

Entrepreneurship in Turkey  
2010

The Global Entrepreneurship Monitor (GEM)

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## Foreword

Turkey has come a long way in terms of economic and private sector development since 1980s, and now classified as one of the efficiency-driven economies in the world, in a group that includes high-growth economies such as Brazil and China. Firms in an efficiency-driven economy compete and grow by cutting down costs, while firms in an innovation-driven economy compete and grow by creating unique value at the global level. In order to upgrade to an innovation-driven stage, Turkish economy needs high-impact enterprises that are able to scale-up to the global level by creating unique value. Entrepreneurship is a key factor in creating high-impact enterprises.

This report successfully identifies the key areas Turkey needs to work on in order to improve entrepreneurship. Although Turkey aims for a transition from being an efficiency-driven economy to being an innovation-driven economy, in many areas Turkey is still behind its efficiency-driven counterparts. Access to finance, lack of business opportunities, the tax and administration burden, inadequate entrepreneurship education and the lack of cultural support are still the main obstacles for developing entrepreneurship in Turkey. Turkey is behind the other efficiency-driven countries in

the number of start-ups, the number of nascent entrepreneurs, and the ratio of opportunity-driven to necessity-driven entrepreneurs.

The Union of Chambers and Commodity Exchanges of Turkey (TOBB) is more than willing to play its part in this important process. TOBB has already established two very active groups of entrepreneurs: TOBB Women Entrepreneurs Board in 2007 and TOBB Young Entrepreneurs Board in 2009.

Moreover, Turkish Venture Capital Assembly, established this year, works to improve the climate for early stage investments and strengthen the networks of business angels and venture capitalists, which are essential factors of the entrepreneurship ecosystem.

In addition to these dynamic groups, TOBB launched the Turkey chapter for the Partners for a New Beginning Program (PNB) with Aspen Institute and the U.S. State Department, which aims to build public-private partnerships to advance economic opportunity, science & technology and education.

TOBB University of Economics and Technology contributes to the education side of this combined effort of TOBB. The newly established Department

of International Entrepreneurship of the TOBB Economics and Technology University admitted its first students in the school year 2010-2011. This department aims to raise entrepreneurs that study economics and at the same time Russian and Arabic and that are capable of doing business both in Turkey and in the countries of the region.

Another TOBB program, Allworld Turkey 25, which identifies and celebrates the fastest growing entrepreneurs of Turkey, is about to be completed. The results will be announced at the Presidential Summit on Entrepreneurship this December.

I hope this report to be a useful contribution to the current efforts in Turkey that aim to increase the level of entrepreneurship in this country. May this report benefit everyone, who seeks to learn about entrepreneurship in Turkey, and provide a clear picture of how Turkey can complete its jump to become an innovation-driven economy.

**M. Rifat HİSARCIKLIOĞLU**

TOBB President



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My sincere thanks must also go to our research sponsors, TOBB-Union of Chambers and Commodity Exchange of Turkey, and USAID-United States Agency International Development, without whose generous sponsorship Turkey's participation

in GEM 2010 would not have been possible. I would like to thank Cihat Alagöz, Ussal Sahbaz, and Berrak Kutsoy who made this report possible. And finally, I would like to thank Jonathan Kaplan for editing my work.

I sincerely thank the reader, for your interest in GEM Turkey 2010. I welcome your comments and criticisms, and I take responsibility for any mistakes that might remain in the report. I look forward to continuing a very productive collaboration.

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## Executive Summary

Entrepreneurship is a vital part of national economic growth and development. The Global Entrepreneurship Monitor (GEM) is a major international research study aimed at increasing our knowledge of entrepreneurship. This report reviews the main findings of the 2010 GEM survey and suggests key measures to stimulate entrepreneurial activity in Turkey.

Since 2008 the countries that participate in the GEM project have been classified according to Porter's typology of "factor-driven economies", "efficiency-driven economies" and "innovation-driven economies" (GEM, 2008). Turkey is currently at the efficiency-driven stage of economic development. The other countries included in this group are as follows: Argentina, Bosnia and Herzegovina, Brazil, Chile, China, Colombia, Costa Rica, Croatia, Ecuador, Hungary, Latvia, Macedonia, Malaysia, Mexico, Montenegro, Peru, Romania, Russia, South Africa, Taiwan, Trinidad and Tobago, Tunisia, and Uruguay.

The main measure of entrepreneurial activity published by GEM is the Total Entrepreneurial Activity (TEA) index. The TEA measures the proportion of a country's adults who are involved in starting or running new businesses. TEA is the only

internationally accepted and implemented measure of entrepreneurship data that can provide reliable comparisons among the countries that do take part.

The level of early stage entrepreneurship activity in 2010 in Turkey was 8.6% which means that about 9 out of every 100 adults were entrepreneurs according to the "GEM definition". When compared with 2008, year 2010 showed a more positive outlook for entrepreneurship in Turkey. In 2008, among our respondents, 6% were identified as being involved in entrepreneurial activity; thus, six out of every 100 adults in Turkey were entrepreneurs. The number of individuals who are actively looking for and taking advantage of business opportunities has increased since 2008 in Turkey. This shows that Turkey had the higher proportion of entrepreneurs in 2010 when compared to 2008 among "similar" phases of economic development included in the GEM study.

During 2010, 3.69% of the adult population in Turkey was actively trying to start a business (nascent entrepreneurs). Turkey experienced slightly higher start up entrepreneurial activity over the year 2008 (3.19%). The increased proportion of nascent entrepreneurs can be considered an indicator for new business activity in the future, especially when global economic circumstances improve. When we

compare start-up rates in Turkey (3.69%) with those in other efficiency-driven economies (6.7%), Turkey has lower than average start up rates.

On the other hand, in 2010 5.05% of the adult population in Turkey was owner-managers of a business that was 3-42 months old (new businesses). This was an increase over the figure for 2008 (3.01%). The increase in the prevalence of new business appears to reflect an improvement in overall economic growth.

The ratio of new firms to start-ups has increased from 0.94 in 2008 to 1.36 in 2010, suggesting that in Turkey many businesses progress beyond the start-up phase. The survival and growth of new business should have a positive effect on economic development.

On the other hand, the rate for already established businesses to endure more than 42 months was 10.73% in 2010, a remarkable expansion over the same index for 2008, which was only 4.82%. This indicates that between 2008 and 2010, 5.91% more of early stage entrepreneurs were transformed into established businesses. This appears to indicate increasing stability or sustainability of business activities in Turkey, which is very important for creating and maintaining employment and general economic well being.

In Turkey, 4.64% of entrepreneurs exited from their businesses in 2010. Entrepreneurial activity must be assessed not only by the number of new actors entering the market of competition, but also by the number of those exiting it. The nascent entrepreneurs involved in creating new businesses are 3.7% fewer than those that exit. The number of entrepreneurs who exited the market exceeding the number of entrepreneurs who entered the market in 2010 must be interpreted to reflect that expansion of entrepreneurship is not significant in Turkey.

According to the GEM report, the main reason for those exiting their businesses in 2010 was the

“problem [of] getting finance [sic]”. Most likely, difficulties in attracting additional financing for established businesses after the recession as well as problems securing start-up financing was important for the viability of business in 2010.

The number of entrepreneurs pursuing a business opportunity in Turkey increased in 2010; however, that number is relatively low proportionally compared with the other efficiency-driven economies. On the other hand, the number of “necessity-entrepreneurs” in Turkey proportionally is relatively high on a global scale, implying that relatively more Turkish entrepreneurs have taken the entrepreneurial route out of necessity. Hence, Turkey has a less favorable ratio of opportunity- to necessity-driven early stage entrepreneurs compared with 2008. People in Turkey are pushed into entrepreneurship because they have no other means of making a living or because they fear becoming unemployed in the near future. The discrepancy between male and female is even higher for opportunity entrepreneurship.

For 2010, the proportions of university degree- and post-graduate degree- entrepreneurs have increased compared with those of 2008. Evidence from the GEM research from Turkey suggests that people who have attained higher levels of education tend to be opportunity-driven entrepreneurs. Conversely, people who have gone less far with their education start their own businesses because they have less choice among options for suitable employment (necessity-driven entrepreneurs). Opportunity entrepreneurs are non-existent among the illiterate population. On the other hand, necessity entrepreneurial activity is non-existent for people who have a high level of education (university and graduate experience).

In general terms, and to summarize, our results also indicate that people of low-to-middle income who embark on or have embarked on a business tend to be necessity-driven entrepreneurs. Conversely, at the highest income level, persons tend to be opportunity-driven entrepreneurs.

With respect to gender, the GEM data show that, worldwide, more men than women become entrepreneurs. Consistent with this pattern in other countries, almost 70 % of all entrepreneurs in Turkey are men. The good news is that the ratio of male to female entrepreneurs has decreased slightly from 2008 to 2010. Nevertheless, indicative of a continuing dearth of opportunities for women, the ratio in Turkey of male to female is the highest, or most inequitable, among the efficiency-driven economies. The male TEA rates are 3.63 times higher than the female TEA rates.

The GEM data also show that gender attitudes are different towards entrepreneurship. A higher percentage of men than women see more favorable opportunities in the environment for starting a business. Men are also more confident that they possess the knowledge and experience necessary for starting a new business and they have less fear of failure. Men have more networking resources and know, for example, more people who started a business than do women. More efforts should be made to encourage women to participate in business as entrepreneurs.

Consistent with international findings, Turkish people in the highest household income brackets are more likely to start a new company. 76 % of Turkish entrepreneurs are found in the highest 33% income level, and only 8% of Turkish entrepreneurs come from the lowest 33% income level. Clearly, starting a company if your household income is low is difficult. Special attention should be paid to these people.

The GEM study shows that 66% of entrepreneurial activity in Turkey took place in the consumer oriented sector. There was a significant increase in the consumer oriented sector from 2008 to 2010 and a decrease in other sectors, especially in the share of entrepreneurs involved in the transforming industries (manufacturing and construction), which dropped from 34% to 20%. In 2010, the most start-

ups focused on end users of the goods and services industries, which do not require as much startup capital.

In the GEM study, 36.14% of Turkish respondents considered that there were good opportunities for start-ups, which is lower than the average for efficiency-driven countries of 42.94%. Nevertheless, the Turkish experts are generally optimistic about the existence of opportunities in Turkey. Most of the business professionals mentioned that they believe there will be plentiful opportunities for starting new business in next six months.

More than half of those polled (54%) believed that they had the skills necessary to start a new business. This level of self belief among respondents in Turkey represents an increase from 2008, when the figure was 49%. Accordingly, Turks appear to be more confident and positive with regard to the skills they believe they possess in order to start up a new business. On the other hand, the opinion of our professionals about the population's entrepreneurial abilities was negative with regard to the ability to start and manage a high-growth business, and to organize the resources required for a new business; furthermore, they did not believe Turks, in general, possessed the experience necessary to start a new business.

With regard to networks of relationships with others, 36.43% of Turkish business persons polled in the GEM study knew someone personally who had started a business in the past two years, a lower figure compared to the average score for the efficiency driven countries (45.34%).

In 2010, 33% of Turkish respondents mentioned that fear of failure prevented them from embarking on a new business. Turkey is 8<sup>th</sup> lowest with regard to the level of fear of failure among the efficiency driven countries. This figure is slightly lower than the average for efficiency-driven countries, or 35%. At the same time, the share of those in Turkey delayed by fear of failure in starting a new business

decreased by about 3 percent by comparison with 2008. Because of high unemployment, one can conclude that this decline was due to the lack of other opportunities in the labor market.

In terms of society-related measures to entrepreneurship, 75.44 % of Turkish adult population felt that starting a business is a good career choice, the result is higher than the average of efficiency-driven countries.

Consistent with findings from previous years about the perceptual measures of entrepreneurship, Turkey is still relatively weaker than other countries. However, in terms of social-related measures to entrepreneurship, our figures show improvement.

The GEM research model identifies nine entrepreneurial framework conditions that are considered to have an impact on entrepreneurial activity within a country. The nine entrepreneurial framework conditions are: financial support, government policies, government programs, education and training, research and development transfer, commercial and professional infrastructure, market openness, access to physical infrastructure, and entrepreneurial culture and attitude toward entrepreneurship.

Among these entrepreneurial framework conditions, the experts gave their most positive assessment to attitude toward entrepreneurship, market openness to speed of change in the market, and ease of access to physical infrastructure. Supporting the findings on the increase in entrepreneurial activity levels in Turkey in 2010, the 36 experts polled rated Turkey's environment for entrepreneurship generally to be more favorable than in 2008.

Government policy in support of business endeavor in Turkey, at all levels of government (national, regional, municipal) has grown. For example, with regard to government regulation, the experts believe that the tax and administration burden may have improved slightly over the last two

years; however, this is still a key area of complaint among the experts.

Technology transfer refers to the transfer of new technology and scientific and other knowledge from universities and research institutions to new or expanding businesses; for 2010, the experts were more positive than they were in 2008; research and development (R&D) Indicators confirm such progress. The ratio of R&D spending to Gross National Product (GNP), the private sector's share in R&D funding, and the number of full-time equivalent R&D personnel have all increased since 2008.

Turkish experts give a better rating in 2010 than in previous years to general preparation in primary and secondary education for young people who might be interested in careers in business. Those polled believe that schools are encouraging more creativity, self-sufficiency, and personal initiative, and are providing more information about principles of market economics and more attention, specifically, to entrepreneurship skills.

In contrast to these positive trends in primary and secondary education about training for entrepreneurship, the Turkish experts negatively assess both the quality and quantity of university and vocational education, expressing the belief that higher educational institutions are not providing adequate preparation for starting up a new business nor for growing an existing business.

According to the experts, there are more opportunities for entrepreneurship in Turkey than there are people equipped with the skills necessary to take advantage of them. Therefore, opportunity recognition and opportunity shaping should be put high on the agenda, and education for entrepreneurship should be further developed.

Importantly, availability of funding in Turkey has been changing for the better over the years. According to the experts, the greatest increase is seen in the availability of debt and equity funding.

However, there are mixed views about government subsidies even as some increases are seen with regard to the availability of business angels, and of venture capital and capital raised from initial public offerings. The general opinion is that, although the availability of resources are increasing it remains the case that insufficient financial support is undermining entrepreneurship in Turkey.

A long-term barrier appears to derive from cultural norms surrounding entrepreneurship. The national culture does not emphasize self-sufficiency, autonomy or personal initiative and does not encourage creativity and innovation in young people. Traditional emphasis in Turkish society on

obedience, reinforced by the practice of educating children as much within the family unit as in formal education, subverts the development of creativity, innovation, and personal initiative.

An important point to consider, while by no means the only factor, entrepreneurship gives us the means to overcome the challenges of the current economic crisis. This is because an increase in the number of skilled entrepreneurs in a society historically has been shown to help end recessions by reallocating resources from obsolete economic activities to new and more dynamic ones (GEM 2008).





# Introduction

## Global Entrepreneurship Monitor (GEM)

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The Global Entrepreneurship Monitor (GEM) is a unique, global initiative that explores relationships between entrepreneurship and economic growth. It produces unique, globally comparable data on the entrepreneurial potential of nations, thereby providing an annually updated data and reference material for economic policy makers interested in entrepreneurship.

GEM was initiated in 1997 by leading scholars from Babson College (US) and the London Business School (UK). In 1999, when the first annual GEM report was published, 10 countries participated in the initiative. In 2010, altogether 59 countries are involved from all continents around the World.

GEM set out to explore three fundamental questions:

- Does the type of entrepreneurial activity vary between countries?

- Are the differences in national entrepreneurial activity related to national economic growth?
- What national characteristics are related to differences in types of entrepreneurial activity?

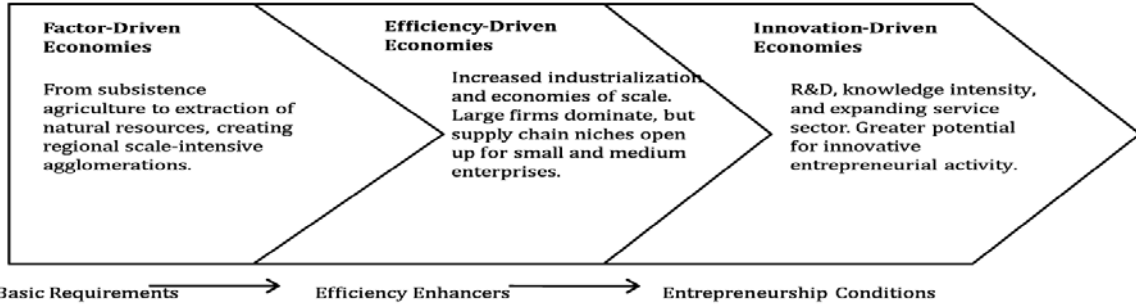
## Entrepreneurship and Stages of Economic Development

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GEM analyzes the contribution of entrepreneurship to an economy according to its stages of development. The countries in this report are grouped into three stages of economic development, as defined by the World Economic Forum's Global Competitiveness Report: factor-driven, efficiency-driven, and innovation-driven (Figure 1).

Factor-driven countries primarily compete with regard to low prices and natural resources. Enterprises are mainly involved in primary production. An economy is particularly vulnerable to fluctuations in the world economic cycle, commodity prices, and exchange rates.

Figure 1 - Characteristics of Economic Groups and Key Development Focus



Source: GEM Global Report 2010

Efficiency-driven countries produce standard products and services. Productivity is improved through increased investment in infrastructure and a business-friendly environment. Enterprises move up the value chain beyond basic manufacturing toward product design, distribution, and marketing. Financial crises and external, sector-specific demand shocks can still impact the economy.

Innovation-driven economies are characterized by their production of new and unique products and/or services for the global market, driving advances in technology and business methods. Service industries play an increasingly important role and contribute significantly to GDP. Economies at this stage of

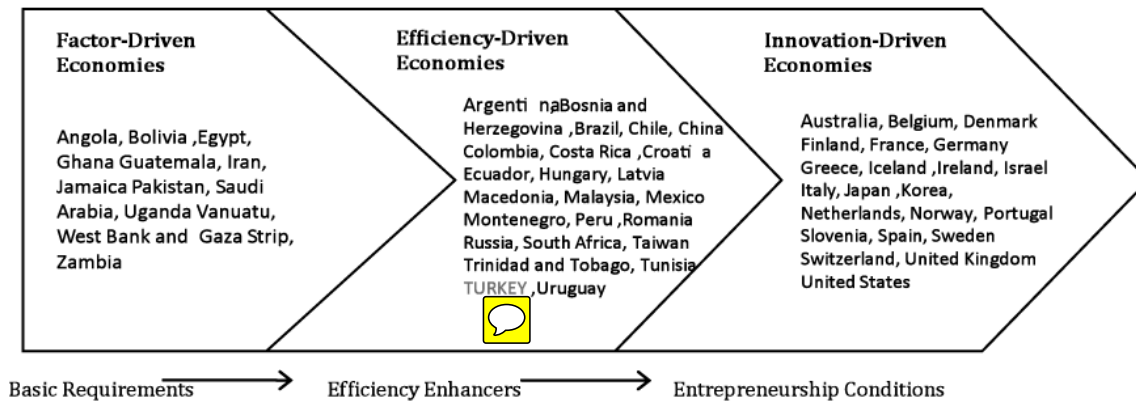
development are more resilient in a volatile global economy.

As countries develop economically, they tend to shift from one phase to the next. Turkey is currently at the efficiency-driven stage of economic development (Figure 2).

### GEM Definition of Entrepreneurship

The Global Entrepreneurship Monitor (GEM) research program defines active entrepreneurs as “adults in the process of setting up a business

Figure 2 - Countries Participated in GEM Project in 2010



who will (partly) own and/or are currently owning and managing an operating young business” 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” (Reynolds et al., 2005).

Entrepreneurs in GEM are classified according to the age of their establishments and their motivations. Based on the age of enterprises, GEM classifies potential entrepreneurs, nascent entrepreneurs, new business owners, early stage entrepreneurs, and established business owners. Figure 3 summarizes the entrepreneurial process and GEM’s operational definitions.

**Potential entrepreneurs** are either working to start a business at the moment or are thinking of establishing a business in the future.

**Nascent entrepreneurs** are currently active in trying to start a business, have not yet paid any

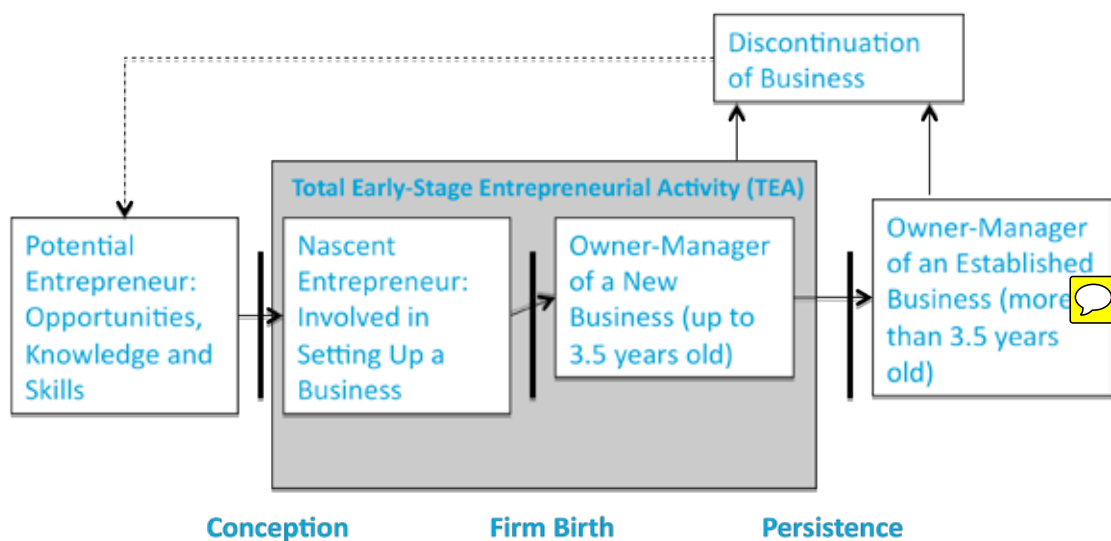
salaries or wages, or have paid less than three months wages among the adult population aged 18-64 years.

**New firm entrepreneurs** are currently active in running a business that has paid salaries or wages for more than three months but less than 3.5 years among the adult population aged 18-64 years.

**Total early stage entrepreneurs (TEA)**, as the name implies, combines nascent entrepreneurs with new business entrepreneurs among the adult population aged 18-64 years. In some instances, this rate is less than the combined percentages for nascent entrepreneurs and new firm entrepreneurs. This is because, in circumstances where respondents qualify as both a nascent and a new firm entrepreneur, they are counted only once.

**Established business owners (EB)** are individuals among the adult population aged 18-64 years who have set up businesses that they have continued to own and manage and that have paid wages or salaries for more than 42 months.

Figure 3 - The Entrepreneurship Process and GEM Operational Definitions



Source: GEM Global Report 2010

# GEM Research Methodology & Data Sources

 GEM employs three research approaches:

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## 1. Adult Population Surveys

2000 or more adults were selected in each country for a random sampling survey using a common survey instrument via telephone. The survey is used to estimate the entrepreneurial participation in the country concerned as well as to capture various attitudes of the population towards entrepreneurship. The results of the analysis are drawn from the responses of the working age group (18 to 64 years old).

## 2. Country Experts Interviews

The GEM national research team in participating countries collected two types of data from country experts. In depth interviews were conducted using both structured questionnaire (standard questionnaire for all countries) as well as open-ended discussions. The structured questionnaire data were used to

provide Likert-Scale indices on the status of each of the nine framework conditions that are comparable across the participating countries. The open-ended discussions were transcribed for qualitative content analysis.

In Turkey, 36 key informants including entrepreneurs and venture support professionals were interviewed by the GEM national research team to gather data representing the nine entrepreneurial framework conditions: presence of financial support, government policies, government programs, education and training, research and development transfer, commercial and professional infrastructure, internal market openness, access to physical infrastructure, and cultural and social norms related to entrepreneurship.

## 3. Collection of Secondary National Socio-Economic Data

In addition to the primary data collection, selected national socio-economic data from various national and international sources, including the Organization for Economic Cooperation and Development (OECD),

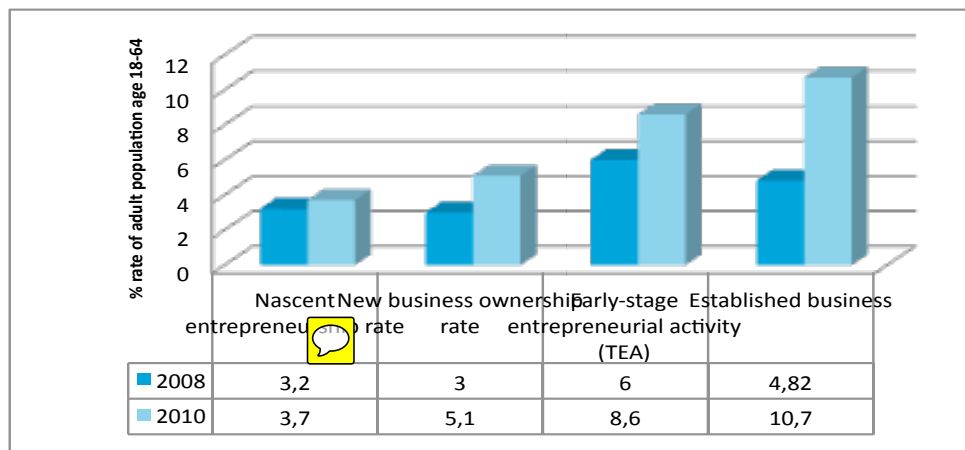
## Entrepreneurial Activity in Turkey

One of the main objectives of the GEM research project is to assess the level of entrepreneurial activity in a harmonized way that allows for reliable cross-country comparisons. In order to accomplish this, a Total Entrepreneurial Activity (TEA) index is calculated for each country. The TEA index is the combination of the following two types of entrepreneurs:

- 1) Nascent entrepreneurs, i.e., individuals who are currently involved in concrete activities to start up a new business (start-ups),
- 2) owner-managers of new firms, i.e., individuals who currently own a business that is less than 42 months old (new business).

The TEA index is calculated as the number of entrepreneurially active individuals who belong to one of the two categories mentioned above and who are in the age range of 18-64 years. We first analyze the TEA results, and then focus on the prevalence rate for start-ups and new firms.

Figure 4: Entrepreneurial Activity in Turkey (%)



The level of early stage entrepreneurship activity in 2010 was 8.6% which means that about 9 out of every 100 adults in Turkey were entrepreneurs according to the “GEM definition”. When compared with 2008, 2010 reflects a more positive outlook for entrepreneurship in Turkey. In 2008, among our respondents, 6% were identified as being involved in entrepreneurial activity; thus, six out of every 100 adults in Turkey were entrepreneurs.

The number of individuals actively looking for and taking advantage of business opportunities increased from 2008 to 2010. This also indicates that Turkey had a higher proportion of entrepreneurs in 2010 compared to 2008 among “similar” phases of economic development included in the GEM study. However, the average TEA rate of Turkey (8.6%) is still below the average rate of all GEM efficiency-driven economies included in 2010 (11.7%).

Table 1: Prevalence rates (in %) of entrepreneurial activity across GEM Efficiency-driven economies in 2010, for those aged 18-64

Nascent entrepreneurship rate		Ranking	New business ownership rate		Ranking	Early-stage entrepreneurial activity (TEA)		Ranking
Peru	22.1	1	Colombia	12.7	1	Peru	27.2	1
Montenegro	12.0	2	Brazil	11.8	2	Ecuador	21.3	2
Chile	11.1	3	Ecuador	11.5	3	Colombia	20.6	3
Ecuador	10.4	4	China	10.0	4	Brazil	17.5	4
Costa Rica	10.4	5	Argentina	7.4	5	Chile	16.8	5
Trinidad and Tobago	8.9	6	Trinidad and Tobago	6.4	6	Trinidad and Tobago	15.1	6
Mexico	8.6	7	Chile	6.1	7	Montenegro	14.9	7
Colombia	8.6	8	Peru	6.0	8	China	14.4	8
Uruguay	7.8	9	<b>Turkey</b>	<b>5.1</b>	<b>9</b>	Argentina	14.2	9
Argentina	7.0	10	Tunisia	4.4	10	Costa Rica	13.5	10
Brazil	5.8	11	Latvia	4.2	11	Uruguay	11.7	11
Latvia	5.6	12	Uruguay	4.1	12	Mexico	10.5	12
South Africa	5.1	13	Bosnia and Herzegovina	4.1	13	Latvia	9.7	13
Taiwan	4.7	14	South Africa	3.9	14	South Africa	8.9	14
Hungary	4.6	15	Taiwan	3.8	15	<b>Turkey</b>	<b>8.6</b>	<b>15</b>
China	4.6	16	Macedonia	3.6	16	Taiwan	8.4	16
Macedonia	4.4	17	Malaysia	3.6	17	Macedonia	8.0	17
Bosnia and Herzegovina	4.1	18	Costa Rica	3.6	18	Bosnia and Herzegovina	7.7	18
Croatia	3.8	19	Montenegro	3.1	19	Hungary	7.1	19
<b>Turkey</b>	<b>3.7</b>	<b>20</b>	Hungary	2.6	20	Tunisia	6.1	20
Romania	3.3	21	Mexico	2.0	21	Croatia	5.5	21
Russia	2.1	22	Croatia	1.9	22	Malaysia	5.0	22
Tunisia	1.7	23	Russia	1.9	23	Romania	4.3	23
Malaysia	1.4	24	Romania	1.1	24	Russia	3.9	24
Average	6.7	Average	Average	5.2	Average	Average	11.7	

Source: Adult population survey 2010 (APS)

## Start-Up and New Firm Participation

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As mentioned earlier, GEM distinguishes between two stages of entrepreneurial activity: start-ups and new firms. The respondent is considered to be involved in a start-up if he or she has undertaken any activity to start a firm in the past 12 months and has not paid salaries or wages for more than three months. The respondent is considered to engage in new firm activity when he or she currently owns or partly owns a firm which has paid wages or salaries for between 3 and 42 months.

In Figure 4, we show the percentage of Turkish adults who were involved in start-up and new firm activity respectively in 2008 and 2010. We also compare the Turkey's results with other efficiency-driven economies (Table 1).

During 2010, 3.69 % of the adult population in Turkey was actively trying to start a business (nascent entrepreneurs). Although, Turkey has had lower than average start up rates (6.7%) for efficiency-driven countries, we experienced slightly higher start up entrepreneurial activity over 2008 (3.19%). The increased proportion of nascent entrepreneurs can be considered as an indicator for new business activity in the future, especially when global economic circumstances get better. When we compare Turkey's start-up rates with other efficiency-driven economies, Turkey is in fifth-from-last position for start-up types of entrepreneurial activity. In fact, the start-up rate of Turkey is much lower than the average (6.7%).

On the other hand, 5.05% of the adult population in Turkey were owner-managers of businesses from 3-42 months old (new businesses) in 2010. There is an increase in the share of young business owners relative to the adult population of 2010 compared with 2008 (3.01%). Turkey is in ninth position among the efficiency-driven countries. The increase in the prevalence of new business may reflect an improvement in economic growth.

The ratio of new firms to start ups could also show the survival rates of starts ups. This ratio has been increased from 0.94 in 2008 to 1.36 in 2010, suggesting that in Turkey many businesses progress beyond the start-up phase. The survival and growth of new business might have a positive effect on overall economic development. Start-ups help to redress employment needs in the country.

## Established Business

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An established business is where the owner/manager has operated the business, has been paying wages and salaries or any other payment, for more than 42 months. The high rate of established business ownership shows positive circumstances for firm survival and also can be interpreted as an index for the general stability and sustainability of businesses (GEM, 2010, p. 36). The prevalence rate for established businesses for 2010 was 10.73%, a noticeable expansion over 2008 which recorded only 4.82% (Figure 4). This indicates that between 2010 and 2008, 5.91% of early stage entrepreneurs were transformed into established businesses.

The survival rate of start-ups and growth of new business into established businesses in Turkey increased over 2008. This could show increasing stability and/or sustainability of business activities in Turkey, which is very important for creating and sustaining employment and economic well being.

## Exits by Entrepreneurs

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GEM tracks the number of individuals who have sold or closed their businesses in the last 12 months. The total number selling and closing their businesses is considered an exit rate. Turkey recorded 4.64% of entrepreneurs who exited their businesses in 2010. Entrepreneurial activity should be assessed not only by the number of new entries into the market but also by the number of those exiting the market. The nascent entrepreneurs who were involved in creating new business, equating with 3.7%, are fewer than those equating with the exit rate.

The number of entrepreneurs who exit the market exceeded the number of entrepreneurs who entered the market in Turkey in 2010, which may show that the expansion of entrepreneurship is insignificant.

Understanding the reasons for business discontinuation is important for entrepreneurship. It may help policymakers deal with problems that entrepreneurs face in order to achieve entrepreneurial sustainability.

Figure 5: Reasons behind Discontinuous Business

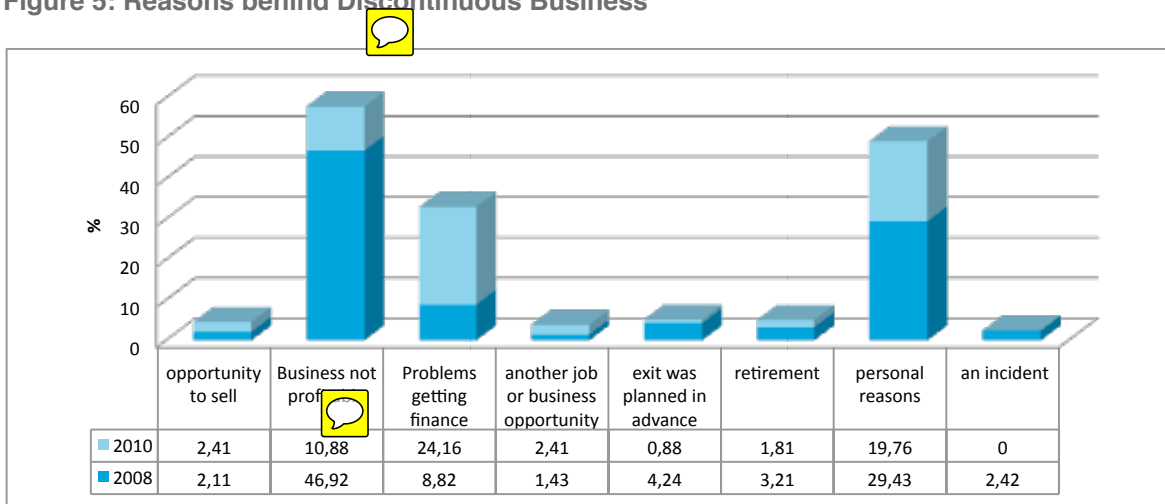


Figure 5 shows the reasons stated by entrepreneurs for quitting their businesses activities. Although the reasons for business discontinuation are various: unprofitability, difficulties with access to finance and personal factors are important reasons for discounting business in Turkey.

“The business was not profitable” was the main reason indicated for exiting the market in 2008; a full 47% of respondents cited this as the reason. However, “problem getting finance” was the main reason to exit the market in 2010. Most likely, attracting additional financing after the recession and problems securing finance were important for the viability of businesses in 2010.



## Opportunity and Necessity Entrepreneurs in Turkey

Entrepreneurs who consider starting a new business may be motivated by various factors. Some start their businesses in order to take advantage of particular business opportunities; others are forced by necessity to start up a business because they do not have other real sources of income. Thus, GEM makes a distinction between entrepreneurs who say they are pursuing a business opportunity (i.e., opportunity-entrepreneurship-TEA-OPP) and those who say they are involved in entrepreneurial activity because they have no other choice of work (necessity-entrepreneurship-TEA-NEC).

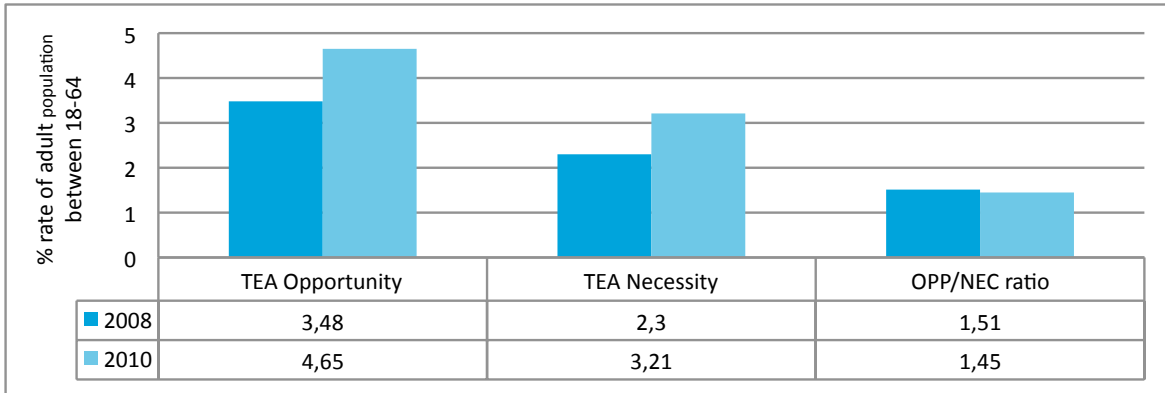
Opportunity and necessity entrepreneurs may differ with respect to performance. It has been argued that opportunity entrepreneurship is more likely to make a greater contribution to the economy in terms of innovation and job creation (Reynolds et al., 2002). Opportunity-entrepreneurs expect to start new ventures that create jobs. Necessity-entrepreneurs expect their new firms to create relatively few jobs, or remain vehicles of self employment only.

The Figures 6 and 7 show the opportunity and necessity indices and the ratio of opportunity to

necessity entrepreneurs in Turkey and the same indicators for the efficiency-driven countries, respectively. It is important to note that the opportunity entrepreneurship index and the necessity entrepreneurship index do not add up exactly to the TEA index, since some entrepreneurs say they are motivated by something other than opportunity or necessity or by a combination of factors. However, these figures show all respondents that can be assigned to either the opportunity or necessity category.

In Turkey, the entrepreneurial pool was made up of about 60% opportunity-entrepreneurs and 40% necessity-entrepreneurs in 2010. In terms of the actual prevalence rates for the two types of entrepreneurship, 4.65% of the Turkish adult population was involved in entrepreneurial activity based on opportunities, whereas 3.21 % of the population was involved in such activity by necessity. Although there has been an increase in opportunity-entrepreneurs, this rate is well below the average of the efficiency-driven countries (7.81%) and 17<sup>th</sup> out of the 24 efficiency-driven countries. The necessity-entrepreneur rate in Turkey remained relatively high in 2010, and

Figure 6: % Rate of Opportunity- and Necessity-Entrepreneurship in Turkey

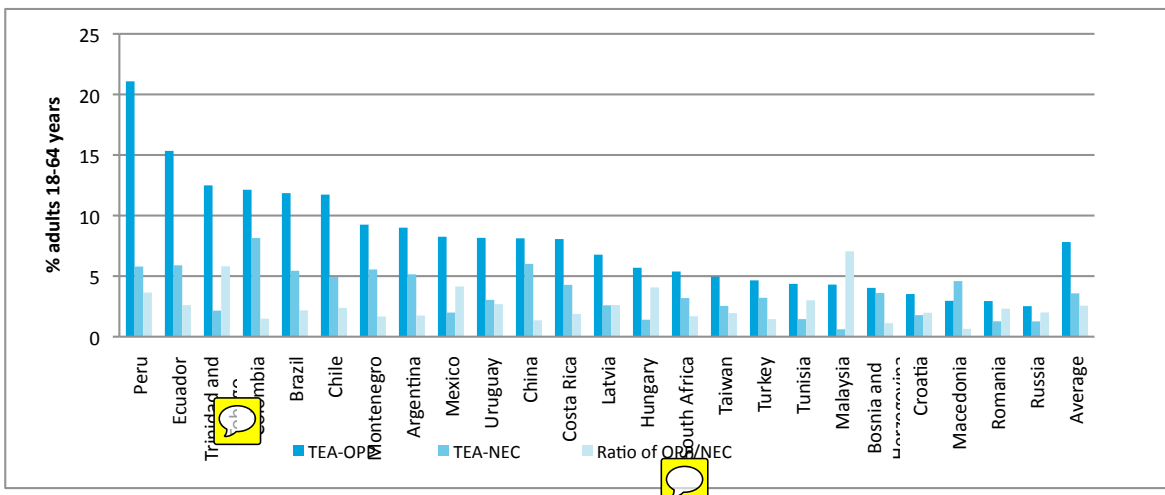


this rate is close to the average for the efficiency-driven countries (3.58%); Turkey is situated 12th out of the 24 countries considered. Not surprisingly, in Turkey limited income, high unemployment, and a weak social welfare system force Turkish people to attempt to start a business from what they deem to be necessary for survival.

The ratio of opportunity to necessity driven early stage entrepreneurship remained relatively low

in 2010 for Turkey at 1.45%, a slight dip from 1.51% in 2008. This ranks Turkey 21st out of 24 countries. Turkey has a less favorable ratio of opportunity to necessity driven early stage entrepreneurs. However, the improved ranking of Turkey in terms of the ratio of opportunity- to necessity-entrepreneurship is very significant. This is because opportunity-type start-ups have the best chance of leading to further growth and job creation.

Figure 7: Opportunity and Necessity Early-Stage Entrepreneurship

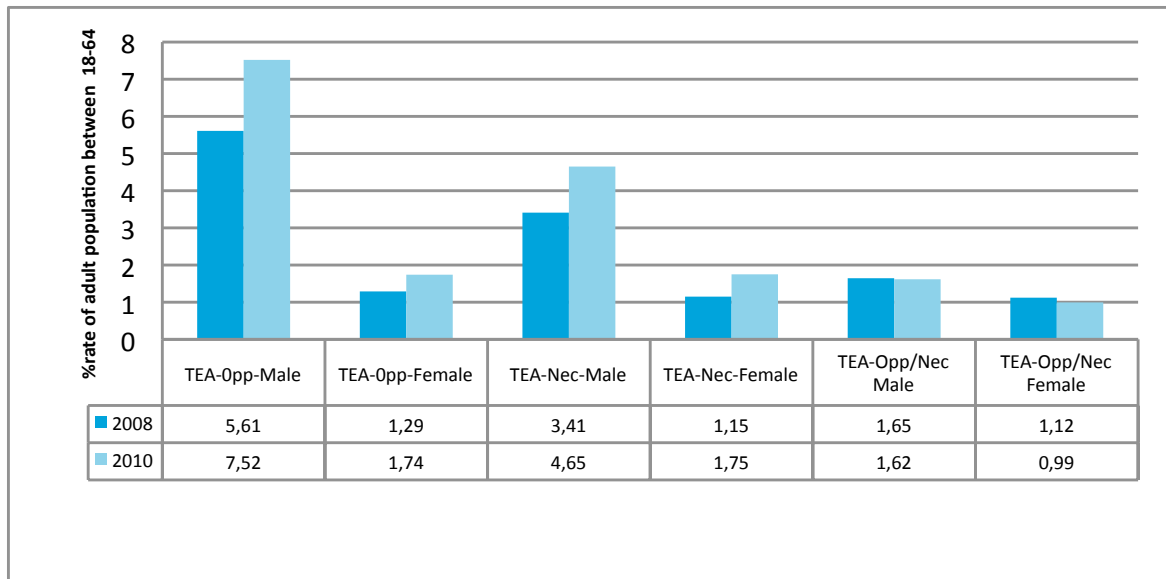


### Motivation-Gender

Regarding gender difference, it seems that there is more gender distinction in opportunity-entrepreneurship than in necessity-entrepreneurship. Figure 8 shows that the proportion of females who set up a business from necessity is increasing at a higher rate than those of males participation. This

is the case even as male participation in necessity-entrepreneurship rate is increasing as well. Traditionally, women are assumed to have lower levels of human capital because they are more likely to work part-time or drop out of the labor force after having children (Becker 1993). Women who have a higher education usually prefer to work for somebody else rather than set up their own business.

Figure 8: Gender Participation in Necessity- and Opportunity-Entrepreneurship TEA Rate

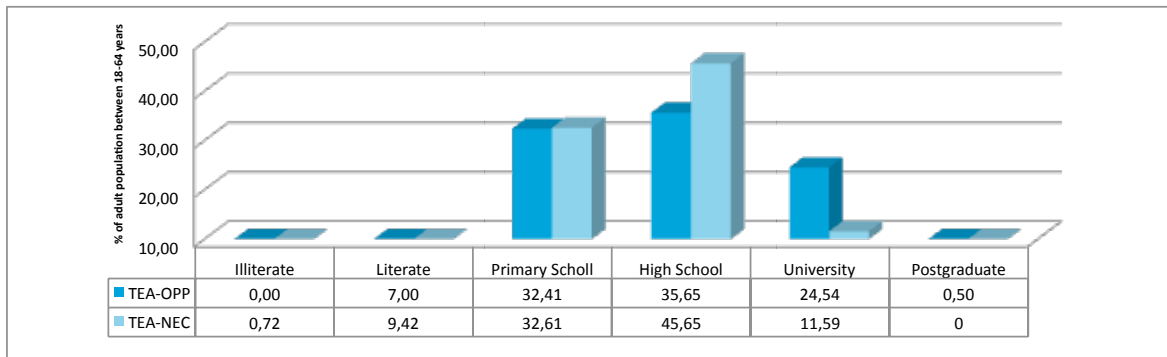


### Motivation-Education

Education level covaries with unemployment. It may be expected that people with a low level of education have more difficulties finding a job, and therefore see no other option than in place of necessity-entrepreneurship. Evidence from the GEM research finding for Turkey (Figure 9) suggests that people who have attained higher levels of education tend to be opportunity-driven entrepreneurs. These people tend to have wider choices for employment. Accordingly, they have little desire to take risks

by starting their own business until they perceive an obvious potential gain from a new business. Conversely, people who have comparatively lower levels of education start their own business because they have fewer choices for suitable employment. Such entrepreneurs are driven by the necessity of their own economic circumstances. Opportunity-entrepreneurs are non-existent among the illiterate. On the other hand, necessity-entrepreneurial activity is non-existent for people who have a high level of education (i.e., graduate experience).

Figure 9: Education Level of Necessity and Opportunity-Entrepreneurs (%)

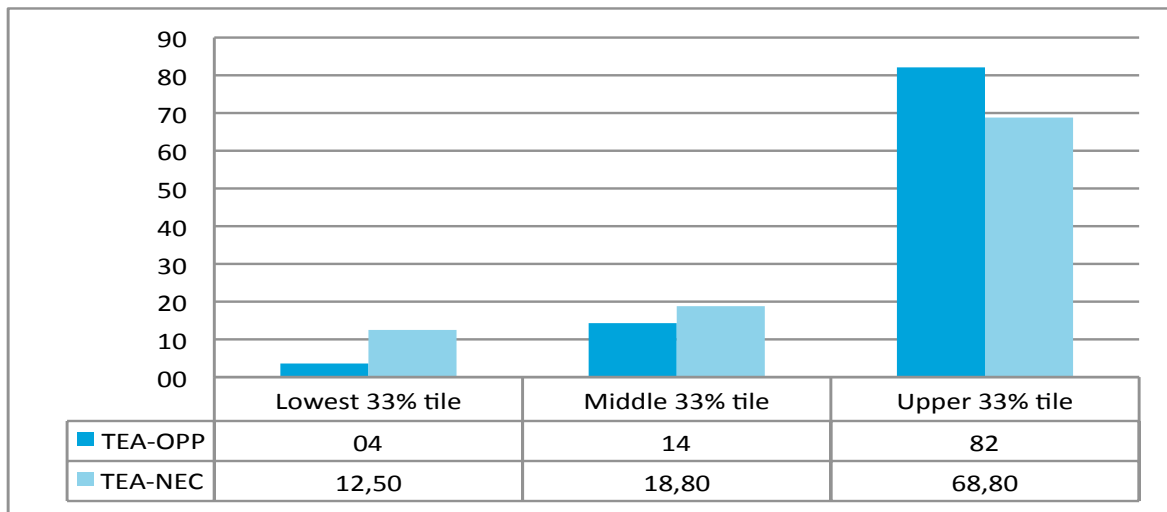


### Motivation-Income

The GEM data for household income are classified according to three equal percentages of income groups: lowest 33%, middle 33%, and highest 33%. Figure 10 shows that, people who are at the lowest and middle income levels start a business because of necessity. Conversely, for the highest income level; people tend to be opportunity-driven entrepreneurs.

Since opportunity-entrepreneurs may have more resources to invest in the human and social capital necessary to start a business which may lead to higher earnings than necessity-driven business earnings. An opportunity-entrepreneur is more likely to have recognized an opportunity for making profits, while necessity-entrepreneurs may simply have had no better choice. Opportunity-entrepreneurs earn more than necessity-entrepreneurs, therefore suggesting a stronger positive impact from them on economic growth.

Figure10: Income Level of Necessity- and Opportunity-Entrepreneurs (%)

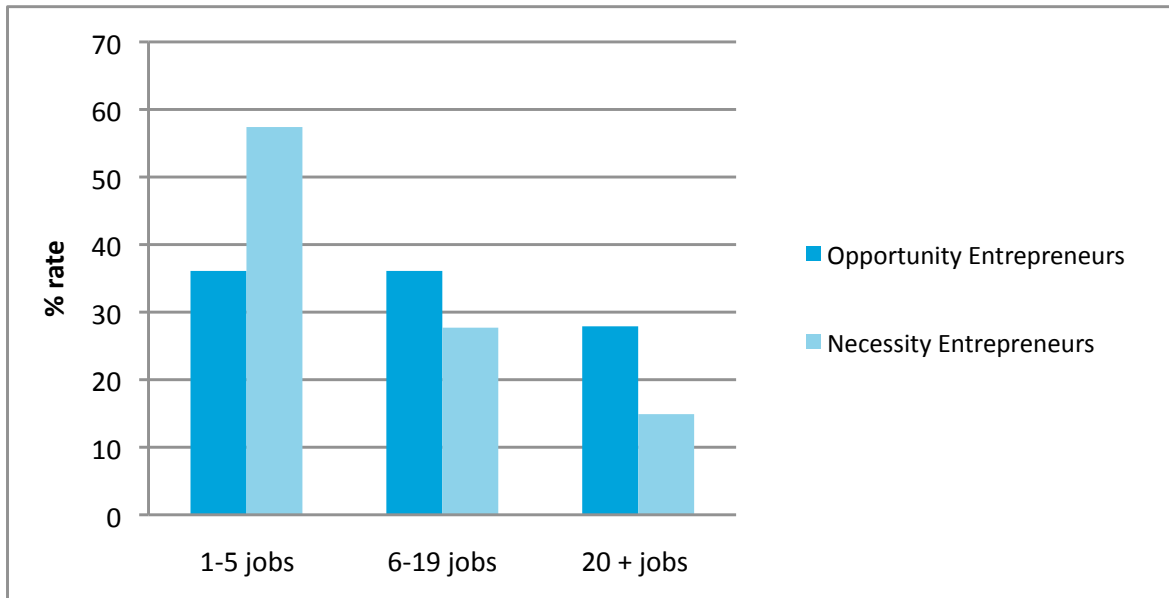


### Motivation-growth aspiration

Necessity and opportunity entrepreneurs differ in their growth aspirations in that opportunity entrepreneurs want to grow faster. In Turkey, 27.9%

of opportunity-entrepreneurs expect to create more than 20 jobs, whereas only 14.9% of necessity-entrepreneurs have these expectations. Opportunity-entrepreneurship is more likely to make a higher contribution to the economy in terms of job creation.

Figure11: Growth Aspiration of Necessity- and Opportunity-Entrepreneurs (%)



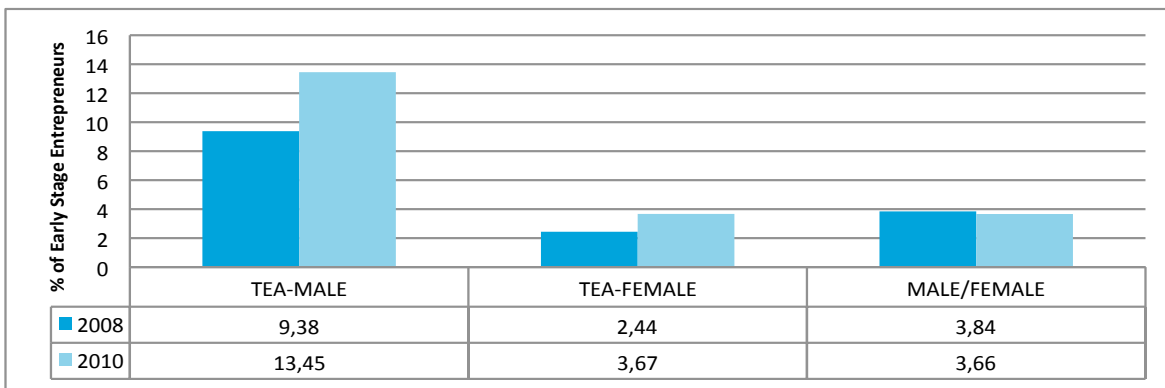
## Social and Demographic Characteristics of Turkish Entrepreneurs

Social and economic characteristics such as age, gender, education and income have significant effect on the desire to start a business. In this section, we take a closer look at what kind of people start companies and in which sectors of an economy their start-up businesses fall. We also examine changes in the social and demographic characteristics of Turkish entrepreneurs occurring between 2008 and 2010.

### Gender and Entrepreneurship

GEM data show that, worldwide, more men are acting as entrepreneurs than women. Consistent with this pattern in other countries, almost 70 % of all entrepreneurs in Turkey are men (Figure 12). The good news is that both the male and female TEA-index increased in 2010, to 13.45% for men and 3.67% for women, respectively. The ratio of male to female entrepreneurs decreases slightly from 2008 to 2010.

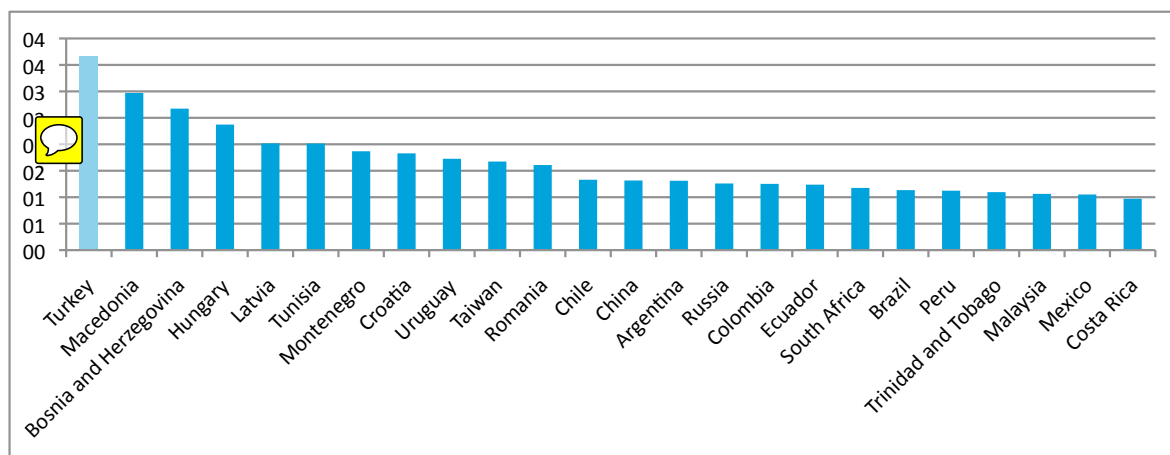
Figure 12: Male and Female TEA- Index



However, the ratio of male to female for Turkey is the most disadvantageous for the latter among the efficiency-driven countries (Figure 13). Male TEA rates are 3.63 times higher than female TEA rates. The lowest female participation rate for Turkey among the efficiency-driven countries shows for

every 100 male entrepreneurs there are 28 female counterparts. Clearly, stimulating entrepreneurship in Turkey has paid off for men, but not for women. More effort needs to be made to encourage women to become entrepreneurs.

Figure 13: Ratio of Male to Female for Efficiency-driven Countries in 2010



The GEM data show that gender attitudes differ about entrepreneurship. A higher percentage of men as opposed to women see favorable opportunities in the business environment for starting companies. Men are also more confident that they possess the knowledge and experience necessary to start a new business, and they have less fear of failure. Men also have more resources from social networks and know more people who started a business than do women.

## Age and Entrepreneurship

For most parts of the world, the largest group of entrepreneurs is between 25 and 34 years old. GEM 2010 data for Turkey reveal somewhat different results (Figure 14). In comparison with 2008, the share of the 25-34 age group declined significantly.

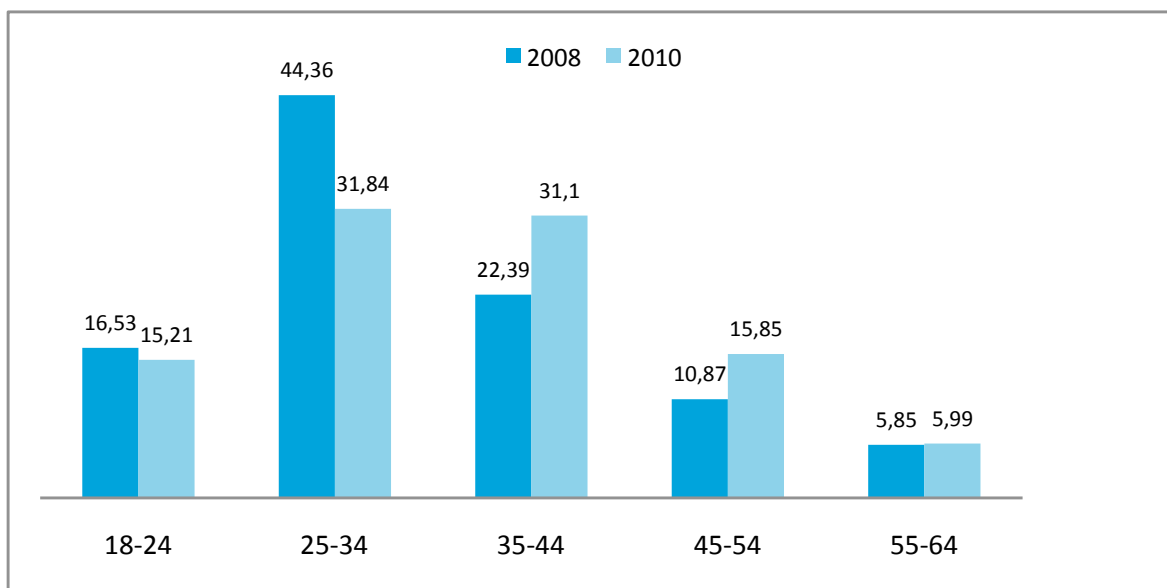
Furthermore, the business activities of the 18-24 age group decreased, albeit slightly, in comparison with 2008. These trends may be due to an increase in the share of the 35-44 and the 45-54 age groups. In 2010, the popularity of entrepreneurship among a middle age population (35-44 and 45-54) increased, and older persons were involved in early stage entrepreneurial activities than were in 2008. No significant changes are found for the 55-64 age group.

Increasing the educational level of entrepreneurs might help to explain the change seen with regard to age distribution in Turkey for 2010. Individuals have tended to spend longer periods of time devoted to their education. In addition, data show that Turks prefer to work for established companies or in public companies before becoming entrepreneurs.

According to figures from the Turkish Statistics Institute (TUIK), half of the Turkish population is under 29 years old, and the unemployment rate among Turkish youth is 21.6 percent. In other words, one out of every five young persons in Turkey is

unemployed. This indicates that much more effort needs to be made on behalf of young people who might contemplate becoming entrepreneurs; we should encourage our young people to choose entrepreneurship as a career path.

Figure 14: Age Distribution of TEA in Turkey (%)



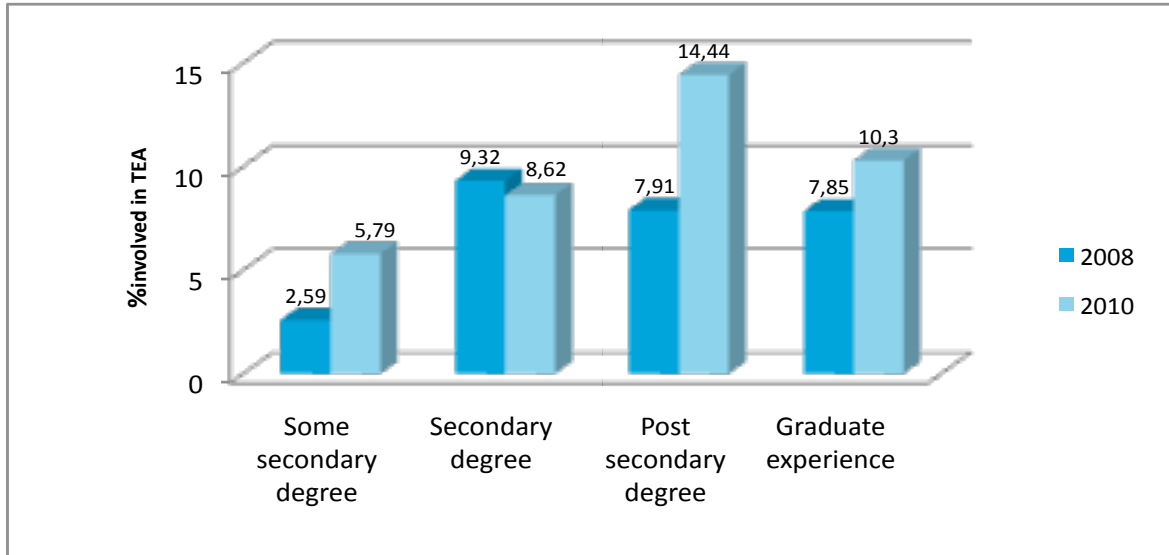
## Education and Entrepreneurship

Education is vital to the successful development of entrepreneurship within society. Figure 15 shows the distribution of education levels for early-stage entrepreneurs in 2008 and 2010. The proportion of university and post-graduate degree entrepreneurs increased compared to 2008. Earlier, we showed that those people attaining higher levels of education tend to be opportunity-driven entrepreneurs.

On the other hand, the data show an increase in the proportion of entrepreneurs who have less education. Again we found that Turkish people who have received comparatively lower levels of education start their own businesses because they have less of a choice regarding suitable employment. Such entrepreneurs are driven by necessity to try to improve their economic circumstances.



Figure 15: Distribution of Education Levels for Early-Stage Entrepreneurs in 2008 and 2010

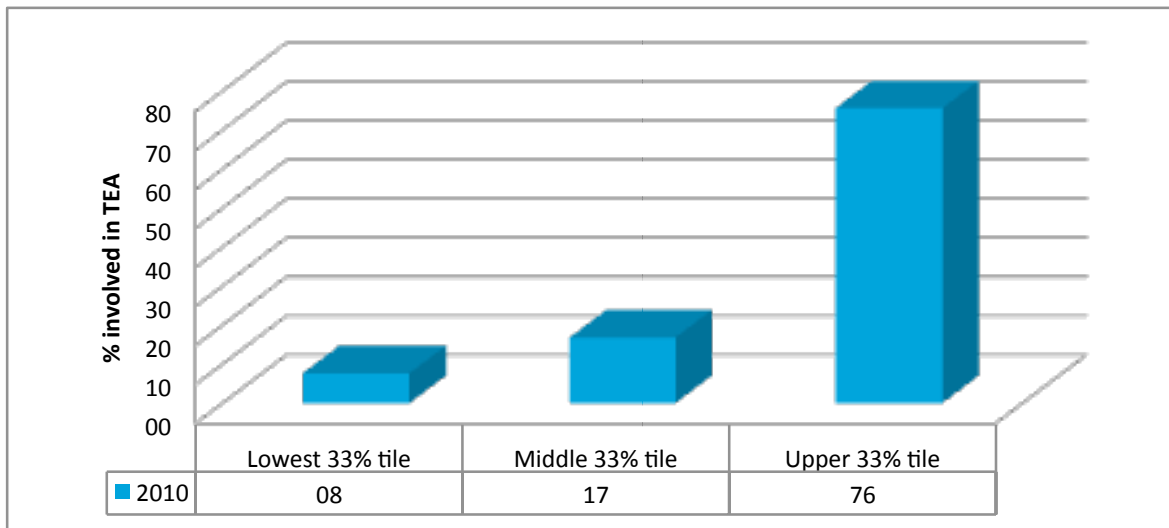


### Household Income and Entrepreneurship

Consistent with international findings, Turkish people in the highest household income brackets are more likely to start a new company (Figure 16). 76

% of Turkish entrepreneurs are found in the highest 33% income level, 17% percent are found in the middle 33% income level, and only 8% of Turkish entrepreneurs come from the lowest 33% income level. Clearly, starting a company if one’s household income is low is difficult. Special attention should be paid to these low-income earners.

Figure 16: Entrepreneurial Activity by Income



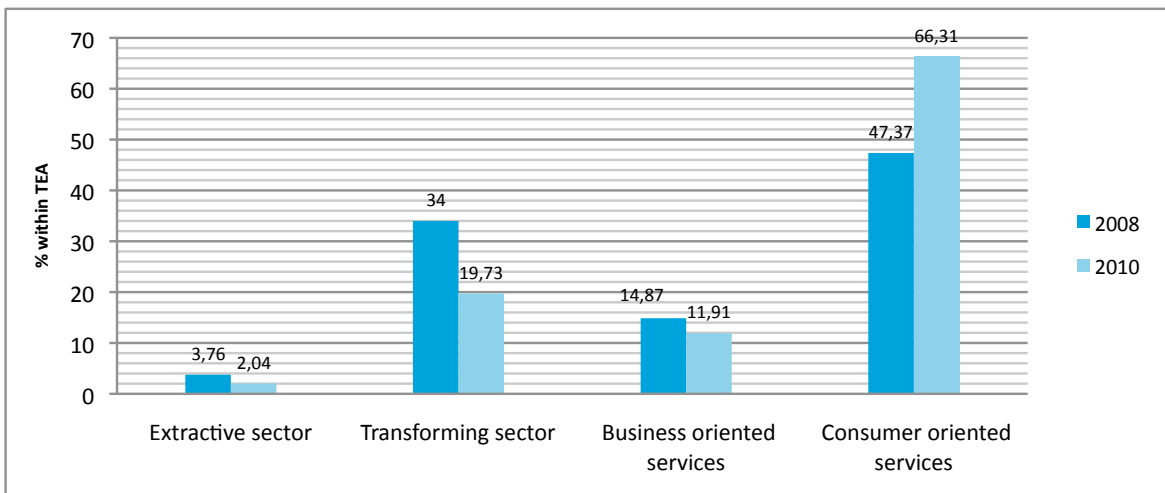
## Entrepreneurial Activity by Sector

The GEM study classified sectors according to the international standard of industrial classification. These include the consumer industries, and the business services, transforming (manufacturing and construction) and extraction industries (farming, forestry, fishing and mining) industries. In most of the countries included in the GEM-study, entrepreneurial activities dominated in the consumer-oriented services. As an economy becomes more developed, the share of consumer-oriented services becomes less prevalent and the share of business-oriented services becomes more important.

Figure 17 shows that the most entrepreneurial activity in Turkey took place in the consumer-

oriented sector. However, there was a significant increase in the consumer-oriented sector from 2008 to 2010 and a decrease in the other sectors, especially with regard to the transforming industry (manufacturing, and construction), where the percentage of entrepreneurial activity dropped from 34% to 20%. In fact, according to TUIK data, there was a decrease trending in the manufacturing and construction industry. Possibly this decrease came about because of unfavorable global conditions, in general. In 2010, the most start-ups were focused on end users of the goods and services provided, for which the businesses concerned do not need as much startup capital.

Figure 17: Early-Stage Entrepreneurial Activity by Industry Type



# Entrepreneurial Attitudes and Perception of Turkish People

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

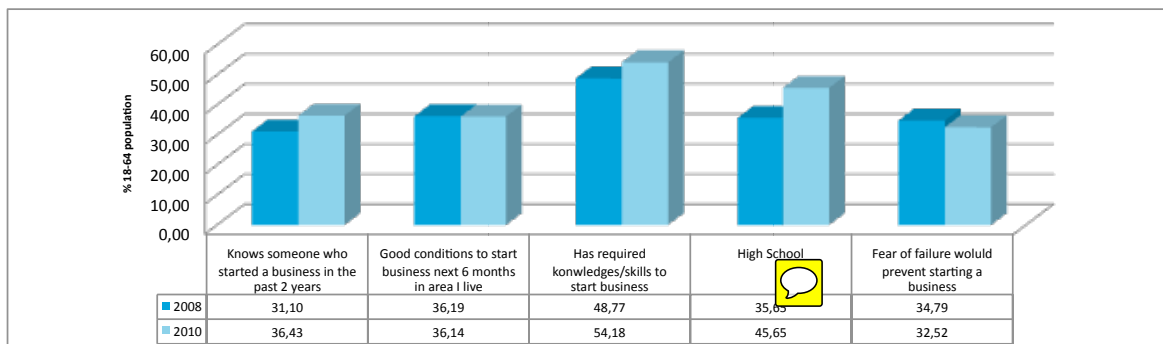
## Perception of Turkish people

GEM measures the following perceptions that are important for the entrepreneurial process:

- (1) the extent to which one perceives that there are opportunities within the environment;
- (2) the extent to which one believes his/her skills are capable of starting a new enterprise;
- (3) the extent to which one knows entrepreneurs who can serve as role models within a personal network;
- (4) the extent to which one is reluctant to be involved in entrepreneurial activity because of fear of failure.

First, opportunity recognition is the basic condition of entrepreneurial action. Kirzner (1973) defined entrepreneurs as those who are alert to discovering and exploiting opportunities and to acting upon them. In order to capture the extent to which one perceives entrepreneurial opportunities, the GEM study asks the respondents whether "they saw good opportunities for starting a business in the next six months in the area where they lived". Figure 18 shows that the Turkish respondents felt that there were good opportunities for start-ups; 36.14 % of the Turkish respondents held this belief. This figure is lower than the average for efficiency-driven countries of 42.94%.

Figure 18: Perceptions of Turkish People about Entrepreneurial Environment



Moreover, the Turkish people appear to believe that there is no change in the degree of entrepreneurial opportunities in Turkey from 2008 to 2010. People feel that the economy is not providing more opportunities for them.

On the other hand, the Turkish experts were generally optimistic about the existence of opportunities in Turkey. This said the general population does not appear to share this optimism. Most of the experts mentioned that they believed there will be plentiful and good opportunities for starting up new businesses in the next six months; but only 36% of the general Turkish population said the same.

Second, possession of knowledge, skills and experience is also deemed important to the successful start-up of a new business. If people believed they possessed the necessary skills, those individuals might be more inclined to pursue entrepreneurship. The GEM study asked respondents whether “they had the knowledge, skill and experience required to start a new business.” Figure 18 shows the percentage of adults who responded, “yes,” to this question. As can be seen, Turkey ranks in the middle among efficiency-driven countries: 54.18% of the Turkish respondents believed they had the skills necessary for a successful start-up. This figure is slightly lower than the average of 55.86% for the efficiency-driven countries.

More than half of the population (54%) believed that they possessed the skills necessary to start a new business. This level of self-belief by Turkish people represents an increase compared with the previous survey year, for which the figure was 49%. Therefore, it appears to be the case that Turks are more confident and positive with regard to the skills required to start up a new business. Individual self-confidence, defined as individuals’ belief in their capability to perform a task, influences the development of both entrepreneurial intentions and actions or behaviors (Byod and Vozikis ,1994).

More Turkish people believe they have the skills to start a business than believe that there are good business opportunities, which is to say that Turkish people are pessimistic about business opportunities. However, the Turkish experts seem to think that this pessimism has more to do with a lack in the capacity to recognize opportunities rather than with an actual lack of opportunities.

The opinion of our experts about the population’s entrepreneurial abilities was negative in respect to the ability to start and manage a high-growth business, the experience necessary to start a new business, and the capability to organize resources required for a new business. These results draw attention to the need for policy makers to concentrate on developing entrepreneurial capacity, which has to do with the ability to respond to business opportunities.

Third, networks of relationships with others and successful role models may affect entrepreneurial decisions of people. Knowledge gained from such networks provides information about opportunities to the individuals who might think about starting their own business.

In order to assess the viability of networks of relationships with others, the respondents were asked whether “they knew someone personally who had started a business in the past two years.” The results are presented in Figure 18. These indicate that 36.43% of those asked this question responded positively. This figure is lower than the average score for the efficiency-driven countries (45.34%).

The data show that for the Turkish respondents who saw good opportunities for starting a business in the next six months in the area where they lived, all knew someone personally who had started a business in the past two years. On the other hand, 72% of respondents who did not belong to an entrepreneurship network were unable to envisage good opportunities for starting up a business. This shows clearly that networks are important because they provide information about opportunities, and help to strengthen and support a given business.

Fourth, fear of failure is an important factor that negatively affects entrepreneurial activity. Many people who choose not to become entrepreneurs are afraid of failing, that is, of making mistakes and losing money. However, business failure must be accepted as a natural risk in the process and should be perceived as being a valuable learning experience instead of something of which we should be ashamed and for which we should be punished.

In 2010, 33% of Turkish people mentioned that fear of failure prevented them from starting up a business. This figure is slightly lower than the average for efficiency-driven countries of 35%. At the same time, the percentage of those in Turkey deterred by fear of failure decreased about 3% by comparison with 2008. Most likely this decline was

due to lack of other opportunities in the labor market because of high unemployment.

## The Attitude of Turks towards Entrepreneurship

The attitude toward entrepreneurship which reflects society’s view of entrepreneurship is an important precondition for entrepreneurial activity. Developing entrepreneurial capacity is not about skills alone, but also about creating a motivating environment.

GEM measures the following attitudes towards entrepreneurship that are important for the entrepreneurial process:

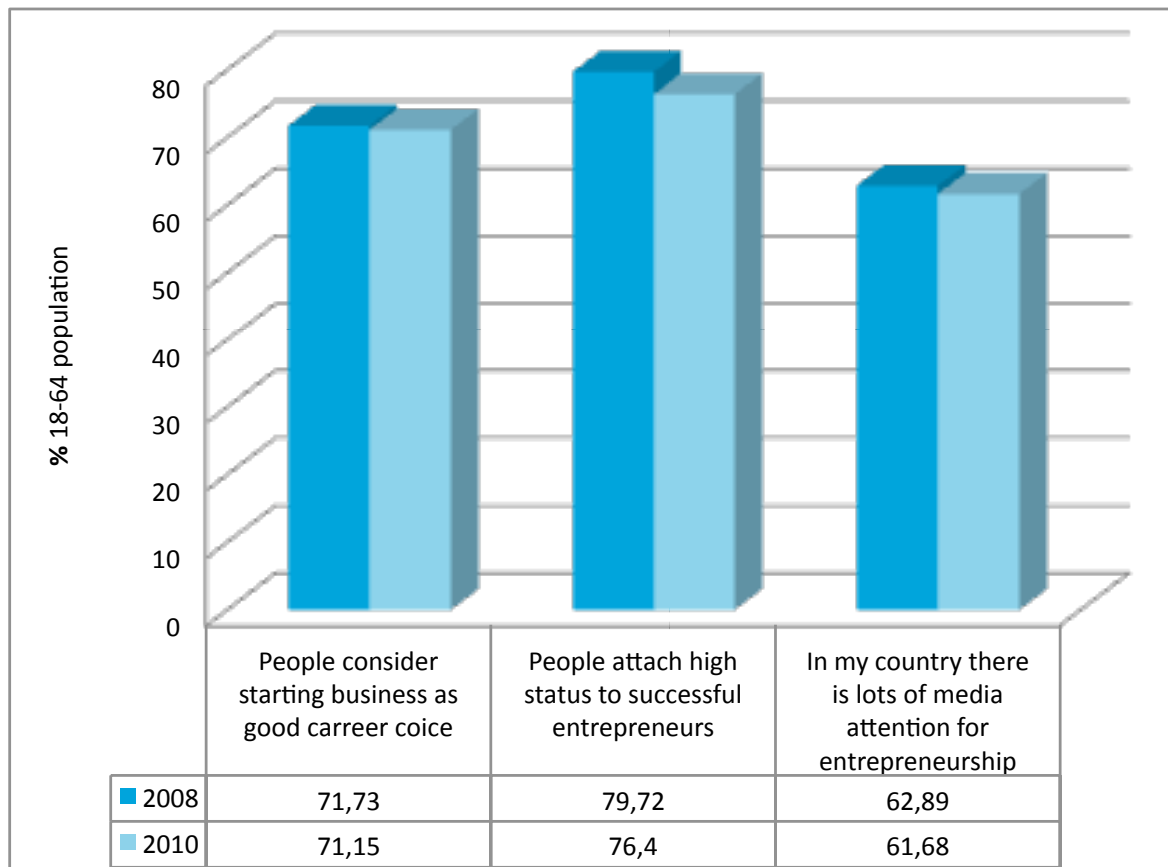
- (1) starting business is a good career choice;
- (2) starting a new business gains a high level of status and respect;
- (3) media publicity is important for a new business.

The first point assesses the percentage of adults who feel that in their country, starting a new business is considered a desirable career choice. In 2010, 71 % of Turkish people considered opening one’s own firm to be a desirable career choice. Figure 19 shows that there is no change in national attitudes about entrepreneurship as a successful career choice in Turkey from 2008 to 2010.

The choice of an entrepreneurial career might be affected by other employment opportunities in the country. This might explain why this indicator is so low in Japan (28%) and so high in Ghana (91%)

The second indicator refers to public opinion about entrepreneurship: Do entrepreneurs occupy a high social status or are they generally not seen as role models within the society? Over 76 % of the adult population believes that successful entrepreneurs are held in high esteem. Although that figure represents a decline from 80% in 2008 to 76% in 2010, the result is still higher than the average for efficiency-driven countries (69.8%).

Figure 19: Attitudes to Entrepreneurship in Turkish Society



The third indicator relates to the popularity of entrepreneurship and asks for respondents' opinions on the media coverage for new businesses in the country. In 2010, 62 % of Turkish mentioned that the media gave significant attention to highlighting entrepreneurs' activities and to describing business

opportunities. This measure is very close to the average found in efficiency-driven countries (62.5%) and the value for the year 2008 (62.8%) in Turkey. The leaders with regard to this indicator among the efficiency-driven countries are Peru and Brazil, where this value is 81 %.

## Support for Entrepreneurship in Turkey

The GEM model identifies the structural condition of the socio-economic factors that affect the development of entrepreneurial activity.

The model assumes that all firms are affected by national characteristics, and is referred to as the Entrepreneurial Framework Conditions (EFC).

### The nine entrepreneurial framework conditions are:

**EFC1-Financial support:** the availability of financial resources, equity and debt for new and growing firms, including grants and subsidies.

**EFC2-Government policies:** the extent to which government policies, reflected in taxes or regulations or the application of either, are either size-neutral or encourage new and growing firms.

**EFC3-Government programs:** the presence of direct programs to assist new and growing firms at all levels of government (national, regional and municipal).

**EFC4-Education and training:** the extent to which training in creating or managing small, new or growing business is incorporated within the educational and training systems at all levels.

**EFC5-Research & development transfer:** the extent to which national research and development will lead to new commercial opportunities, and whether or not these are available for new, small and growing firms.

**EFC6-Commercial and Professional infrastructure:** the presence of commercial, accounting, and other legal services and institutions that allow or promote the emergence of new, small or growing businesses.

**EFC7-Market Openness:** the extent to which commercial arrangements are prevented from undergoing constant change and redeployment, thus preventing new and growing firms from competing and replacing existing suppliers, sub-contractors and consultants.

**EFC8-Access to the physical infrastructure:** the ease of access to available physical resources – communication, utilities, transportation, land or space at a price that does not discriminate against new, small and growing firms.

**EFC9-Cultural and social norms:** the extent to which existing social and cultural norms encourage, or do not encourage, individual actions that may lead to new ways of conducting business or economic activities and, in turn, that lead to a greater dispersion in wealth and income.

The data on entrepreneurial framework conditions were collected through an extensive questionnaire which was completed by 36 experts. Our experts included academics, entrepreneurs, government officials, business development advisors and other professionals concerned with entrepreneurship.

The experts evaluated framework conditions on a five-point scale, ranging from (1) to (5), indicating strong disagreement to strong agreement; a score of (3) is read as neutral, implying that any score less

than (3) is negative and more than (3) is positive. The responses to these 5-point scale questions have been standardized to a scale of -2 to +2 for graphical representation.

As should be apparent from Table 2, the majority of assessments are below 3, i.e., these factors do not facilitate development of entrepreneurship. The experts gave their most positive assessment to attitudes towards entrepreneurship, market openness with the speed of change in the market, and ease of access to physical infrastructure.

Table 2: Entrepreneurial Framework Conditions

Entrepreneurial framework conditions	2008	2010	Change	
Financial environment related with entrepreneurship	1.94	2.06	0.12	↑
Government concrete policies, priority and support	2.1	2.57	0.47	↑
Government policies bureaucracy, taxes	2.18	2.22	0.04	↑
Government programs	1.98	2.21	0.23	↑
Entrepreneurial level of education at Primary and Secondary	1.87	2.21	0.34	↑
Entrepreneurial level of education at Vocational, and University	2.66	2.52	-0.14	↓
R&D level of transference	2.01	2.37	0.36	↑
Professional and commercial infrastructure access	2.76	2.77	0.01	↑
Internal market dynamics	<b>3.36</b>	<b>3.68</b>	0.32	↑
Physical infrastructures and services access	<b>3.33</b>	<b>3.33</b>		→
Cultural, social norms and society support	2.78	2.06	-0.72	↓
Attitude towards entrepreneurship	<b>3.63</b>	<b>3.7</b>	0.07	↑

Overall, the experts indicated belief that there was improvement for more than half of the framework conditions for 2010 in comparison with 2008, with the exceptions of entrepreneurial education at vocational schools and universities, and of the national culture.

In the following section we examine each condition, find out its changes in Turkey, and compare Turkey to other efficiency-driven countries participating in GEM.



## Financial Support

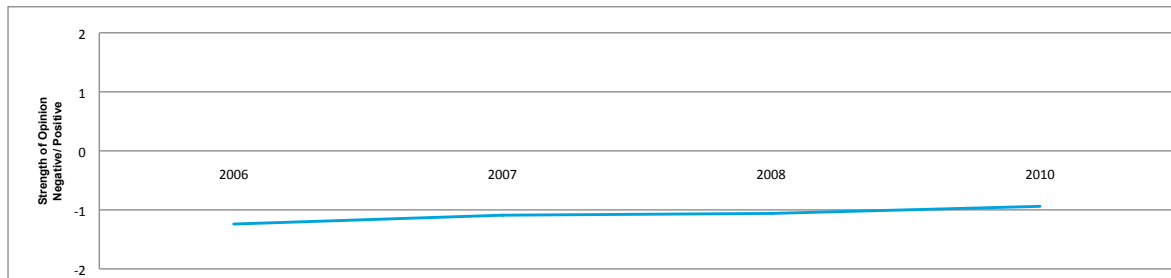
Financial support refers to the availability of funding for entrepreneurship. Financial resources are categorized according to the availability of debt and equity funding, government subsidies, business angels, venture capital and initial public offerings.

Availability of funding in Turkey has been changing over the years (Figure 20). Resources seem to have increased slightly over the years. According to the experts, the most increases were seen with regard to the availability of debt and equity funding over the years. However, there are mixed views with regard to government subsidies, even as and there has been some increase in the availability of

business angels, of venture capital and of initial public offerings.

The most significant problem for firms is providing the collateral necessary to get loans from the banking sector. In addition, certain businesses are unable to obtain debt financing because they do not have sufficient cash flow to service repayments. The experts mentioned that equity finance is an important source of operating capital for firms, particularly those that have strong and rapid growth prospects; equity financing is suitable for the early, pre-revenue stages of company development. Overall opinion in Turkey affirms that although the availability of resources is increasing there continues to be insufficient financial support for entrepreneurs.

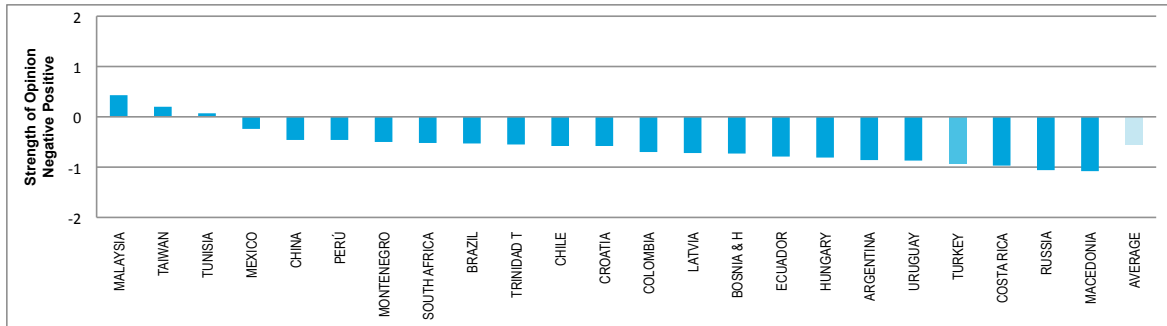
Figure 20: Financial Support for New Firms



Availability of funding is also measured in the other efficiency-driven countries participating in GEM (Figure 21). Internationally, experts polled from three other GEM countries reflect the belief that the availability of finance for entrepreneurs in their countries is adequate. Among the efficiency-driven countries, Malaysia, Taiwan, and Tunisia

have the greatest availability, and Costa Rica, Russia and Macedonia the lowest. Turkey is fourth from the bottom. To summarize, availability of resources in Turkey has been increasing in recent years; however, Turkey still remains at the low end among efficiency-developed countries.

Figure 21: Financial Support of Efficiency Driven Countries to New Firms



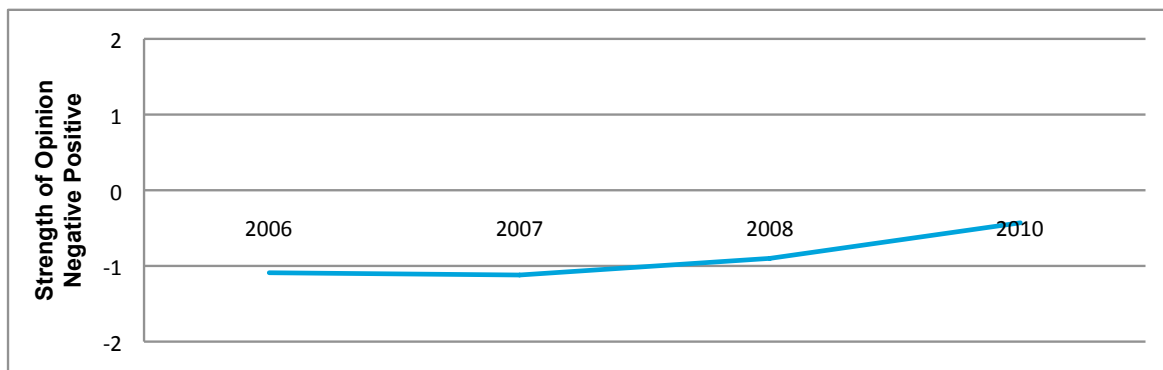
## Government Policies

Government policies are rated in two sections. First, the government supports policy, which all levels of government (national, regional, municipal) considers new and growing firms a high priority. Second, government regulation policies, which pertain to the tax and administrative burden on

business, are a problem for new and growing firms in Turkey.

Government support policies towards entrepreneurship have been changing (Figure 22). Over the years, the Turkish government has become more supportive and supporting policies have become more favorable. Turkey's political stability is seen as an important positive contribution to encouraging entrepreneurship.

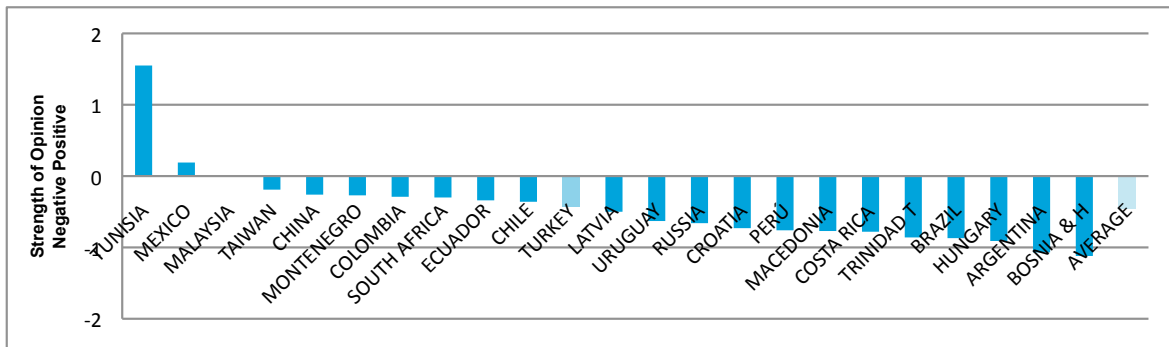
Figure 22: Government Support Policies for New Firms



Where is Turkey positioned compared to other efficiency-driven countries? Figure 23 shows that among the efficiency-driven countries, government support policies are especially extensive in Tunisia, Mexico, and Malaysia. Turkey is in the middle, with half of the other countries above and the other half below.

Mexico, and Malaysia. Turkey is in the middle, with half of the other countries above and the other half below.

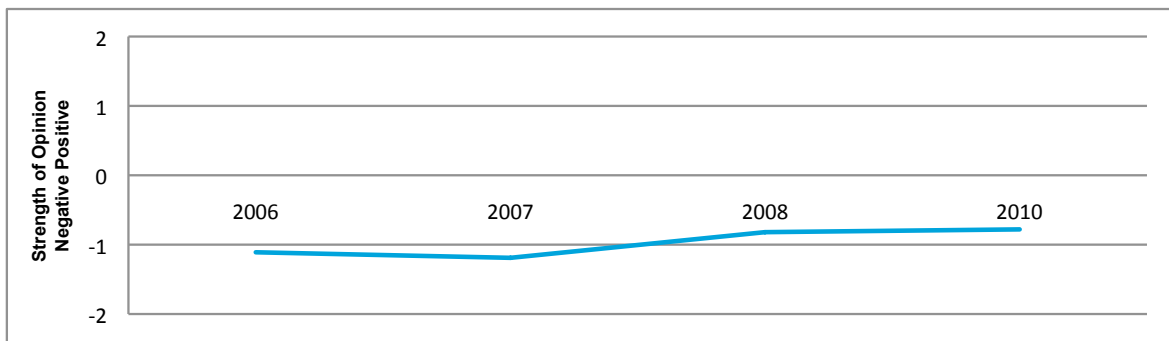
Figure 23: Government Support Policies in Efficiency-Driven Countries for New Firms



Second, the government regulation policies regarding the tax and administrative burdens remain a problem for new and growing firms in Turkey. While the general trend is positive, the experts

believe that these burdens have lifted only slightly during the last few years. This is still a key area of complaint among the experts.

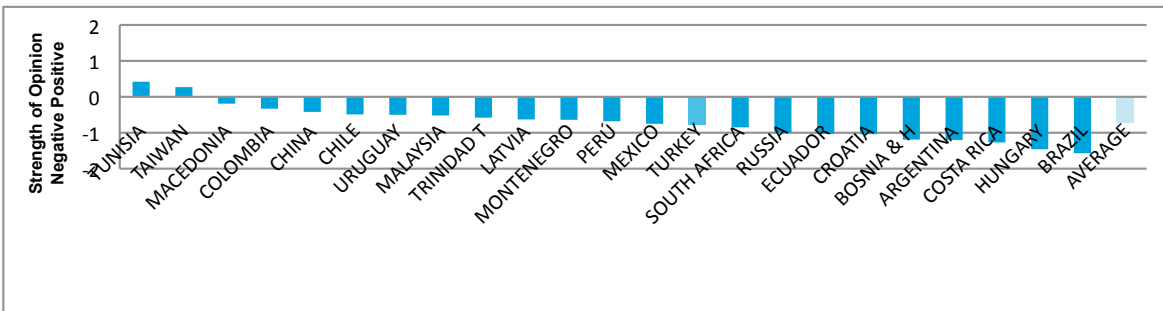
Figure 24: Government Regulation Policy



Where is Turkey positioned compared to other efficiency-driven countries in terms of supportive regulation policies? Among these countries, 56% of countries are more supportive than Turkey and

40% are less supportive. In short, supportiveness of government policies has increased slightly, even though Turkey still ranks no higher than the middle among the efficiency-driven countries.

Figure 25: Government Regulation Policy of Efficiency Driven Countries



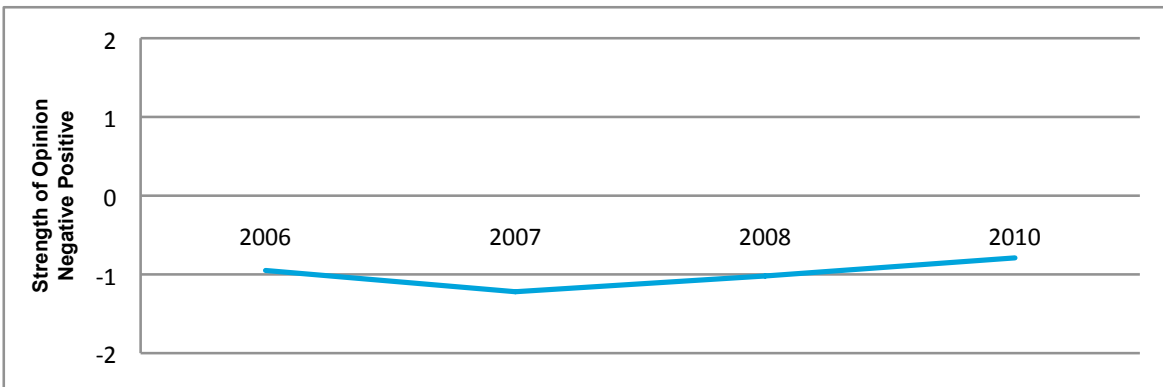
### Government Programs

Government programs refer to the presence and efficiency of direct programs to assist new and growing firms at all levels of government (national, regional, and municipal).

Generally, confidence in government programs has been increasing since 2007. Turkish experts have been more positive in their opinions as to the

centralization of the diverse kinds of government assistance and whether an adequate number of government programs exist for new and growing firms. However, Turkish experts still express negative opinions as to the effectiveness of government programmers to provide adequate support for new and growing firms and with regard, as well, to the competence and effectiveness of the personnel working within government agencies.

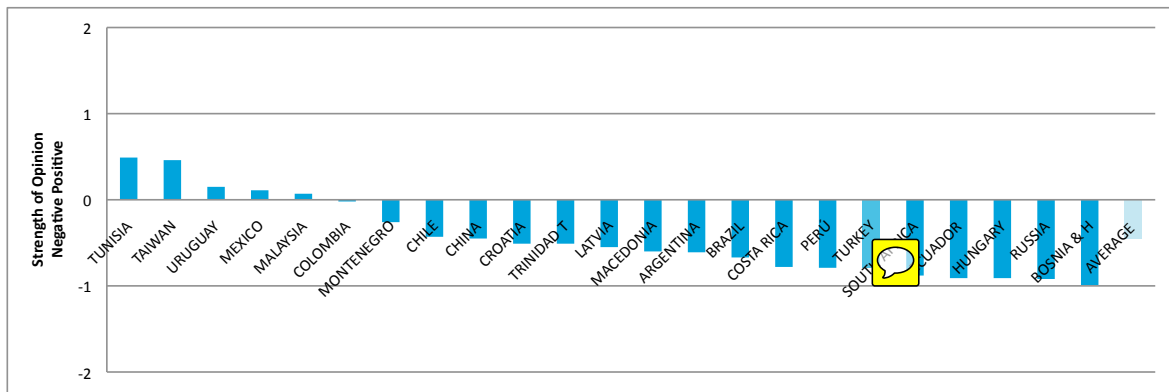
Figure 26: Government Programs



Where does the increase bring Turkey, in comparison with other efficiency- driven countries? Experts from five countries express positive opinions with regard to government programs that provide adequate and effective support to new firms: these

are Tunisia, Taiwan, Uruguay, Mexico and Malaysia. Although the efficacy of government programs in Turkey has been growing over the years, these indices remain significantly below the mean when compared to other countries.

Figure 27: Government Programs of Efficiency-Driven Countries

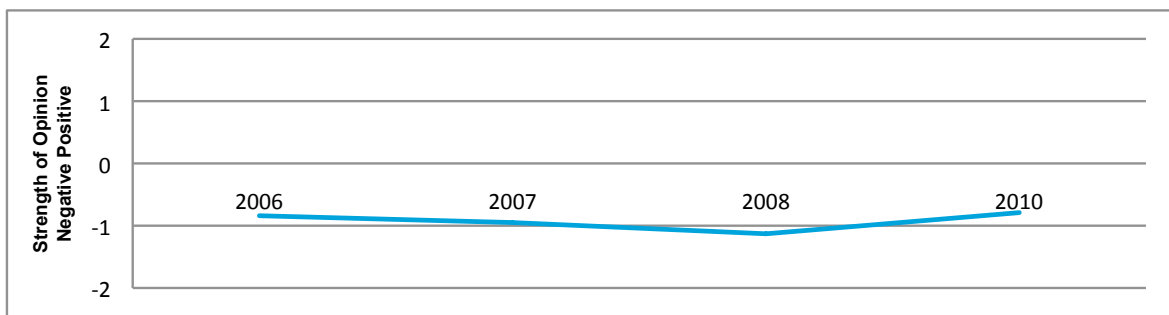


### Education and Training

Education and training refers to the educational and training systems at all levels that provide knowledge and skills for performing the entrepreneurial role. The role of Turkish education and training in promoting entrepreneurship is analyzed according to the primary and secondary education level and beyond the secondary education level (universities and vocational training).

Turkish experts have given a better rating in 2010 than in previous years regarding the general school education in primary and secondary education and consider that Turkish schools do encourage more creativity, se efficiency, and personal initiative and also provide more information about market economic principles and pay more attention to entrepreneurship.

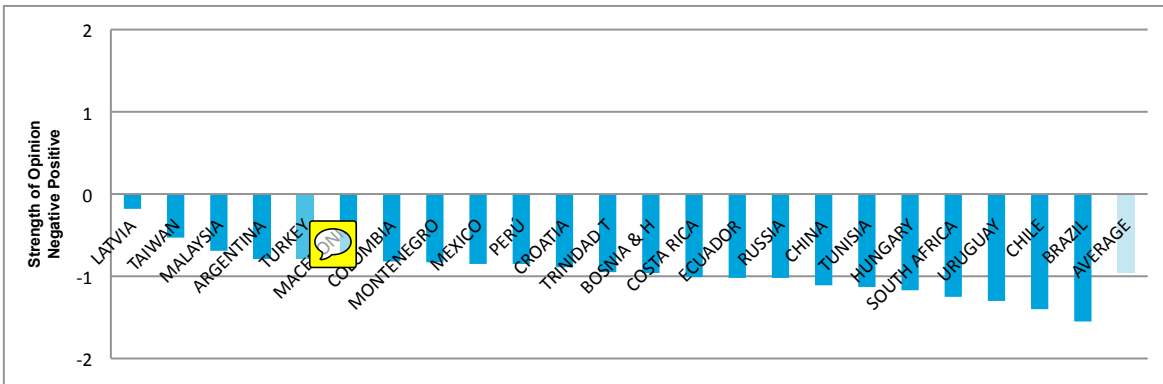
Figure 28: Primary and Secondary Education



Where does this increase in entrepreneurial education bring Turkey today, in comparison to other efficiency-driven countries? Comparison shows that none of the participant countries' experts, including Turkey, is satisfied with the teaching of basic knowledge necessary for future business careers in primary and secondary education. None of the experts

polled believes that adequate attention is being paid to entrepreneurship. Among the efficiency-driven countries, Latvia, Taiwan, Malaysia, and Argentina, together with Turkey, are seen as having relatively more extensive entrepreneurial education than the other participant countries.

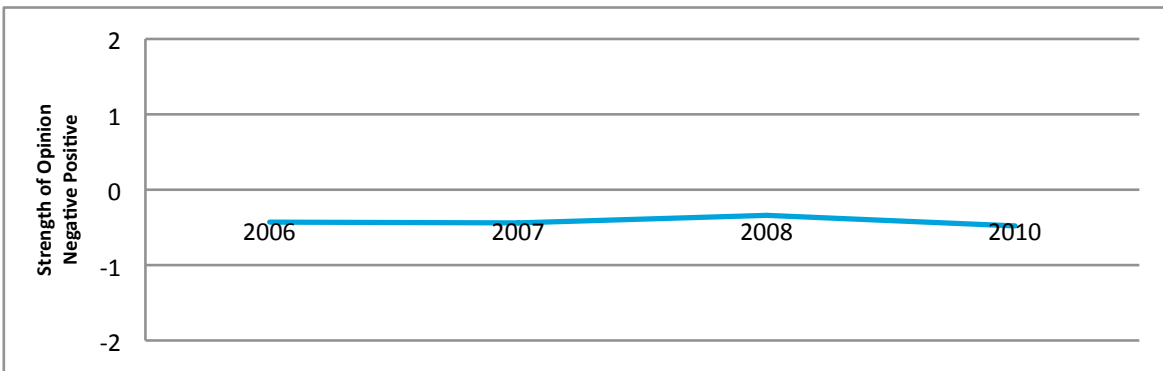
Figure 29: Primary and Secondary Education in Efficiency-Driven Countries



In contrast to the positive trends in primary and secondary educational systems related to entrepreneurship, the Turkish experts have a negative opinion about both the quality and quantity of university and vocational education in Turkey. Figure 29 shows that there has been a weak

downward trend, which indicates that there is not much change in the views of the experts. The main concern of the experts is that colleges, universities and vocational education systems are not providing good and adequate preparation for starting up and growing new firms.

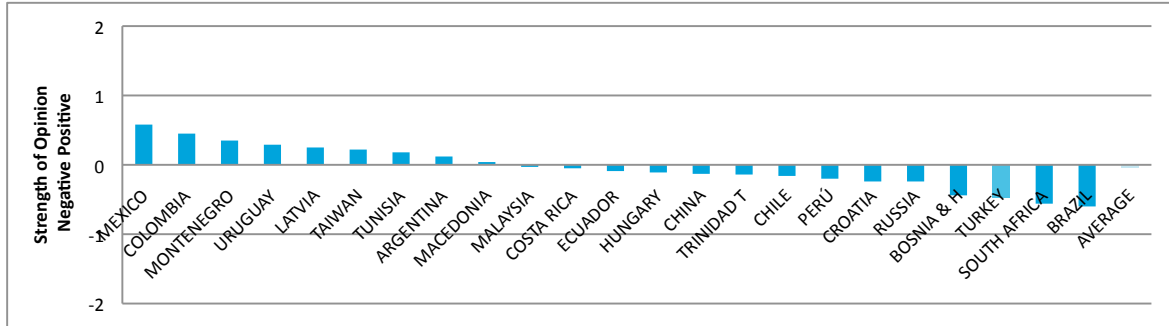
Figure 30: Beyond Secondary Education



Where is Turkey positioned compared to other efficiency-driven countries in terms of education and training for entrepreneurship? At the tertiary level, only nine countries were rated positively. The Turkish experts expressed the third least dissatisfaction with

their country’s education beyond the secondary level. It remains to be said that we need to ensure that entrepreneurship is supported throughout our educational systems.

Figure 31: Beyond Secondary Education in Efficiency-Driven Countries



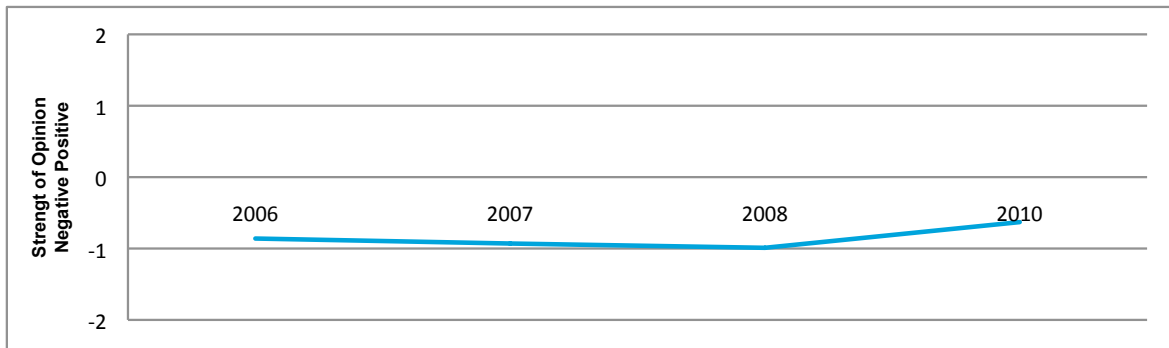
## Research and Development Transfer

Technology transfer refers to the transfer of new technology, science and other knowledge from universities and research institutions to new or growing firms.

The experts are more optimistic about this framework condition this year. There is an upward trend since 2008 which shows that Turkey has experienced progress in the science, technology and

innovation fields. In fact, research and development (R&D) Indicators confirm such progress. According to the Scientific and Technological Research Council of Turkey (TÜBİTAK), R&D spending, which was at TL4.5 billion in 2006, went up to TL 8.5 billion in 2009. The ratio of R&D spending to Gross National Product (GNP) went up to 0.85 percent in 2009 from 0.58 in 2006. Another important finding for R&D funding is that the private sector’s share of funding reached 41 percent in 2009. In 2009, the number of full-time equivalent R&D personnel reached 74,000.

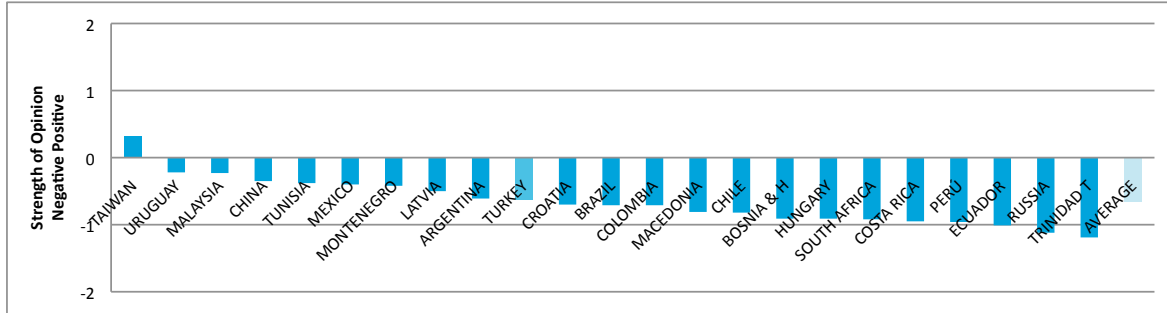
Figure 32: Research and Development Transfer



Where does the increase bring Turkey, in comparison with other efficiency driven countries? As a marker, technology transfer is especially extensive in Taiwan. Turkey is a little above the middle compared to other efficiency-driven

countries. Private innovative entrepreneurship in Turkey should be encouraged in order to facilitate the competitiveness of firms and to improve the innovation culture.

Figure 33: Research and Development Transfer in Efficiency Driven Countries



### Commercial and Professional Infrastructure

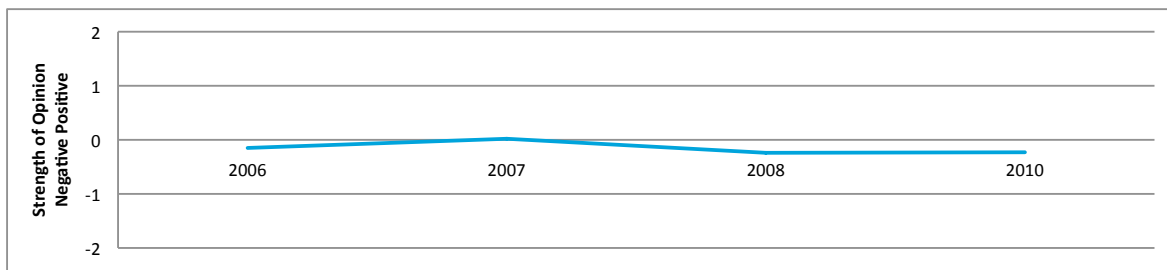
Commercial and professional Infrastructure refers to the availability and affordability of high quality suppliers, subcontractors and consultants for new or growing firms.

Overall, access to commercial and professional infrastructure in Turkey among the other entrepreneurial framework conditions has the fourth highest average score (3.32). The experts mentioned that access to physical infrastructure does not seem to be a major issue. The data show that there has been

a weak downward trend, which may be interpreted to mean that there is not much change in the views of the experts. While the experts were relatively favorable in their assessment of the availability of good professional legal and accounting services, they were still very critical of the affordability of these services.

The experts mentioned that it is relatively easy to obtain good banking services although the experts find the banking services are costly for small firms. Internet banking is lowering service fees and payment of wages electronically decreases the need for, and risk of, transporting large sums of cash.

Figure 34: Commercial and Professional Infrastructure





## Internal market dynamics

Internal market dynamics assess the speed of change in the market. Overall, among the other entrepreneurial framework conditions rapid market change has the highest average score (3.68) in Turkey. The experts opined that dramatic changes

in the consumer and business markets have occurred which are demonstrating the dynamism of the market. Nevertheless, the experts mentioned that the current global financial crisis has weakened the speed of the internal market. However, after 2008, Turkish markets regain dynamics; the current turmoil has been over.

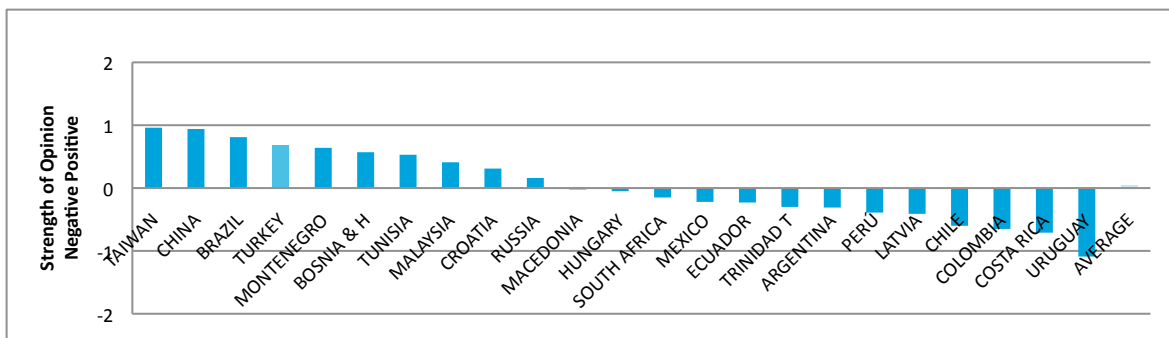
Figure 35: Internal Market Dynamics



How dynamic is the Turkish internal market in comparison with other efficiency-driven countries? Among these countries, Taiwan, China, Brazil and Turkey have relatively more dynamic internal markets than the other countries. The assessment

of Turkey with regard to the speed of change was above the average for the GEM sample and placed Turkey as high as fourth overall. Market dynamism increases opportunities for new start-ups.

Figure 36: Internal Market Dynamics in Efficiency Driven Countries

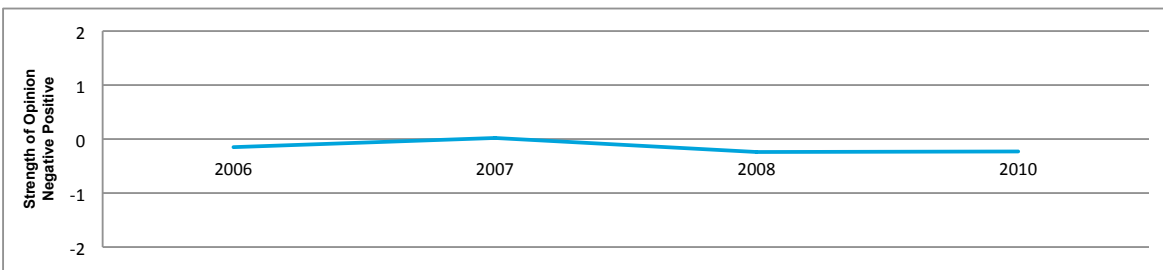


## Access to Physical Infrastructure

Physical Infrastructure refers to facilities for transportation, communication, utilities, their

availability and affordability, and speed of obtaining such infrastructure for new and growing firms.

Figure 37: Access to physical Infrastructure

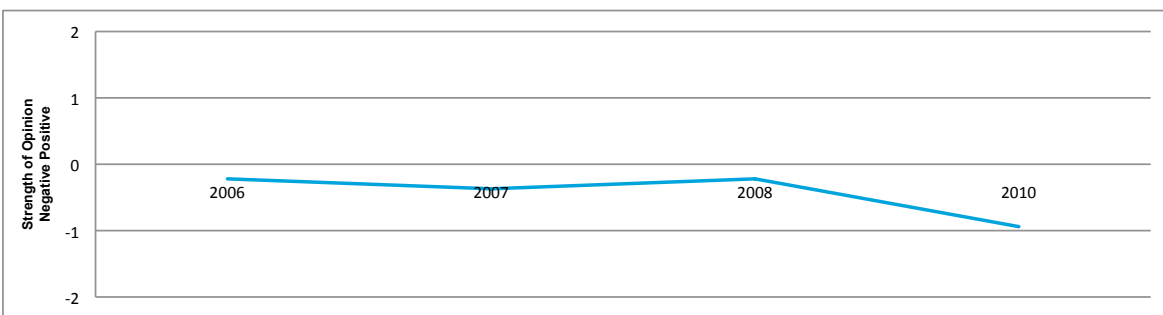


Access to physical structure remains the second positive of the nine framework conditions in Turkey. The experts believe that new and growing firms can get good access to communications (telephone, internet, etc.) and to utilities (gas, electricity, and sewer) in a relatively short time. However, the experts concern about the energy costs and high energy taxes. The Turkish experts believe that access to physical structure has been consistently positive over the last four years and shows no significant sign of change, that is, for the worse.

## Entrepreneurial Culture

National culture refers to the extent to which cultural norms encourage individuals to conduct business or economic activities. The experts think that the social and cultural norms in Turkey are not very supportive for entrepreneurship and that these norms have had an even more negative impact after 2008.

Figure 38: Entrepreneurial Culture

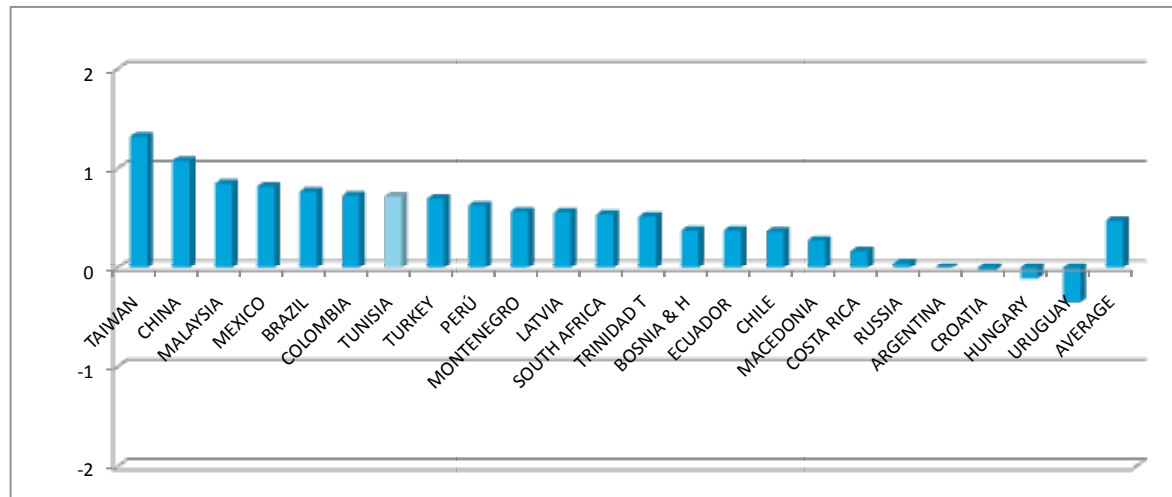


The experts are increasingly negative with regard to the following points: first, Turkish national culture does not encourage entrepreneurial risk-taking. Turkish people do not want to take a risk because failure is, for them, an unacceptable outcome. Second, national culture does not encourage creativity and innovation. Accordingly, young people are not equipped to develop bright ideas or to create a simple product. Furthermore, even the creative ones cannot be supported financially. In those countries that do have positive cultures for

entrepreneurship, the individuals develop a bright idea, create a rudimentary product, attract venture capital, establish a company to commercialize the product, sell the company or hold an initial public offering (IPO), and repeat the process.

The experts affirmed that the attitude towards entrepreneurship in Turkey was higher than the GEM- and the developing countries' average. Although Turkish national culture does not particularly encourage entrepreneurship, Turkish people have a positive attitude regarding entrepreneurship.

Figure 39: Attitude toward Entrepreneurship in Turkey



Experts believe that successful entrepreneurs are respected in Turkey. There has been recent and increasing emphasis on entrepreneurship in the media, with local newspapers, national papers and business magazines promoting and publicizing

entrepreneurship. Experts also believe that starting up a new business is considered an appropriate way to become rich and that an entrepreneur is a desirable career. This positive attitude about entrepreneurship is very helpful for encouraging start-ups.

## Conclusion

The worldwide slowdown in economic growth rates has provoked a dwindling of opportunities for new enterprises. However, Turkey is a growing economy, has a large and youthful population and buoyant consumer demand, all of which are the important factors that encourage entrepreneurship.

GEM 2010 may provide some evidence that a dynamic growth process in Turkey has started. In 2010, 3.69% of the adult population in Turkey were actively trying to start a business (nascent entrepreneurs); 5.05% were owner-managers of a business that was 3-42 months old (new businesses). Early-stage entrepreneurial activity, the sum of the nascent entrepreneurship rate and the new business owner-manager rate was 8.52% in Turkey, higher than the average of 6% recorded for 2006–2008. However, the TEA rate of Turkey (8.6%) is lower than for countries falling in the same income range as Turkey (Brazil 17.5%, Mexico 10.5 %, Argentina 14.5%), and lower than average compared with the efficiency-driven countries (11.7 %).

The survival rate of start-ups (nascent entrepreneurs), and the growth of new businesses into established businesses in Turkey have increased since 2008. The prevalence rate for established businesses (a business that is owned and managed

for more than 42 months) in 2010 was 10.73%, a noticeable expansion over 2008, which recorded only 4.82%. This indicates that between 2010 and 2008, 5.91% of early stage entrepreneurs were transformed into established businesses. These data could show increasing stability and/or sustainability of business activities in Turkey, both factors very important for creating and sustaining employment and economic well being.

In terms of motivation, almost 1.43 times as many respondents cited opportunity (4.58%) as opposed to necessity (3.19%) as their reason for starting a business. This year's results confirm the tendency that was observed in previous years regarding an increase in necessity-based entrepreneurs (from 1.79% in 2006 to 1.98% in 2007, to 2.3% in 2008, to 3.19% in 2010), which also explains part of the increase in total early-stage entrepreneurship. As a result, the ratio of opportunity-to-necessity entrepreneurship is decreasing. Of opportunity entrepreneurs, 37.71% expect to create more than twenty jobs, whereas only 8.45% of necessity entrepreneurs have these expectations.

The entrepreneurial activity rate for males (13.39%) is 3.6 times higher than that for females (3.71%). Although there is a slight increase

observed for 2010 in the number of active women as early-stage entrepreneurs, Turkey still has the fourth highest male/female ratio among the GEM participating countries and this ratio of male to female is increasing. Men are more likely than women to start a new firm due to business opportunity. While fewer women are involved in opportunity-entrepreneurial activity, more women are involved in necessity-entrepreneurial activity. More females in entrepreneurship should be enlisted and more women encouraged choosing entrepreneurship.

People who have attained a low level of education are more likely to become self-employed out of necessity, whereas people with a higher level of education are more likely to engage in entrepreneurship because of a perceived business opportunity.

From a policy perspective it is important to have insight into differences between opportunity- and necessity-entrepreneurs in order to develop specific programs to encourage entrepreneurship in these two groups.

GEM reports (2008) identified education and training as one of the entrepreneurial framework conditions that affects the levels of entrepreneurial attitudes, aspiration and activity, which then affect the level of new enterprises in the economy. The supply of people equipped to become entrepreneurs may be increased by improvements in education and training.

The proportion of individuals who received some kind of training in starting a business, either in school or after school, is only 6% in Turkey - the lowest rate among efficiency-driven economies, as well as among all of the participating countries. Therefore, it must be concluded that entrepreneurship education and training in Turkey is very inadequate.

In the past, one of the most widely-circulated myths was that these were people “who were gifted, or were born to be entrepreneurs.” Nowadays, entrepreneurship is considered learnable through formal education and training. Including entrepreneurship education in the school system is very important and should be widely sought across the board. More students need to learn the elements of entrepreneurship. Through entrepreneurship education, self confidence of future businesspersons with respect to their ability to start up a new enterprise, to the understanding of financial and business issues, and to the desire to embark on entrepreneurial activity will be increased. Appropriate entrepreneurship education needs to be offered in all schools beginning with primary school. Dramatic improvements in the quantity and quality of entrepreneurship education are needed.

Raising the levels of entrepreneurial activity must come from increasing the proportion of people possessing the education required and in increasing the proportion of people who believe that they have the skills, knowledge and experience to start a business. These two factors go hand-in-hand, since higher levels of education are associated with significant increases in entrepreneurial self-confidence.

In conclusion, entrepreneurship across the world is under pressure. Entrepreneurial activity in Turkey has endured relatively well despite the present unfavorable economic conditions. In the short run, government regulation policy and the financing of new businesses are important policy objectives. In the long run, raising entrepreneurial awareness through the educational system should be a fundamental concern.

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Ireland	Dublin City University	Paula Fitzsimons Colm O'Gorman	Enterprise Ireland	IFF
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Italy	EntER - Bocconi University	James Hayton Giovanni Valentini		Target Research
Jamaica	University of Technology, Jamaica	Girjanauth Boodraj Vanetta Skeete Mauvalyn Bowen Joan Lawla Marcia McPherson-Edwards Horace Williams	College of Business and Management, University of Technology, Jamaica	KOCI Market Research and Data Mining Services
Japan	Keio University	Takehiko Isobe	Venture Enterprise Center Ministry of Economy, Trade and Industry	Social Survey Research Information Co.,Ltd (SSRI)
Korea	Jinju National University	Sung-sik Bahn Sangu Seo Kyung-Mo Song Dong- hwan Cho Jong-hae Park Min-Seok Cha	Small and Medium Business Administration (SMBA) Korea Aerospace Industries, Ltd. (KAI) Kumwoo Industrial Machinery, Co. Hanaro Tech Co., Ltd. Taewan Co., Ltd.	Hankook Research Co.
Latvia	The TeliaSonera Institute at the Stockholm School of Economics in Riga	Olga Rastrigina Anders Paalzow Alf Vanags Vyacheslav Dombrovsky	TeliaSonera AB	SKDS
Macedonia	University "Ss. Cyril and Methodius" – Business Start-Up Centre Macedonian Enterprise Development Foundation (MEDF)	Radmil Polenakovik Tetjana Lazarevska Lazar Nedanoski Gligor Mihailovski Marija Sazdevski Bojan Jovanovski Trajce Velkovski Aleksandar Kurciev Bojan Jovanoski Igor Nikoloski Ljupka Mitrinovska	Macedonian Enterprise Development Foundation (MEDF) National Centre for Development of Innovation and Entrepreneurial Learning (NCDIEL)	Brima Gallup

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	Moscow Team State University - Higher School of Economics, Moscow	Alexander Chepurenko Olga Obratsova Tatiana Alimova Maria Gabelko Kate Murzacheva	State University - Higher School of Economics Ministry of Economic Development of Russian Federation	
Saudi Arabia	The National Entrepreneurship Center Alfaisal University	Munira A. Alghamdi Hazbo Skoko Norman Wright Ricardo Santa Wafa Al Debasi	The Centennial Fund/National Entrepreneurship Center	IPSOS
Slovenia	Institute for Entrepreneurship and Small Business Management, Faculty of Economics & Business, University of Maribor	Miroslav Rebernik Polona Tominc Ksenja Pušnik Katja Crnogaj	Ministry of the Economy Slovenian Research Agency Finance – Slovenian Business Daily	RM PLUS
South Africa	The UCT Centre for Innovation and Entrepreneurship, Graduate School of Business, University of Cape Town	Mike Herrington Jacqui Kew Penny Kew	Swiss South African Cooperation Initiative (SSACI) Services SETA Small Enterprise Development Agency (SEDA)	Nielsen South Africa

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