attract more customers with practically zero costs. Second, the shift from the "Marketer-Consumer" relationship to "Consumer-Consumer" relationship, which means that the sales power of a product doesn't come from the marketer, but from the customers themselves.

It is worth mentioning that due to the importance of viral marketing for home-based businesses, it can also shed negative light on the business if the viral message contains a negative aspect of the business. But what can be said for sure about viral marketing, is that if done right, it is undoubtedly the most effective marketing tool.

#### **8.4 Sales Promotion**

These tools are essentially techniques used by businesses to temporarily promote their sales. These tools often work through offering an added value to the customer, such as a lower price or a free item accompanying the purchased product. These tools have been used to gain the customers' trust.

#### **8.5 Media**

A media is a channel by which the business can transmit a controlled message to the customer. A media not only exposes the consumer to the message, but it affects the message either positively or negatively. The key point is choosing the right media for transmitting the message to the customer. The audience numbers of a media is an important factor. The businesses in our studies have chosen different medias for announcing their messages, ranging from weddings, hotels, schools, busy city sections and etc. Sorting the effectiveness of these places, due to their diverse nature, is not exactly possible, but we can say that it is important to find the right media for the right product. Find the product's message and convey it to the right people, and it should leave its effect.

#### **8.6 Public Relation**

The aim of having a public relation is to make sure you're leaving a good impression on your consumer base. The shortest version of the public relation definition would be the management of a mutual stream of information between the firm and the public. In other words, public relation means informing the public about your product/service while receiving feedback on how it's affecting them. Public relation doesn't require the costs of using a media, which makes it more popular with home-based businesses. Things such as a short movie about the business, publishing articles about it with the brand name, holding free lectures and etc. are also examples of good public relation that we've encountered in our study.

## **8.7 *Personal Sales***

Personal sales, especially in a home-based business' first few stages, is extremely important. Personal sales, is defined as the owner, personally going to a customer and selling him product. This method, nowadays has become extremely strategic and complicated and requires a scientific approach to conduct. Such skills, like negotiation is crucial for the business owner to have since a home-based business often lacks the fund necessary to hire a specialist or an adviser for applying this method. It's important to aim at informing the customer regarding the product or his/her own needs.

## **9 Brand Position**

A brand's place means the way people see it compared to other competing brands. A brand's place should be well known since message transmission and advertisement should be written accordingly. Kotler defines Brand Position as the proper design of products/services in order to find the desired place for the brand. Most brand Position in home-based businesses is done through the features of the product itself. In general, there different ways of doing so:

### **9.1 *Positioning Based on Product's Benefits***

This means exactly what it sounds like. The consumer ends up buying it because of its benefits. In the food industry (subject of our study), most home-based business owners aim to achieve this goal by offering distinct and unique tastes, in vast varieties. This is often easier for home-based businesses to achieve since creativity in variety does not cost much. Marketing intelligence would affect the efficiency of this method tremendously, mainly because knowing what your competitors are offering the market would help you an easier to remember product yourself.

### **9.2 *Positioning Based on the Consumer Base***

This one is very similar to the previous method. The Positioning happens based on what sort of customers might need/want this product. For instance, focusing on foreign tourists or exclusively producing for celebrities or a specific neighborhood in town. Limiting your target audience like this, especially at the beginning of a business would help a lot with knowing the market and being prepared for expansions.

### 9.3 Positioning Based on Product Features

Simply put, if the product has enough positive features, it would find a high place among the consumers. It would be especially helpful in home-based food businesses because competing with industrially produced food is not hard for home-made food.

## 10 Conclusion

Home-based businesses, due to their unique nature, have access to numerous unique opportunities while facing very unique challenges as well. Therefore the key to success for such businesses is having a systematic approach towards seizing those unique opportunities while successfully dodging the challenges. Among the tools available for entrepreneurs to achieve such a thing, branding proves to be an incredibly successful strategy that would guarantee more sales, long term loyal customers and business durability. This study was conducted on Iranian home-based food businesses in order to find patterns in branding among these businesses. Most of these businesses had at least 5 successful years behind

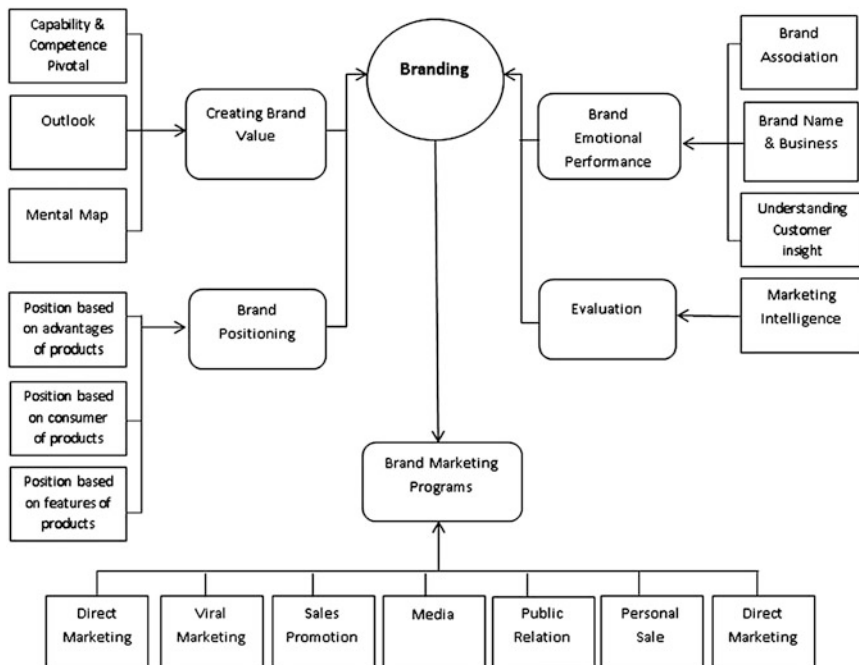


Fig. 1 Branding model of home-based businesses operating in the field of nutrition

them which shows a certain degree of stability and experience. 62.5% of these entrepreneurs were university educated, within a related field which is a sign that professional skills could guarantee success to a degree. Marketing Intelligence, defined as the ability to assess the environment and react accordingly seems to be very influential as well. Some businesses employed creative solutions for market surveillance such as gaining their competitors' cooperation. But the majority used more traditional means such as friends, relatives, local suppliers and etc. But the main point here is that without assessing the market, by whichever means available, success is practically impossible. Another vastly effective method these businesses have employed seems to be viral marketing. But it's important to remember that viral marketing works both ways. If, at some point, your business shows a negative aspect, that negativity will also spread virally. Last but not least, as mentioned before, is brand Position. Making sure that your product has enough positive, distinct features that it can find its permanent place within the consumer market. Although we haven't found any data that could help us rate each element due to its importance, what's obvious to us is that the recipe for success is most definitely a balanced mixture of all the elements mentioned in our article (Fig. 1).

## References

- Aaker, D. A. (1992). Managing the most important asset: Brand equity. *Planning Review*, 20(5), 102–120.
- Aaker, D. A. (1996). Measuring brand equity across products and markets. *California management review*, 38(3), 102-120.
- Aaker, D. A. (2004). *Brand portfolio strategy. Creating relevance, differentiation, energy, leverage and clarity*. New York: Free Press.
- Aaker, D. A., & Stillier, J. (2000). *Brand leadership*. New York: Free Press.
- Ben Habib, J., & Spiegel, M. M. (1994). The role of human capital in economic development evidence from aggregate cross-country data. *Journal of Monetary economics*, 34, 66–69.
- Carter, S., Tagg, S., & Dimitratos, P. (2004). Beyond portfolio entrepreneurship: multiple income sources in small firms. *Entrepreneurship & Regional Development*, 16(6), 481–499.
- Carson, D., & Gilmore, A. (2000). SME marketing management competencies. *International Business Review*, 9(3), 363–382.
- Carlson, D. S., Kacmar, K. M., Wayne, J. H., & Grzywacz, J. G. (2006). Measuring the positive side of the work–family interface: Development and validation of a work–family enrichment scale. *Journal of Vocational Behavior*, 68(1), 131–164.
- Clifton, R., & Maughan, E. (Eds.). (2000). *The future of brands: Twenty-five visions*. NYU Press.
- Dishman, P. L., & Calof, J. L. (2008). Competitive intelligence: a multiphasic precedent to marketing strategy. *Emerald Journal*.
- Duncan, T., & Moriarty, S. (2006). How integrated marketing communication's 'touchpoints' can operationalize the service-dominant logic. *The service-dominant logic of marketing: dialog, debate, and directions*, 236–249.

- Edwards, S., & Paul E.P. (2005). *Entrepreneurship at home businesses for Dummies*, Wiley, Publishing. Inc.
- Falstad, J. (2001). *Butte exec seeks return to electricity regulation*. Billings Gazette, p. C13.
- Hakim, S., & Blackstone, E. A. (1997). *Securing home and business: A guide to the electronic security industry*. Butterworth-Heinemann.
- King, S. (1991). Brand building in the 1990s. *Journal of Consumer Marketing*, 8(4), 43–52.
- Keller, K. L. (2003). Building, measuring, and managing brand equity. *Aufl.*, Upper Saddle River, NJ.
- Keller, K. L. (2008). *Strategic brand management: Building, measuring, and managing brands equity* (3rd ed.). Pearson Education.
- Keller, K. L., & Lehmann, D. (2001). How do brands create value. *Journal of Marketing Management*, May/June, 26–31.
- Kotler, P., & Armstrong, G. (2007). *Marketing: An introduction*. Upper Saddle River, N.J.: Pearson Prentice Hall.
- Laforet, S. (2009). *Managing brands*. McGraw-Hill Education, December 1, 2009.
- Lehmann, D. R., & Winer, R. S., (2002). Analysis for Marketing Planning. *Business & Economics*, McGraw-Hill Irwin.
- Martin, G., & Staines, H. (1994). Management competencies in small firms. *International Journal of Management Development*, 13 (7), 23–34.
- McDonald, M. H., & de Chernatony, L. (1998). *Creating powerful brands in consumer, service and industrial markets*.
- Murphy, J. (1998). What is Branding in brands. *The New Wealth Creator*, Macmillan Press, London.
- Muske, G., & Woods, M. D. (2003). *Home-Based Business: An Economic Development Alternative*. Division of Agricultural Sciences and Natural Resources, Oklahoma State University.
- Nicholson, I. (2010). *A brief guide to starting a home based business*. Business eBook comes with the compliments of <http://www.simple-ebusiness-traffic-solutions.com/>
- Newbery, R., & Bosworth, G., (2010). “Home-Based business sector in the rural economy”. *Society and Business Review*, 5(2), 183–197.
- Ruiz, Y., & Walling, A. (2005). Home-based working using communication technologies. *Labour market trends*, 113(10), 417–426.
- Stokes, D. (2000). Entrepreneurial marketing: a conceptualisation from qualitative research. *Qualitative market research: an international journal*, 3(1), 47–54.
- Stokes, D., & Lomax, W. (2002). Taking control of word of mouth marketing: the case of an entrepreneurial hotelier. *Journal of small business and enterprise development*, 9(4), 349–357.
- Stokes, D., & Wilson, N., & Wilson, N. (2010). *Small business management and entrepreneurship*. Cengage Learning EMEA.
- Park, C. W., Jaworski, B. J., & MacInnis, D. J. (1986). Strategic brand concept-image management. *The Journal of Marketing*, 135–145.
- Temporal, P., & Lee, K. C. (2000). *Hi-tech hi-touch branding: creating brand power in the age of technology*. John Wiley & Sons, Inc.

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# The Effects of Mergers and Acquisitions (M&As) on Bank Performance and Entrepreneurial Orientation (EO)

Mohammad Zarei, Amir Alambeigi, Behrouz Zarei  
and Parvaneh Karimi

**Abstract** This chapter aims at pointing out that how mergers and acquisitions (M&As) as popular strategies which they are based on external growth approach have affected the performance of banks and entrepreneurial orientation (EO) in the context of Iranian financial sector. In this regard, it has been tried to investigate in what way EO moderates the relationships between the performance of banks in one hand, and M&As on the other hand. For this goal, 114 participants including the top and middle managers of the Iranian banks were chosen to be closely considered. The research is an applied research and a cross-correlation methodology has been used to spotlight on the probable relationships between EO and M&As. Furthermore, partial least squares was used to analyse the data and test the model. Thus, the main contribution of the research can be claimed as; investigating whether EO performs as a variable moderator between the performance of banks and M&As. The results of the research reveal that, M&As have enhanced the performance of banks directly and indirectly, through promoting EOs.

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## 1 Introduction

Quick proliferations of financial institutions and private banks have disarranged the equilibrium of the Iranian financial sector. The sector witness unprecedented growth in the number of co-operatives, credit unions, and private banks in less than a decade. The Iranian government by legislating some regulations has tried to reorganise the sector by focusing on increasing the efficiency of the money market and results from such actions have been a waves of mergers and acquisitions (M&As). Many of the Iranian banks due to obtaining a competitive advantage, acquiring their competitors and improving their performance have used this opportunity and embraced M&A deals (Zarei et al. 2015).

In a few words, M&A refers to a combination of two or more separated organisations into a one new entity. M&A is known as a key phenomenon of the modern economies, which it is based on the external growth paradigm. M&A as one of the strategies of corporate development it is prevalent and can be manipulated by corporate entrepreneurs. Furthermore, the positive impacts of M&A on performance have been verified by various researches (e.g. Akbulut and Matsusaka 2010; Huck et al. 2007; Rahman and Limmack 2004), although the opposite results have been simultaneously reported (King et al. 2004).

The *entrepreneurism* as a value-based paradigm covers verities of concepts such as social entrepreneurship that strives to create socio-economic values (Zarei et al. 2017) or techno-entrepreneurship that emphasises on the “revolutionary changes” by using of new technologies such as Cloud Computing and Internet of Everything (Zarei et al. 2016). On the other hand, corporate entrepreneurship has been referred by many authors as an organisational process that contributes to firm survival and performance (Barringer and Bluedorn 1999; Covin and Slevin 1988; Lumpkin and Dess 1996). In this regard, Dess and Lumpkin (2005) argue that, the firms which follow the strategy of corporate entrepreneurship are able to pursue growth through new venture opportunities and strategic renewal. Two important concepts in the domain of entrepreneurship are known as entrepreneurial intention (EI) and entrepreneurial orientation (EO). EI has been discussed as the percentage of individuals who expect to start their own businesses within the next three years. On the other side, the term of EO refers to the strategy-making processes and styles of managing corporations that engage in entrepreneurial activities (Lumpkin and Dess 2001), furthermore, EO has become a central concept in the domain of entrepreneurship (Covin et al. 2006) and two of the most important dimensions that characterise an EO are known as, (I) aggressive toward competitors, and (II) proactive relative to marketplace. The positive impact of EO on the *performance* has been proven by several scholars.

On the one hand, many aspects of the organisations have changed during the post-merger era, for instance: the organisational structure, human resources, businesses processes, and of course the performance, on the other hand, and in spite of the importance of the issue the impact of M&As on the EO has not been investigated. Therefore, the main aim of this study has been to investigate the effect of

M&As on the performance of banks and the EO, as well. In fact it has been tried to explore that in what way EO as a variable mediates the relationship between bank performance and the M&As. Consequently, in the remaining parts, first the drivers and motivations of M&A deals, for the aim of understanding the effects of M&As on firm's performances have been reviewed and then the recent Iranian merger waves are investigated, at that time, the EO and its key dimensions closely considered. Also for understanding the current situation of the Iranian financial sector—as the research context—the current circumstances of the Iranian banking system and our case consists of 114 managers of the Iranian banks, and hypothesis comprehensively have been argued. Finally, the empirical results and findings of our research have been presented.

## 2 The Drivers and Motivations of M&As

In general, economic theory provides many possible reasons for the question that, why mergers have occurred; including efficiency-related reasons that often involve economics of scale and scope or synergy, that attempts to create market power, take advantage of opportunities for the aim of diversification (Andrade et al. 2001), industry consolidation, compelling strategic rationale, defensive measure to protect market share, entry into the new emerging markets, and eventually manipulating reduction and dissolution, consolidating the value chain, distributing the assets, reducing the investment risks, eliminating and absorbing the competitors, creating competitive advantages, generating wealth and value for the shareholders and stakeholders, and even tax related reasons. In addition to the above-mentioned factors, it seems that merger waves as a macro and/or an industrial factors sometimes have such power to motivate corporations to be benefited from M&A deals. Since 2011 Iranian banking industry has involved with a new M&A wave. Therefore understanding the drivers of these waves are necessary.

There is a generally accepted opinion among the specialists about the concept of M&A waves and the existence of such waves has been proven by financial economists. The first studies on M&A waves return to Thorp (1941), Stigler (1950), Markham (1955) and Nelson (1959), however, some other studies have reported a wave-like pattern during the severe merger deals. M&A waves have formed due to the variety of reasons. One of the most conspicuous features of M&As is that, they emerge in waves that are correlated with increases in share prices and price/earnings ratios (Gugler et al. 2012). Furthermore, Harford (2005) alludes to several other factors such as, market timing, combination of industry shocks, react firms to the environmental shocks or regulators contemporaneous, peak in partial-firm acquisitions for cash, and high stock market valuations. Correspondingly, other mentioned factors can be categorised as; shocks to a economy of an industry, technological changes, and regulations (Gort 1969; Mitchell and Mulherin 1996).

According to Vives (2001) regulators have traditionally tried to restrict competition in a sector in order to avoid excessive risks and Rhodes-Kropf et al. (2005) show that misvaluations have affected the level of merger activity. Also, two other mentioned factors are known as; managerial timing of market, and overvaluations of the firms (Rhodes-Kropf and Viswanathan 2004; Shleifer and Vishny 2003). The other drivers can be named as; merger-manias, overvaluation of stocks, agency costs, monopoly and competitive positioning. As a final point, aggregate merger waves couldn't be necessary happened due to shocks on industrial clusters.

### 3 The Impact of M&A on Performance

M&As have been faced with a paradox, that is globally known as the paradox of M&As. Despite of the high failure rate from M&A deals, these strategies are still manipulated by organisations around the globe. However, a number of researchers have reported the positive impact of M&As on the performance of the investigated firms. For instance, Akbulut and Matsusaka (2010) argue that announced returns from 4764 mergers over 57 years have been significantly positive, or Huck et al. (2007) by investigating the M&A paradox found out that, merged firms have produced more significantly output than their competitors. During a research Rahman and Limmack (2004) examined the financial performance from a sample of 97 quoted acquired and 117 targeted companies which were involved in series of acquisitions and they discovered that, the operating cash flow performance of combined firms was significantly improved since the acquisitions.

However, there are several other conducted researches during 1980s that the majority of them revealed a minor positive impact from such deals (see e.g. Hoshino 1982; Mueller 1985; Ravenscraft and Scherer 1987). Banks' incentives to merge are also driven by financial cost advantages related to size (Carletti et al. 2007). Also, M&As between large banks lead to polarisation of the banking system; into large and small institutions. Liberalisation process and information technology are also mentioned as two other factors that affect the consolidation wave (Vives 2001).

For measuring the performance from M&A deals the variety of methods have been using include; accounting-based measures (Thanos and Papadakis 2011), study the stock price, executive opinion survey, and case studies, however, truthfully, a widely accepted method for measuring the performance of M&A deals has not been offered, as a result, we designed our questionnaire based on executive opinions.

### 4 Entrepreneurial Orientation (EO)

Dess and Lumpkin (2005) argue that EO is a corollary concept that emerged primarily from the strategic management literature and an EO refers to the processes, practices, and decision making activities that lead to a new entry. The effect of EO on

the performance of firms is in our time endorsed (Dada and Watson 2013; Dess and Lumpkin 2005; Frank et al. 2010; Lumpkin and Dess 2001; Mousa and wales 2012). Five dimensions of EO are known as: autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness. Autonomy affords organisational members the freedom and flexibility to develop and enact entrepreneurial initiatives. Innovativeness is the predisposition to engage in creativity through introducing new products/services or research and development. The risk taking characteristic covers areas such as taking risk under uncertainty conditions, for instance, allocating resources to a venture in an ambiguous environment. Also, the proactiveness is an opportunity-seeking approach, a forward-looking perspective characterised by the introduction of new products and services ahead of the competitors by the way of anticipating the future's demand (Lumpkin et al. 2009). The competitive aggressiveness refers to the quality that a company reacts upon the competitive trends and demands that already exist in the bazaar (Lumpkin and Dess 2001).

## 5 The Case: Iranian Banking System

Over the past three decades, extensive changes took place in the Iranian banking system, including establishing private financial institutions and private banks, and shifting from traditional banking to the internet-based banking. The minimum initial capital to establish a private bank in the country is about 4000 billion Rials (equal to 117.5 million USD). The Iranian financial sector comprises 11 main groups as shown in Table 1.

Table 1 indicates that, almost 1698 financial institutions exist in the Iranian financial sector. Recently the sector witnesses an incredible increase in the amount of co-operative credit unions, that about 82% of them have been revoked, expired

**Table 1** Iranian financial sector at a glance

Group	Number	Lack of licenses, revoked or expired
Bi-National Bank	1	–
Foreign Banks	5	–
Governmental-Commercial Banks	3	–
Co-operative Credit Unions	904	807
Gharz-al-hasaneh Banks	2	–
Currency Exchange	712	343
Gharz-al-hasaneh Bank & Institution Funds	7	–
Credit Institutions	3	–
Leasing Company	37	–
Private Banks	19	–
Specialised Government Banks	5	–
Total	1698	1150

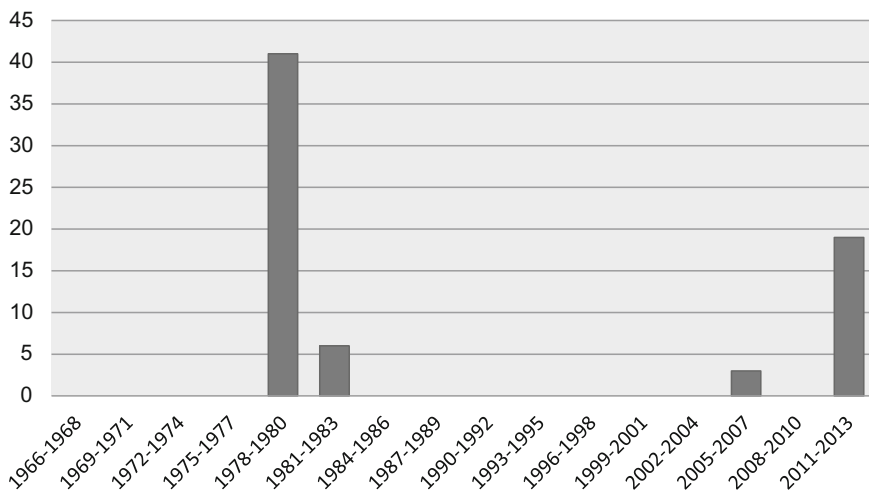
or do not have the banking license—that for having any financial activity will be absolutely needed—from the *Central Bank of Iran* (CBI). About 25% of the Iranian liquidity is managed in these institutions and one of the main CBI's policies during the recent years was to persuade the financial institutes to merge with other financial institutions in order to create a stronger financial entity, for the aim of consolidating the financial sector (Zarei et al. 2015).

### 5.1 The M&A Waves of the Iranian Banking Industry

Since 1966 more than 68 M&A deals can be recognised in the Iranian banking system as is depicted in Fig. 1. The first M&A wave occurred in 1978–1980 and the recent wave is started since 2011.

The first wave of the Iranian M&As was formed in the late of 1979, about one year after the Iranian revolution. In those years, the new Iranian government was established and legislated the new institutional laws. Many foreign banks were merged to be prevented from outflowing the national capitals, which formed a wave of M&As.

The second wave started since 2011, when 25 banks and financial institutions were forced to be combined with the banking license holders in less than two years for the aim of re-organising the money market and achieving the competitive advantages. Although several financial institutes still have not acquired banking license as a consequence more M&A deals will be expected. By interviewing with



**Fig. 1** History of the Iranian banking industry M&As. *Source* Zarei et al. (2015)

some of the managers of the merged banks, experts from the industry, CBI's managers and reviewing the related literature, the following hypotheses emerged:

- H1: Forces behind the M&As have affected the performance of banks
- H2: EO has affected the performance of banks
- H3: Forces behind the M&As have affected the EO

## 6 Methodology

The present study is an applied research which was conducted by using of a cross-correlation method. In this regard, 114 participants including both middle and top managers of the Iranian banks surveyed in the current research. The analysed data were collected through a questionnaire which was based on a five Likert Scale. The following independent variables were investigated in the present study: acquiring competitive advantage, lack of banking license, organising money market, shareholders pressure, reduction and dissolution, and finally, the treat of government to close the institutions which had no banking license. The measurement scale for each variable was identified based on the literature review and for determining the validity of instruments—each concept of the questionnaire; their validity were checked by the experts and consequently, some changes were applied in the questionnaire to be finalised and distributed.

After collecting data, confirmatory factor analysis (CFA) is employed. The factor loading for each indicator has a  $t$  value greater than 1.96. In this way, the indicator is accurate enough to measure the constructs and latent trait. The results from factor loading demonstrate that all indicators have a  $t$  value higher than 1.96 so they are meaningful—see Table 2. Composite reliability and Cronbach alpha are also calculated to assess the reliability of the instruments, which in our case indicated that the instrument has an acceptable level of reliability—see Table 2. The Cronbach alpha value is higher than 0.7, and the composite reliability is higher than 0.6, so it can be taken into account as an evidence from the respectable reliability of the instrument.

Based on the aim of the research, partial least squares were manipulated as a statistical method for the aim of testing the model, as well as hypotheses, that is known as a causal predictions method which is considered as a multivariate method. Partial least squares method is known as the second-generation of variance-based structural equation modeling approach that overcomes some weaknesses from the first multivariate generation; such as simple linear single-stage, especially in the linear regression, pre assumption of existence of observable variables, and ignoring the measurement error of variables.

**Table 2** Factor loading of each indicator of the constructed model along with their significant value

Construct	Indicators	Sign	Factor loading	<i>t</i>	Cronbach alpha	CR	AVE
Bank performance	Our bank has a good return on investment (ROI)	PE1	0/825	23/45	0/94	0/95	0/69
	Our bank has a good return on sales (ROS)	PE2	0/853	27/16			
	Our bank has good profit growth	PE3	0/844	27/90			
	Our bank has good return on assets	PE4	0/808	22/15			
	Our overall efficiency of operations was good	PE5	0/844	30/86			
	Our sales growth was good	PE6	0/848	26/21			
	Our bank witnessed good market share growth	PE7	0/857	33/74			
	Our cash flow from operations was good	PE8	0/848	24/98			
	Our bank has appropriate reputation	PE9	0/719	13/24			
EO	Our Bank spends more time on long-term R&D (3+ years) than on short-term R&D	EO1	0/652	9/02	0/88	0/90	0/57
	Our bank is usually among the first in the industry to introduce new products	EO2	0/766	19/63			
	Our bank rewards risk taking	EO3	0/838	23/38			
	Our bank shows a great deal of tolerance for high-risk projects	EO4	0/848	27/83			
	Our bank uses only "tried-and-true" procedures, systems, and methods	EO5	0/435	3/65			
	Our bank challenges, rather than responds to, its major competitors	EO6	0/832	21/88			
	Our bank takes bold, wide-ranging strategic actions rather than minor changes in tactics	EO7	0/832	23/81			

(continued)



**Table 2** (continued)

Construct	Indicators	Sign	Factor loading	<i>t</i>	Cronbach alpha	CR	AVE
Forces underlying the M&A	Accepting the closure subsidiary business without accepting their detriments is the force underling the current M&A	MA10	0/707	14/42	0/84	0/88	0/51
	Tax evasion is the force underling the current M&A	MA12	0/620	9/06			
	Opportunity exploitation to acquire target institutes is the force underling the current M&A	MA17	0/709	11/42			
	Acquire Synergies and Economics of scope/scale is the forces underling the current M&A	MA18	0/703	11/68			
	Low performance and encourages shareholders is the force underling the current M&A	MA8	0/743	10/52			
	Willingness of shareholders to increase profit is the force underling the current M&A	MA9	0/782	16/21			
	Stakeholder pressures is the force underling the current M&A	MA7	0/746	12/50			

Furthermore, a Bootstrap method is used which uses simulation and resampling for testing the significance of parameters for the aim of investigating the significance of parameters of the model besides Chin and Newsted (1999) believe that, for having an accurate estimate from the proposed model, the minimum number of resampling can be provided around 500 reliable results.

## 7 Findings

As it can be seen from the proposed model, first the validity of the selected metrics for measuring latent variables should be explored through CFA.

Based on the consumptions of the structural equation modeling in addition to examining the validity of the constructs, which is used to determine the validity of the indicators for measuring the constructs, discriminant validity should also be considered. Therefore, for determining the discriminant validity, square root of average variance extracted was used (Table 3).

The squared root of the average variance for each construct should be greater than the correlations between that construct and all other constructs (Fornell and Larcker 1981). The analysed results of discriminant validity based on Fornell and Larcker’s criteria demonstrate that; the selected indicators were good enough to be used as a measurement tool, for the reason that, the extracted squared root of average variance for each structure is higher than all correlation of the other factors.

In the next level, the causal relationships between constructs should be investigated and for this aim the structural equation modeling can be used. Also, Bootstrap simulation method is used to examine the significance of path coefficient. For this purpose, resampling method is used, with both 500 and 800 samples—which is suggested by the partial least squares method. The results indicate that the significant or insignificant statuses of the parameters have not changed, so the results are quite valid (Table 4).

The first hypothesis proposes that; forces underlying the M&A significantly and statistically affected the performance of banks. The path coefficient analysis demonstrates that, forces underlying the M&As have affected the performance of the investigated banks, besides their value equal to 0/215 which is significantly higher than 0.01. Thus, the null hypothesis is hereby rejected, that means; there are enough reasons to prove that (Fig. 2);

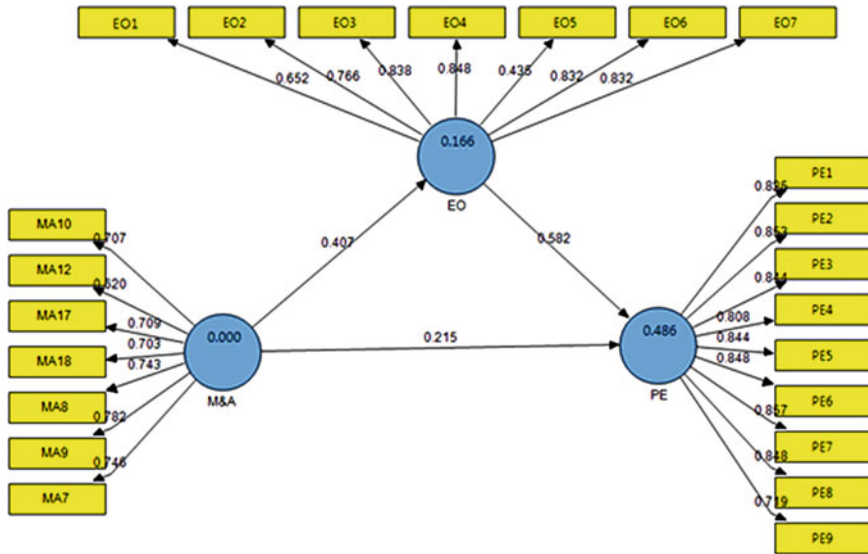
**Table 3** Square root of average variance extracted and correlation

	1	2	3
EO	0/754	0/408	0/670
Forces underlying the M&A	0/408	0/714	0/451
Bank performance	0/670	0/451	0/830

The squared root of the average variance was extracted

**Table 4** Coefficient paths and the significant direct effect of research variables along with important indices

R2	Standard error	t	Path coefficient	Studied path
0/49	0/08	3/44	0/215	Forces underlying the M&A → Bank performance
	0/07	9/28	0/582	EO → Bank performance
0/17	0/08	4/90	0/407	Forces underlying the M&A → EO



**Fig. 2** Path model of the effects of research variables based on the estimation of partial least squares

*Forces underlying the M&As have a direct and significant effect on the performance of banks.*

The second hypothesis proposes that, EO variable has statistically and significant effect on the performance of banks. The path coefficient analysis of this study clearly demonstrates that, EO variable affects the performance of banks and it's value equals to 0/582 which has significantly is higher than 0.01; hence, this null hypothesis is rejected, as well. In other words,

*EO variable has a direct and significant effect on the performance of banks.*

The third hypothesis proposes that forces underlying the M&A variable statistically and significantly has an effect on the EO variable. In this regard, the path coefficient analysis demonstrates that, forces underlying the M&A affected the EO and their value equal to 0/407 which is significantly higher than 0.01; as a result, there are enough reasons to reject null hypothesis. In other words:

*Forces underlying the M&A affect the EO.*

The primary purpose of the current study has been to investigate the effect of M&A on the performance of banks and EO, as well. Furthermore, explains that whether EO variable mediates the relationship between the performance of banks and M&As. As was mentioned, mediating effect refers to the effect which in that a variable affects the dependent variable through another variable.

To investigate the significance of the mediator, Sobel test was used.

$$Z\text{-value} = a * b / \text{SQRT}(b^2 * s_a^2 + a^2 * s_b^2)$$

In the equation, the values of  $a$  and  $b$  are equal to regression effect of the dependent variable on the mediator variable and the effect of the mediator variable on dependent variable, respectively. The values of  $s_a$  and  $s_b$  refer to the standard error of the related paths, respectively. The obtained value of  $Z$  equals to 33.4 with the standard error of 05.5 which is significant at the level of 0.01.

*Therefore, it is determined that EO variable acts as mediator variable between banks' performance and M&As.*

To determine whether the effect of the mediator is fully or partially,  $VAF$  value or Iacobucci and Duhachek indicators should be used. The obtained value is equal to 0.523 and since the value of this index is between 0.20 and 0.8, it can be claimed that the mediator variable has a partial mediator effect on the relationship between bank's performance and M&As. In the other words, merger and acquisition variable affects the performance of banks both directly and indirectly through the EO variable. In sum, the results show that M&A variable promotes the performance of the considered banks both directly and indirectly through stimulating EO.

## 8 Conclusions

From a certain point of view, corporate entrepreneurship contributes to firm survival and performance and EO has become a central concept in the domain of entrepreneurship, on the other hand M&A as one of the corporate development strategies it is so popular and the positive impact of both M&A and EO on the firms' performance have been proved by the results from several researches. Nonetheless, it is a limited number of studies that focus on the consequences of M&As on the EO. Thus, the primary purpose of the current study has been to investigate the effect of M&As on the performance of the Iranian banks and EO, also we struggled to explain that in what way EO as a variable mediates the relationship between the performance of the Iranian banks and M&As. To investigate this relationship an ad hoc but well-developed questionnaire based on the opinions of the managers of the Iranian banks was designed and then we tested our hypotheses among the sample of 114 participants; including both middle and top managers of the Iranian banks which involved in the second wave of the Iranian meager wave.

In sum, the results show that: (A) M&As have had a direct and positive effect on the performance of the Iranian banks, (B) the EO has a direct effect on the performance of banks, and finally, (C) M&A deals have affected the EO. So it can be

concluded that, the M&A deals promotes the performance of the studied banks both directly and indirectly through developing their EO. We suggest that during the post-merger and after closing M&A deals the top manager pay enough attention on human resources aspect of organisations to accelerate the performance of banks through increasing EO among employees and middle managers.

## References

- Akbulut, M. E., & Matsusaka, J. G. (2010). 50+ years of diversification announcements. *Financial Review*, *45*(2), 231–262.
- Andrade, G., Mitchell, M. L., & Stafford, E. (2001). New evidence and perspectives on mergers. *Journal of Economic Perspectives*, *15*(2), 103–120.
- Barringer, B. R., & Bluedorn, A. C. (1999). The relationship between corporate entrepreneurship and strategic management. *Strategic Management Journal*, *20*(5), 421–444.
- Carletti, E., Hartmann, P., & Spagnolo, G. (2007). Bank mergers, competition, and liquidity. *Journal of Money, Credit and Banking*, *39*(5), 1067–1105.
- Chin, W. W., & Newsted, P. R. (1999). Structural equation modeling analysis with small samples using partial least squares. *Statistical Strategies for Small Sample Research*, *1*(1), 307–341.
- Covin, J. G., Green, K. M., & Slevin, D. P. (2006). Strategic process effects on the entrepreneurial orientation–sales growth rate relationship. *Entrepreneurship Theory and Practice*, *30*(1), 57–81.
- Covin, J. G., & Slevin, D. P. (1988). The influence of organization structure on the utility of an entrepreneurial top management style. *Journal of Management Studies*, *25*(3), 217–234.
- Dada, O., & Watson, A. (2013). Entrepreneurial orientation and the franchise system: Organisational antecedents and performance outcomes. *European Journal of Marketing*, *47*(5/6), 790–812.
- Dess, G. G., & Lumpkin, G. T. (2005). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *The Academy of Management Executive*, *19*(1), 147–156.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 382–388.
- Frank, H., Kessler, A., & Fink, M. (2010). Entrepreneurial orientation and business performance—a replication study. *Schmalenbach Business Review*, *62*, 175–198.
- Gort, M. (1969). An economic disturbance theory of mergers. *The Quarterly Journal of Economics*, *83*, 624–642.
- Gugler, K., Mueller, D. C., & Weichselbaumer, M. (2012). The determinants of merger waves: An international perspective. *International Journal of Industrial Organization*, *30*(1), 1–15.
- Harford, J. (2005). What drives merger waves? *Journal of Financial Economics*, *77*(3), 529–560.
- Hoshino, Y. (1982). The performance of corporate mergers in Japan. *Journal of Business Finance & Accounting*, *9*(2), 153–165.
- Huck, S., Konrad, K. A., Müller, W., & Normann, H. T. (2007). The merger paradox and why aspiration levels let it fail in the laboratory. *The Economic Journal*, *117*(522), 1073–1095.
- King, D. R., Dalton, D. R., Daily, C. M., & Covin, J. G. (2004). Meta-analyses of post-acquisition performance: Indications of unidentified moderators. *Strategic Management Journal*, *25*(2), 187–200.
- Lumpkin, G. T., Coglisier, C. C., & Schneider, D. R. (2009). Understanding and measuring autonomy: An entrepreneurial orientation perspective. *Entrepreneurship Theory and Practice*, *33*(1), 47–69.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, *21*(1), 135–172.
- Lumpkin, G. T., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, *16*(5), 429–451.

- Markham, J. W. (1955). Survey of the evidence and findings on mergers. In *Business concentration and price policy*. Princeton University Press.
- Mitchell, M. L., & Mulherin, J. H. (1996). The impact of industry shocks on takeover and restructuring activity. *Journal of Financial Economics*, 41(2), 193–229.
- Mousa, F. T., & Wales, W. (2012). Founder effectiveness in leveraging entrepreneurial orientation. *Management Decision*, 50(2), 305–324.
- Mueller, D. C. (1985). Mergers and market share. *The Review of Economics and statistics*, 259–267.
- Nelson, R. L. (1959). *Merger movement in American industry, 1895–1954*. Princeton University press.
- Rahman, R. A., & Limmack, R. J. (2004). Corporate acquisitions and the operating performance of Malaysian companies. *Journal of Business Finance & Accounting*, 31(3–4), 359–400.
- Ravenscraft, D. J., & Scherer, F. M. (1987). Life after takeover. *The Journal of Industrial Economics*, 147–156.
- Rhodes-Kropf, M., Robinson, D. T., & Viswanathan, S. (2005). Valuation waves and merger activity: The empirical evidence. *Journal of Financial Economics*, 77(3), 561–603.
- Rhodes-Kropf, M., & Viswanathan, S. (2004). Market valuation and merger waves. *The Journal of Finance*, 59(6), 2685–2718.
- Shleifer, A., & Vishny, R. W. (2003). Stock market driven acquisitions. *Journal of Financial Economics*, 70(3), 295–311.
- Stigler, G. J. (1950). Monopoly and oligopoly by merger. *The American Economic Review*, 23–34.
- Thanos, I. C., & Papadakis, V. M. (2011). The use of accounting-based measures for measuring M&A performance: A review of five decades of research. *Advances in Mergers and Acquisitions*, 10, 103–120.
- Thorp, L. W. (1941). The increasing responsibility of management. *Journal of Accountancy*, 72(5), 403.
- Vives, X. (2001). Competition in the changing world of banking. *Oxford Review of Economic Policy*, 17(4), 535–547.
- Zarei, M., Alambegi, A., Karimi, P., & Zarei, B. (2015). What drives mergers and acquisitions waves in developing countries? Evidences from Iranian banking industry. *Iranian Economic Review*, 19(2), 123–137.
- Zarei, M., Mohammadian, A., & Ghasemi, R. (2016). Internet of things in industries: A survey for sustainable development. *International Journal of Innovation and Sustainable Development*, 10(4), 419–442.
- Zarei, M., Zarei, B., & Ghapanchi, A. H. (2017). Lessons learnt from process improvement in a non-profit organization. *International Journal of Business Excellence*, 11(3), 227–300.

## Author Biographies

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