Entrepreneurship in Turkey and Developing countries: a comparison of Activities, Characteristics, Motivation and Environment for Entrepreneurship

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Abstract

The aim of the current study is to explore the entrepreneurial activities in Turkey through determining some demographic characteristics, personal perceptions and motivations of Turkish entrepreneurs in addition to the environment for entrepreneurship, and to highlight Turkey's entrepreneurial position internationally. One of the key findings is that the early-stage entrepreneurial activities in Turkey is much lower than those that take place in other developing countries, whereas, the number of established business entrepreneurs are relatively higher. Moreover, we found that the lack of financial support, inadequate government programs that provide knowledge on technology and tax incentives, and insufficient intellectual property rights are some of the important obstacles encountered by entrepreneurs in Turkey, more than those in the other countries. On the other hand, there are favorable entrepreneurial environmental conditions determined in this study that are promising in two aspects: the positive attitudes of people towards entrepreneurship and the existence of the market openness to rapid change.

Keywords: Entrepreneurship, Turkey, GEM.

Introduction

The definition of the word "entrepreneur" is often problematic (e.g., Brockhaus, 1980; Long, 1983; Montanye, 2006; Stenberg and Wennekers, 2005). In the light of the current research, the Global Entrepreneurship Monitor (GEM) ¹ research program defines active entrepreneurs as "adults in the process of setting up a business who will (partly) own and/or currently owning and managing an operating young business" (Reynolds et al., 2005), and defines entrepreneurship as "any attempt to create a new business enterprise or to expand an existing business by an individual, a team of individuals, or an established business".

Entrepreneurship is stated as an important factor for economic and social development in most previous research (e.g., Acs and Audretsch, 1993; Drnovsek, 2004; Tang and Koveos, 2004; Wennekers et al., 2005).

The important contributions of entrepreneurs to accelerate the economic growth of a developing country like Turkey go hand-in-hand with the contributions of small and medium-sized enterprises (SMEs). "The entrepreneur, being a founder, a transformer, a producer, and a reproducer of the organization with its norms and values, is a central and vital factor of SMEs" (Yetim and Yetim, 2006). For that, we think understanding the framework of the entrepreneurial activities in one nation is the initial and very important step to examine this relation.

In spite of the two major attempts in 1950s and 1980s to improve private sector contributions, still most part of production and investment are done by state-owned companies in Turkey (Kozan et al., 2006),. However, SMEs represent more than 99 percent of the total number of Turkish enterprises in the manufacturing sector and provide 76.7 percent to the total employment. They contribute to 10 percent of exports and constitute 26.5 percent of investment and 38 percent of value added in Turkey (KOSGEB, 2005). Ozsoy, Oksoy, and Kozan (2001) found that Turkish small businesses have to rely on family sources rather than government loans or private institutions for financial support. The success of a small business depends on the initiatives of the individual entrepreneur to create a viable business. Therefore, discovering the factors that motive the individual to embark on career becomes important entrepreneurial in stimulating entrepreneurship.

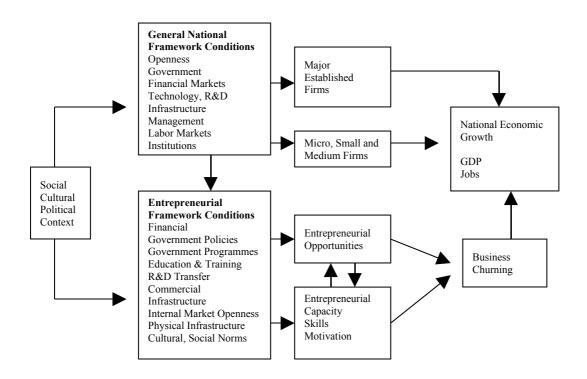
With that respect, the aim of the current study is to (1) explore entrepreneurial activities in Turkey through determining some demographic characteristics, personal perceptions and motivations of Turkish entrepreneurs in addition to the environment for entrepreneurship, and (2) highlight Turkey's entrepreneurial position internationally. Although there are few firm-level studies about small businesses in Turkey (e.g., Alpkan et al., 2007; Kozan et al., 2006; Muslumov et al., 2005; Ozcan, 1995), there exists no study on investigating the behaviour of Turkish entrepreneurs. According to the previous literature, entrepreneurship differs widely across nations and even regions (e.g., Masuda, 2006). While most studies have explored the individually relevant determinants of entrepreneurship for one nation (e.g., Grilo and Irigoyen, 2006; Parker, 2004), exploring the cross-country differences remains idle (e.g., Freytag and Thurik, 2007). Lastly, considering that "cross-country differences in the degree of productive entrepreneurial activity are likely candidates for explaining part of observed cross-country differences in economic performance" (Davidsson and Magnus, 2002), for political implications, it is crucial to investigate the entrepreneurial activities in Turkey as a country that is in the aftermath of the accession to the Customs Union and in the process of harmonization with the European Union (EU).

The article proceeds in the following manner. First, we discuss the conceptual model used in the study. We then explain in detail the research design and the data collection methods. Finally, we present the research findings and discuss their implications.

Theoretical Framework

The model used in the present study is a standardized conceptual framework used in GEM for international comparisons and developed to

investigate the relationship between entrepreneurship and economic growth. According to Figure 1, the left part of the model shows the social, cultural, and political context that shape country's a general national framework conditions and entrepreneurial framework conditions. The general national framework conditions are determined by the macro-level factors contributed by the role of government, managerial skill, technology, research and development, physical infrastructure, financial markets, social and legal institutions. Analyzing these conditions is beyond the scope of the present study.



The Entrepreneurial Framework Conditions (EFCs) in the model determine how much a country is entrepreneurial. EFCs influence entrepreneurial opportunities in the nation and entrepreneurial capacity individuals. The advantage of the model is to consider multiple factors that condition the dynamics of the creation of business. On one side, it emphasizes the role of major established firms in diffusion of knowledge that generates opportunities for small and medium firms and, consequently, economic growth, jobs and income. On the other hand, it focuses on structural factors that constitute the cultural and macroeconomic conditions political, entrepreneurship, either related to the existence and perception of opportunities or to entrepreneurial capacity and motivation. In the present study, we attempt to investigate adult population participation and attitudes toward entrepreneurship in Turkey through exploring factors such as EFC, entrepreneurial opportunities, and entrepreneurial Capacity considered in the conceptual model.

Research Design

The data collection method consists of two main parts: adult population survey (APS), and national expert survey (NES) (Reynolds et al., 2005). The primary data source was collected through the national APS. A random sampling method was used and CATI (Computer Assisted Telephone Interview) was conducted in 16,000 individuals by the vendor company. Only 2416 individuals responded and considered to be a representative² sample size. Participants ranged in age from 18-64, and lived in 19 cities³ throughout Turkey. Thus, a standard questionnaire was asked to 2416 individuals and among those 418 respondents fit the definition of an "entrepreneur".

The second data collection method is NES, a questionnaire that contains 82 questions concerning the assessment of the situation with regard to the entrepreneurial framework conditions that will be explained in detail in the following sections. The NES was asked face to face to 36 experts^4 .

It is important to note that research findings about the total entrepreneurial activities, characteristics of entrepreneurs, and new business structure are based on the APS, whereas, in order to determine the environment for entrepreneurship, the responses to NES is used.

The cross-national comparisons of the entrepreneurial activities are done between Turkey and fourteen developing countries, included in the GEM project. They are India, Jamaica, Indonesia, Philippines, Peru, Colombia, Brazil, Chile, Thailand, Mexico, Uruguay, Malaysia, South Africa, and Argentina.

Research Findings

Total Entrepreneurial Activity in Turkey

We measured the total entrepreneurial activities in Turkey and made cross-country comparisons by using six indices: early-stage entrepreneurial activity (TEA) index, nascent entrepreneurial activity (NEA) index, new business owners (NBO) index, established business owners (EBO) index, opportunity entrepreneurs (OE) index, and necessity entrepreneurs (NE) index.

The TEA index consists of nascent entrepreneurial activity and new business owner's index. These two measurements convey different information about the entrepreneurial landscape of a country (Bosma and Harding, 2006). Nascent business entrepreneurs are defined as the owners/managers of businesses that have taken some action towards creating a new business in the past year and have not paid wages/salaries for more than three-months. New business entrepreneurs are owners/managers of the firms that have paid salaries between three months and three-and-half years and established business entrepreneurs are owners/managers of three-and-a half year-old or older firms.

According to Table 1, the average TEA rate is estimated to be 6.07 percent in Turkey. This is lower than the average TEA rates of the developing countries (14.64percent). The average NEA index rate of Turkey (2.2 percent), is lower than the average rate for the developing countries (7.70 percent), placing it at the bottom of the

developing countries. The average NBO index rate is 4.01 percent, placing it 13^{th} out of 14 developing countries (7.70percent). In terms of established entrepreneurs, the average EBO index of Turkey (11.5percent) is higher than that of the developing countries (9.93percent). One possible reason is that Turkish government attention and support have been always more favorable to large firms than small firms (Kurtuluş, 1987).

Table 1: Total Entrepreneurial Activity in Turkey and Comparing with the Developing Countries

Total Entrepreneurial Activity by six indices	TURKEY	DEVELOPING COUNTRIES
TEA index	6.07	14.64
NEA index	2.2	7.70
NBO index	4.01	7.68
EBO index	11.5	9.93
Ratio of TEA Index to EBO Index	0.53	0.67
NE index	1.79	4.39
OE Index	3.68	9.97
Ratio of OE Index to NE Index	2.05	2.27

TEA Index= early-stage entrepreneurial activities index, NEA index= nascent entrepreneurial activities index, NBO Index= new business owners" index, EBO Index= established business owners" index, OE Index= opportunity entrepreneurs" index, and NE Index= necessity entrepreneurs" index.

The ratio of early stage entrepreneurship (TEA) to established business ownership (EBO) shows the level of entrepreneurial dynamism in the economy and it is an important indicator of the effectiveness of a country's economy (Bullvaag et al., 2006, p.9). This ratio is 1.03 for developed countries, 0.67 for developing countries, and 0.53 for Turkey. This can be interpreted as lack of competitive pressure and not forcing established business to react by improving efficiency or introducing innovations.

There are two types of entrepreneurs on the basis of their motivation: opportunity entrepreneurs versus necessity entrepreneurs. Opportunity entrepreneurs (OE) are people who are taking advantage of a business opportunity, while necessity entrepreneurs (NE) are people who have no better options for work (Reynolds et al,. 2003). According to the average of the OE index Turkey (3.7percent) is $13^{\rm th}$ out of 14 developing countries. The average NE index is 1.8 percent that places Turkey $12^{\rm th}$ among developing countries. Moreover the ratio of OE to NE is lower than the average of the developing countries, implying that relatively more Turkish entrepreneurs have taken the entrepreneurial route out of necessity.

Demographic Characteristics of Turkish Entrepreneurs

Consistent with Allen et al. (2007) and Minniti (2005), we found a significant difference between the numbers of men versus women entrepreneurs in Turkey. The number of men entrepreneurs is more than double of the number of women, particularly for the established entrepreneurs. This may indicate an increase in women participation in recently opening businesses. However, the average male/female ratio is 2.42, which is higher than the developing countries (1.26). Hence, the

women participation in entrepreneurial activity in Turkey is almost half number of women in the other developing countries.

When we look at the age of entrepreneurs, early stage entrepreneurs are most frequently between 25 and 34 years-old. For Turkey, this finding is consistent with previous research that concludes early stage entrepreneurs are in the 25-34 age groups in the developing countries and in the 35-44 age groups in the developed countries (Bosma et al., 2007). The early entrepreneurial activity rates are relatively low amongst 18-24 years old, peak amongst 25-34 years old and then decline sharply as age increases above 44. In fact, Levesque and Minniti (2006) showed that people start a business at early age and decreases thereafter.

The importance of education on entrepreneurship has been excessively mentioned in the literature. The studies of Minniti and Bygrave (2004) and Minniti (2005), have shown that the influence of education on the likelihood to become an entrepreneur is not strictly linear. Conversely, the the level of education is important factor for fostering entrepreneurship in China (Chow, 2006), Belgium, and Finland (Arenis and De Clercq, 2005).

Remarkably, the number of people with post-secondary degrees or graduate school experience involved in early-stage entrepreneurial activity in developing countries (31 percent of all early-stage entrepreneurs) is much more than that of Turkey (6 percent of all early-stage entrepreneurs). However, this dramatic cross-national difference does not exist for the education level of established business entrepreneurs (percentages of established business owners that have postsecondary or graduate degree are 17 percent for developing countries, and 16 percent for Turkey).

Personal Perceptions and Motivations of Turkish Entrepreneurs

"Entrepreneurship is about people", therefore, it is important to know personal perceptions and judgments about environment which are significantly correlated with an individual's decision to start a new business (Arenius and Minniti, 2005).

Previous research identified individuals" perceptions on entrepreneurship by their entrepreneurial ability, their perceived start-up opportunities, knowing other entrepreneurs, and fear of failure in starting a new business (Arenius and Miniti, 2005; Eckhardt and Shaneö 2003; Kirzner, 1973; 1979; Koellinger et al., 2005; Langowitz and Minniti, 2007; Shane and Venkataraman, 2000).

Most entrepreneurship researches have shown that entrepreneurs are different from non-entrepreneurs (Gartner, 1985). Hence, we compare the personal perceptions of entrepreneurs to non-entrepreneurs in Turkey (Table 2).

Table 2: Perceptions of Early Stage Entrepreneurs (TEA), Established Business Owners (EBO) and Non-entrepreneurs

YES-NO PERCEPTION QUESTIONS	Adult	TEA	EBO	Non-
	Population			entrep-
	(18-64),			reneurs
Personally know an entrepreneur who	34	60	39.4	32
started a business in the past two				

years (% yes),				
Sees good start-up opportunities in the next six months in his/her area (% yes),	35	52.5	30.1	32.5
Has the required knowledge and skills	56	89.1	67.2	52.3
to start a business (% yes),				
Fear of failure would prevent from	32	23.1	24.3	30.0
starting a business (% yes),				

Early stage entrepreneurs know more entrepreneurs, see more good opportunities in their environment, have the necessary skills and knowledge, and have less fear of failure than non-entrepreneurs. However, this difference between entrepreneurs versus non-entrepreneurs diminishes for the established business owners.

When we compare these personal perceptions with those in other developing countries, Turkish people responded that the percentage of knowing other entrepreneurs and seeing good opportunities and the perceived necessary skill to start a new business for Turkish adults is lower than in the developing countries. As far as the fear of failure is concerned, only 33 percent of Turkish entrepreneurs stated that the possibility of failing would prevent them from starting a new business which is lower than the percentages of people in both developing.

Personal motivation to become an entrepreneur is related to individual income (Evans and Jovanivic, 1989; Smallbone and Welter, 2001) and education level (Arenis and De Clercq, 2005). The findings show that there is a wide gap between opportunity and necessity-driven entrepreneurship at the different income levels. At the lower income level, 30.6 percent of early stage Turkish entrepreneurs tend to be necessity-driven, while 4.9 percent are opportunity-driven. For the high income level, however, 32.8 of early stage entrepreneurs are opportunity-driven, while 13.9 percent are necessity-driven. Most probably, entrepreneurs with high income start a new business when they perceive an obviously potential gain and have more financial resources to take advantage of the opportunities in the market.

The entrepreneurial activity by motivation might be affected by education level. The findings show that people who have graduate experience levels of education tend to be opportunity-driven entrepreneurs in Turkey. A little over fifteen percent(15.4%) of opportunity-driven entrepreneurs have university degree while only 2.4 percent are necessity-driven entrepreneurs. Because, these people tend to have a wider choice of employment and have little desire to take risks by starting their own business until they perceive an obviously potential gain a new business. There exists no opportunity-driven entrepreneur that is illiterate and no necessity-driven entrepreneur with post-graduate degree. As suggested by Cetindamar (2005), to develop strong entrepreneurial background, education and financial support systems should be improved.

Sectorial Factors of Entrepreneurship in Turkey

The sector distribution is categorized as: extractive sector, transforming sector, business oriented sector, and consumer oriented sector. The greatest number of early stage entrepreneurs is found to

be in consumer service sector (46 percent), followed by transformative sector (34 percent), while most established business owners are in the extractive and transformative sectors (71 percent). This sector distribution of early-stage entrepreneurs is consistent with the literature (Bosma and Harding, 2007), stating that developing countries show a larger share of consumer-oriented sector activities, while developed countries show a larger share of business service sector activities.

Although the sizes of firms are small in Turkey, growth expectations in terms of job creation of these small firms are promising. A high growth expectation firm is defined as all early stage business that expects to employ at least 20 employees within five years time (Autio et. al., 2005, p.14). Accordingly, 22.8 percent of early stage entrepreneurs expect to employ more than 20 people in the next five years. The number of the early stage entrepreneurs with high growth expectations in Turkey is higher than that in the most developing countries, ranking it in $4^{\rm th}$ place. The economic importance of high growth expectations of Turkish entrepreneurs in job creation is very important because of the high unemployment rate in the country.

Exports have several advantages for economic advancement of which the most obvious one is the gains related to scale and scope economies (Kogut, 1985; Grant et al., 1988), from larger volumes of sales and production resulted by revenue growth. While the majority of the new firms (60.17 percent) have no exports as yet, 10 percent already have very significant exports with more than 75 percent of their customers in export markets. It is apparent that early stage entrepreneurs have more customers outside Turkey than established entrepreneurs have. Entrepreneurs in Turkey are more export oriented than entrepreneurs in other developing countries. This could be the result of export-led policies that have been applied since the 1980s.

Many entrepreneurs are important agents of innovations such as the introduction of new product, process technology, system and techniques (Venkataraman, 1997). In order to measure innovation, in the present study, we asked entrepreneurs how they evaluate the newness of their product, service, the competition they face, and the novelty of their technology.

In Table 3, the proportion of owner-manager who claim to offer products that are new to all customers is 34 percent for early-stage business entrepreneurs and 43 percent for established business-entrepreneurs. Probably, established firms have more financial ability and knowledge to invent and/or improve products or services (Ahuja and Lampert, 2001).

According to the previous literature, no matter what a country's average level of per capita income is, customer-oriented innovation is relatively rare (Minniti et al., 2006). However, Turkey's level of customer-oriented innovation is unusually high in international standards. Turkish entrepreneurs think that their products and/or services are new for their customers. These products may not be new in the international market; however, they may be new to Turkish customers.

Table 3: Newness of Product/Services Offered to Customers Perceived by Turkish Entrepreneurs and International Comparison

% of ENTREPRENEURS	TURKEY	DEVELOPING
		COUNTIRES
TEA: product new to all customers	34.1	20.23
TEA: product new to some customers	31.3	30.40
TEA: product new to none customers	34.6	49.38
EB: product new to all customers	43.2	19.10
EB: product new to some customers	26.7	23.88
EB: product new to none customers	30.1	57.02

TEA = Early stage entrepreneurs

EB= Established business entrepreneurs

Just 3 percent of early stage entrepreneurs and 0.83 percent of established business owners say that they have no competitors, which is relatively very small compared to the percentages in the developing (Table 4). While most businesses offer the same products with theirs, it appears that Turkish entrepreneurs perceive their market to be more competitive and do not use product differentiation strategies than their counterparts who are involved in entrepreneurial activity in other developing countries.

Table 4: Intensity of Competition Perceived by Turkish Entrepreneurs and International Comparison

% of ENTREPRENUERS	TURKEY	DEVELOPING
		COUNTRIES
TEA: Many businesses offer same product	72.2	55.93
TEA: Few businesses offer same product	24.6	35.12
TEA: None businesses offer same product	3.12	8.95
EB: Many businesses offer same product	75.8	69.36
EB: Few businesses offer same product	23.4	25.43
EB: None businesses offer same product	0.83	5.21

TEA = Early stage entrepreneurs

EB= Established business entrepreneurs

The last important indicator of the innovativeness of a business concerns the technologies and production process it uses. "Technological innovation in production" is important to lower production costs and meet changing consumer needs (Saka-Helmhout and Karabulut, 2006). Majority of Turkish owners-managers state that they do not use new technology (Table 5). One possible reason is because the new technology is costly for them. The average usage of the latest technology is 1.32 by early stage entrepreneurs and is 2.47 percent by established business owners, which is less than the usage rate of the entrepreneurs in other developing countries.

Table 5: Usage Rate of the Technology Perceived by Turkish Entrepreneurs and International Comparison

% of ENTREPRENEURS	TURKEY	DEVELOPING
		COUNTIRES
TEA: Uses very latest technology	1.32	14.44
(only available since last year),		
TEA: Uses new technology (1 to 5 years),	14.4	22.48

TEA: Uses no new technology	84.3	63.08
EB: Uses very latest technology	2.47	5.55
(only available since last year),		
EB: Uses new technology (1 to 5 years),	8.14	14.92
EB: Uses no new technology	89.4	79.53

TEA = Early stage entrepreneurs EB= Established business entrepreneurs

The Environment for Entrepreneurship in Turkey

The environment for entrepreneurship is important for new firm creation (Chow, 2006; Begley, et al., 2005). Entrepreneurial decisions could be different because of the effects of the environment in which they are taken (Shane, and Kolvereid, 1995; McGrath, et al., 1992; Smallbone and Welter 2001). Wennekers et al., (2002) argued that technology, level of economic development, culture, and institutions all influence the demand for entrepreneurship by creating opportunities available for start-ups.

We explore the environment for entrepreneurship in Turkey and compared it with the other developing countries based on 15 conditions that are considered to have a direct impact on the entrepreneurial climate. (1), availability of financial support, are: appropriateness of government policies, (3), adequacy of government of government programs (4), conduciveness of education and training, (5), efficacy of research and development transfer, (6), availability and cost-effectiveness of commercial and professional infrastructure, (7), extent of internal market openness, (8), quality and accessibility of physical infrastructure, (9), supportiveness of culture, opportunities for new venture creation, (11), entrepreneurial capacity, (12), attitude towards entrepreneurship, (13), intellectual property rights, (14), perceived population composition, and high growth firms. Each condition is measured by taking the average of the responses of national experts in Turkey to several questions. These questions are in 5 Likert-scale, where 1 indicates strong disagreement and 5 indicates strong agreement to whether the explained environment does exist in Turkey.

Table 6: Overview of Entrepreneurial Framework Conditions*

Entrepreneurial Framework Conditions	TURKEY	DEVELOPING
		COUNTRIES
Financial support	1.76	2.40
Government regulation policy	1.89	2.02
Government support policy	1.91	2.39
Government programs	2.05	2.31
R&D transfer	2.14	2.16
Education and training -Primary education	2.16	1.92
Intellectual Property Rights	2.4	2.47
Entry barriers	2.5	2.49
Entrepreneurial Capacity	2.51	2.59
High growth firms	2.53	2.78
Education and training -Secondary education	2.57	2.87
National culture	2.78	2.80
Commercial and Professional Infrastructure	2.85	3.02
Population composition	2.9	3.21

Opportunities for New Venture Creation	3.18	3.47
Access to Physical Infrastructure	3.32	3.50
Rapid market changes	3.4	2.86
Attitude towards entrepreneurship	3.69	3.54

* Note that the numbers represent the mean values of the experts" responses to 5-Likert scale questions asked about each condition, where 1 indicates strong disagreement and 5 indicates strong agreement to whether the explained entrepreneurial framework condition does exist in Turkey

Table 6 summarizes the overall average scores of the Entrepreneurial Framework Conditions in Turkey versus the mean scores of the other developing countries. The expert informants' ratings on all entrepreneurship environment indicators were below the averages of the developing countries except for rapid market changes and attitude towards entrepreneurship.

In fact, the markets for consumer goods and services in Turkey change more dramatically than in other developing countries. It may be caused by changing preferences and growth in demand for goods and services arising out of population growth and the large size of Turkish market.

The experts stated a more positive attitude towards entrepreneurship than in other developing countries. Successful entrepreneurs have a high level of status and respect. Further, most experts think of entrepreneurs as competent and resourceful individuals and there are stories in the public media about successful entrepreneurs. Moreover, the creation of new ventures is considered an appropriate way to become rich.

Overall, the availability of opportunities for new venture creation and access to physical infrastructure rated below the developing countries, the mean values of these two conditions are still above 3 which should be read as positive framework conditions for the Turkish entrepreneurial environment. The experts think that there is an increase in opportunities during the past five years and good opportunities for high growth firms. However, they stated that less people can take advantage of those opportunities. The experts also believe that new and growing firms can get good access to communications (telephone, internet, etc.) and utilities (gas, electricity, and sewer) in short time. However, the experts are concerned about the high infrastructure cost.

The conditions explained above are the most favorable ones existing in the environment for entrepreneurship among 15 framework conditions. The conditions that do not exist to improve entrepreneurship framework are availability of financial support (the availability, accessibility and quality of financial resources, including equity or debt, subsidies, grants, etc., for new and growing firms), government support policies (priority given to new firms in public procurement tenders and support for new and growing firms to be a genuine priority at national and local level), and government regulation policies (required permits and licenses within a week and the amount of taxes). In fact, for these conditions, Turkey has the lowest score compared to other developing countries.

It is important to note that as for the government regulation policy, the scores of the required permits and licenses within a week are better than the developing countries. In fact, Turkish government is supporting the implementation of the anti-bureaucracy program. The experts considered that the amount of taxes is a burden for new and growing firms; in fact, they stated lower scores for existence of tax incentives than other developing countries.

The inadequacy of Intellectual Property Rights and Research and Development conditions are stated to be additional problems of the environment for entrepreneurship in Turkey. The evidence from the expert questionnaire confirms that the protection of intellectual property is frequently cited as one of the basic reasons for problems in the area of the transfer of science and technology in the developing countries. Hence, the score of affording the latest technology is worse than in the developing countries.

Conclusion and Implications

Turkey has taken part in the General Entrepreneurship Monitor Data (GEM), project first time in 2006. The present study is the first attempt to explore the entrepreneurial activities in Turkey and compare with the other developing countries. For these purposes, data are collected through a national adult population survey and a national expert survey.

Our findings show that the early-stage entrepreneurial activity in Turkey is much lower than in developing countries, whereas, established business entrepreneurship activities are relatively high. The early-stage entrepreneurs, particularly nascent entrepreneurs, are the most vulnerable and most in need of favorable conditions. In fact big and family-owned companies dominate the private sector. Moreover, the government attention and support are always more favorable to large firms than small firms (Kurtuluş, 1987). For policy implications, the governmental financial support gap between the small and large firms should be lessened.

In addition, the ratio of the early-stage to established business entrepreneurship activities is relatively very low among developed and developing countries, indicating no dynamic entrepreneurship facilities and ineffective economy. Therefore, the established business owners do not feel competitive pressure and so give importance to innovation. In fact, the intensity of competition are found to be comparably very high in term of offering the same product by many business and the degree of the novelty of the technology rates are found to be comparably very low.

In developing countries' national settings, potential entrepreneurs may not be able to choose from several attractive options, therefore, in poorer countries, the only option will be to pursue an entrepreneurial venture (Baker, Gedajlovic, and Lubatkin, 2005). For these countries, the rates of necessity entrepreneurship have been found to be much higher than that in developed countries (Reynold et al., 2003; Wennekers, et al., 2005). In the current study, Turkey is found to have a very high comparative necessity entrepreneurship rate. This finding points to the absence of paid employment and a limited social safety net for potential entrepreneurs.

The necessity entrepreneurs, individuals that become entrepreneurs because they have no better options for work, are found to have a lower income and education level than the opportunity entrepreneurs who are taking advantage of a business opportunity. Therefore, in order to encourage opportunity-driven entrepreneurship, it is crucial to ease the access to financial resources and to improve entrepreneurial education for providing ability and knowledge to the individuals to see existing opportunities.

When we look at the demographic characteristics of Turkish entrepreneurs, education level of early stage entrepreneurs is found to be lower than other developing countries that emphasize the necessity of educational improvement. Moreover, it is worth to mention that young people (18-24 years old), and women participation in early-stage entrepreneurial activity is lower than the developing countries. This finding can be used by the government to find incentives and supportive mechanisms to enhance the number of young and women entrepreneurs.

In order to explore the personal characteristics of entrepreneurs, we first identify the differences between entrepreneurs versus non-entrepreneurs. With that respect, early stage entrepreneurs know more of other entrepreneurs, see more good opportunities in their environment, think that they have the necessary skills and knowledge, and have less fear of failure than non-entrepreneurs. Interestingly, we found that these perceptions of entrepreneurs that distinguish them from non-entrepreneurs do not diverge much from other developing countries.

When we compare these personal perceptions with other developing countries, we found that percentage of knowing other entrepreneurs and seeing good opportunities, and the perceived necessary skill to start a new business for adults is lower than the developing countries. As far as the fear of failure is concerned, only 33 percent of respondents stated that the possibility of failing would prevent them from starting a new business which is slightly lower than the percentages of people in developing countries.

Our findings about the business structure of Turkey are consistent with the general SMEs' structure Turkey, where SMEs represent more than 99 percent of the total number of Turkish enterprises. In fact, 80 percent of the entrepreneurs in our sample employ five people or less. Although the sizes of firms are small, growth expectations of entrepreneurs in terms of job creation are promising, which is extremely important for a country that has a very high unemployment rate. Another positive finding is that early stage entrepreneurs have more customers outside the country (76-100 percent of their customers in the export market), than the developing countries. This probably is due to the success of the export-led policy that has been applied since the 1980s.

The final determinant of business structure is the degree of innovation. Although Turkish entrepreneurs think they are very innovative with respect to the products and services they offer to their customers, they perceive a large number of firms in the market that sell the same product as theirs. Further, they use more of the established technology than the entrepreneurs in other countries. For policy suggestions to encourage innovativeness, it is crucial to reveal the barriers to the innovative decisions of SMEs.

According to our findings, consistent with Demirbas (2006), the main barriers to innovation for entrepreneurs are inadequacies in the government R&D policy, insufficient intellectual property rights, lack of information on technology, lack of financial sources, and inadequate tax incentives. Although, there are many obstacles encountered by Turkish entrepreneurs, there are favorable entrepreneurial environmental conditions determined in this study that are promising in two aspects: (1) the positive attitudes of people towards entrepreneurship, (2) the existence of the market openness to rapid change. In fact, the markets for consumer goods and services change more dramatically than the developing countries.

As for the further research, as suggested Auken, et al., (2006), a longitudinal study is necessary to explore the relationship between economic growth and the entrepreneurship activities of a nation.

Notes

- The Global Entrepreneurship Monitor (GEM), is a large-scale research program launched 1997 by leading researchers in the field of entrepreneurship at the London Business School (United Kingdom), and Babson College (United States).
- The sample is taken based on the population statistics in 2000 of Turkish Statistics Institute and represents the Turkish adult population at the 95% confidence intervals with -/+ 2% standard error.
- İstanbul, Ankara, İzmir, Adana, Samsun, Gaziantep, Erzurum, Denizli, Diyarbakır, Malatya, Konya, Trabzon, Antalya, Bursa, Kahramanmaraş, Manisa, İçel, Kayseri, Kocaeli.
- Turkish Experts include two distinct categories: "professionals" (e.g. venture capitalists, academics, bankers, consultants, politicians etc. including those people who were/are involved in entrepreneurial ventures alongside their professional role), and; "entrepreneurs" (individuals with a history of practical entrepreneurial activity with relevant experience to one or more framework condition/s. i.e. they are selected primarily on the basis of their active entrepreneurial experience in Turkey),.

References

- Acs, Z.J. and D. B. Audretsch, 1993, Small Business and Entrepreneurship: An East-West Perspective, Cambridge: Cambridge University Press.
- Acs, Z.J., D.B. Audretsch, and D.S. Evans, 1994, "The determinants of variations in self-employment rates across countries and over time", Discussion Paper: 871, London: Centre for Economic Policy Research.
- Ahuja, G., and C. M. Lampert, 2001, "Entrepreneurship in the large corporation: a longitudinal study of how established firms create breakthrough inventions", Strategic Management Journal, 22(6/7),521-543.
- Allen, I.E., N. Langowitz, and M. Minniti, 2007, Global Entrepreneurship Monitor: 2006 Report on Women and Entrepreneurship, The Center for Women"s Leadership, Babson College and London Business School, Babson Park, MA., and London, U.K.

- Alpkan, L., C. Yılmaz, N. Kaya, 2007, "Market orientation and planning flexibility in SMES: performance implications and an empirical investigation", International Small Business Journal, 25(2),152-172.
- Arenius, P., and M. Minniti, 2005, "Perceptual variables and nascent entrepreneurship", Small Business Economics, 24,233-247.
- Audretsch D.B. and A.R. Thurik, 2001, "What is new the about the new economy sources of growth in the managed and entrepreneurial economics", Industrial and Corporate Change, 10(1), 25-48.
- Auken, H., F.L. Fryand, P. Stephens, 2006, "The influence of role models on entrepreneurial intention" Journal of Developmental Entrepreneurship, 11(2) 157-167.
- Autio, E., 2005, Global Entrepreneurship Monitor, 2005 Report on High-Expectation Entrepreneurship, London Business School and Babson College, London, U.K., and Babson Park, MA.
- Baker, T., E. Gedajlovic, and M. Lubatkin, 2005, "A framework for comparing entrepreneurship process across nations", *Journal of International Business*, 36(5), 492-505.
- Begley, T. M., W.L. Tan, and H, Schoch, 2005, "Politico-economic factors associated with interest in starting a business: a multi-country study" *Entrepreneurship Theory and Practice*, 29(1), 35-55
- Blau, D., 1987, "A time-series analysis of self-employment in the United States", Journal of Political Economy, 95(3), 445-467.
- Bosma, N., and R. Harding, 2007, *Global Entrepreneurship: GEM 2006 Summary Results*, Babson College and London Business School, London, U.K., and Babson Park, MA.
- Brockhaus, R.H., 1980, "Risk taking propensity of entrepreneurs", Academy of Management Journal, 23,509-520.
- Bullvaag, E., Z.J., Acs, and I.E., Allen, W.D., Bygrave, and S.Jr. Spinelli, 2006, *GEM-United States 2004-2005 Executive Report*, London Business School and Babson College, London, U.K., and Babson Park,
- MA.
- Carree, M.A., A.J., van Stel, A.R., Thurik and A.R.M., Wennekers, 2002, "Economic development and business ownership: an analysis using data of 23 OECD Countries in the Period 1976-1996", Small Business Economics, 19(3), 271-290.
- Cetindamar, D., 2005, "Policy issues for Turkish entrepreneurs", International Journal of Entrepreneurship and Innovation Management, 5, 187-205.
- Chow, I.H., 2006, "The relationship between entrepreneurial orientation and firm performance in China", Advanced Management Journal, 71(3), 11-20.
- Davidsson, P., and H. Magnus, 2002, "Determinants of the Prevalence of Start-Ups and High-Growth firms" Small Business Economics, 19(2), 81-104.
- Demirbas, D., 2006, "New institutional economy and innovation barriers: micro econometric evidence, *The Business Review*, 5, 82-88.
- Drnovsek, M., 2004, "Job creation process in a transition economy", Small Business Economics, 23,179-188.
- Eckhardt, J., and S.A. Shane, 2003, "Opportunities and entrepreneurship", Journal of Management, 29(3), 333-349.
- Evans, D.S., and B.Jovanovic, 1989, "An estimated model of entrepreneurial choice under liquidity constraints", *Journal of Political Economy*, 97(4), 808-827.
- Freytag, A., and R. Thurik, 2007, "Entrepreneurship and its determinants in a cross-country setting", *Journal of Evolutionary Economics*, 17(2), 117-131.
- Gartner, W.B., 1985, "A conceptual framework for describing the phenomenon of new venture creation", Academy of Management Review Oct, 696-706.

- Grant, R. M., A.P. Jamine, and H. Thomas, 1988, "Diversity, diversification, and profitability among British manufacturing companies, 1972-1984", Academy of Management Journal, 31, 771-781.
- Grilo, I., and J.M. Irigoyen, 2006, "Entrepreneurship in the EU: to wish and not to be", Small Business Economics, 26(4), 305-318.
- Khilstorm, R., and J.J. Laffont, 1979,"A general equilibrium entrepreneurial theory of firm formation based on risk aversion", Journal of Political Economy, 87,719-748.
- Kirzner, I.M., 1973, Competition and Entrepreneurship, University of Chicago Press, Chicago, IL.Kirzner, I.M., 1979, Perception, Opportunity, and Profit, University of Chicago Press, Chicago, IL.
- Koellinger, P., M. Minniti, and C. Schade, 2005, "I think I can, I think I can: overconfidence and entrepreneurial behavior", DIW, Discussion Papers No.501, Berlin, Germany.
- Kogut, B., 1985, "Designing global strategies: profiting from operational flexibility", Sloan Management Review, 27(1), 27-38.
- KOSGEB Small and Medium Industry Development Organization, 2005, Turkey-Germany, XI. Period Cooperation, Council Meeting, Berlin, Available www.bdi-online.de/Dokumente/ Internationale-Maerkte/DTKR KOSGEB.pdf
- Kozan, M.K., D. Oksoy, and O. Ozsoy, 2006, "Growth plans of small businesses in Turkey", *Journal of Small Business Management*, 44(1),114-129.
- Kurtuluş, K., 1987, "Entrepreneurship in Turkey", Journal of Small Business Management, 25(4), 66-69.
- Langowitz N., and M. Minniti, 2007, "The entrepreneurial propensity of women", Entrepreneurship Theory and Practice, May, 341-364.
- Levesque, M., and M. Minniti, 2006, "The effect of aging on entrepreneurial behavior" Journal of Business Venturing, 21(2), 177-194.
- Long, W., 1983, "The meaning of entrepreneurship", American Journal of Small Business, 8(2), 47-59.
- Masuda, T., 2006, "The determinants of latent entrepreneurship in Japan", Small Business Economics, 26(3), 227-240.
- McClelland, D.C., 1968, The Achieving Society, Princeton, NJ: Van Nostrand.
- McGrath, R. G. and I. C., MacMillan, 1992, "More like each other than anyone else?: cross-cultural study of entrepreneurial perceptions", Journal of Business Venturing, Vol. 7 No. 5, pp. 419-429.
- Minniti, M. and W.D. Bygrave, 2004, Global Entrepreneurship Monitor: 2003, Babson College and London Business School, London, U.K., and Babson Park, MA.
- Minniti, M., 2005, "An empirical assessment of entrepreneurial behavior: the case of Italy" Global Business and Economics Review, 7(1), 31-46.
- Minniti, M., W.D., Bygrave, and E. Autio, 2006, Global Entrepreneurship Monitor: 2005 Executive Report, London Business School and Babson College, London, U.K., and Babson Park, MA.
- Montanye, J.A., 2006, "Entrepreneurship", The Independent Review, 10(4), 547-569.
- Muslomow, A., A., Guler, and O., Cenktan, 2005, "Macroeconomic stabilization programs and financial performance of small and medium sized enterprises in Turkey" Journal of International Business and Entrepreneurship, 11(1), 19-40.
- Ozcan, G., 1995, "Small business networks and local ties in Turkey", Entrepreneurship and Regional Development, 7, 265-82.
- Ozsoy, O., Oksoy, D. and. Kozan M.K., 2001, "The Characteristics of Turkish Entrepreneurs and Their Enterprises", Paper presented at the

- Global Business and Technology Association Conference, Istanbul, Turkey.
- Parker, S.C., 2004, The Economics of Self-Employment and Entrepreneurship, Cambridge: Cambridge University Press.
- Reynolds, P., N. Bosma, E. Autio, S. Hunt, N.D. Bono, I. Servais, P. Lopez-Garcia, and N. Chin, 2005, "Global Entrepreneurship Monitor: data collection design and implementation 1998-2003", Small Business Economics, 24, 205-231.
- Reynolds, P.D., W.D., Bygrave, and E. Autio, 2003, GEM 2003 Executive Report, Babson College, London Business School, and the Kauffman Foundation.
- Saka-Helmhout, A., and E. Karabulut, 2006, "Institutional barriers to entrepreneurship in clusters: Evidence from the Turkish textile sector" International Journal of Emerging Markets, 1(2), 128-146.
- Shane, S.A., and S., Venkataraman, 2000, "The promise of entrepreneurship as a field of research", Academy of Management Review, 25(1), 217-226.
- Smallbone, D., and F. Welter, 2001, "The Distinctiveness of entrepreneurship in transition economies", Small Business Economics, 16(4), 249-262.
- Stenberg, R., and R. Wennekers, 2005, "Determinants and effects of new business creation using global entrepreneurship monitor data; *Small Business Economics*, 24(3), 193-203.
- Tang, L., and P.E. Koveos, 2004, "Venture entrepreneurship, Innovation Entrepreneurship, and Economic Growth", Journal of Developmental Entrepreneurship, 9 (2),161-171.
- Venkataraman, S., 1997, "The Distinctive Domain of Entrepreneurship Research: an Editor's Perspective", in J., Katz, and R. Brockhaus, (eds.), Advances in Entrepreneurship, Firm Emergence, and Growth, JAI Press, Greenwich, CT.
- Wennekers, S., L.M. Uhlaner, and R. Thurik 2002, "Entrepreneurship and its conditions: a macro perspective", International *Journal of Entrepreneurship Education*, 1, 25-64.
- Wennekers, S., A. Stel, and P. Reynolds, 2005, "Nascent entrepreneurship and the level of economic development", Small Business Economics, 24,293-309.
- Yetim, N., and U. Yetim, 2006, "The cultural orientations of entrepreneurs and employees job satisfaction: The Turkish Small and Medium Sized Enterprises (SMEs), Case", Social Indicators Research, 77, 257-286.