

Entrepreneurship in Greece: A Way Out of the Crisis or a Dive In?

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Received: January 25, 2013 Accepted: February 21, 2013 Published: March 15, 2013 doi:10.5296/rae.v5i1.3142 URL: http://dx.doi.org/10.5296/rae.v5i1.3142

Abstract

The goal of the current article is to examine the status and role of entrepreneurship in the Greek economy. It presents data on entrepreneurship and business demographic data as size classes, employment, value added and business failure. It also presents data on the barriers met by Greek enterprises. The final conclusion is that entrepreneurship, and especially SMEs, do play a vital role in Greek economy, but business prospects at the moment are not very good. There is an urgent need for political and economic reform, in order to support SMEs' operation and secure their valuable contribution to economy.

Keywords: entrepreneurship; Greece; business statistics; barriers; SMEs



1. Introduction

The goal of the current article is to examine the status of entrepreneurship in Greece and its contribution to the economy. It presents data on entrepreneurship and business demographic data as size classes employment, value added, business failure and barriers met by Greek enterprises. These data come from multiple sources as the Global Entrepreneurship Monitor (GEM), the Organization of Economic Cooperation and Development (OECD), the European Statistical Agency (Eurostat), the World Bank and various domestic public and private organizations. In order to have a better insight on the role of entrepreneurship in economic growth, the data are presented in comparison with other European countries. Based on the findings, a set of policy recommendations is provided in the end.

2. Literature Review

Entrepreneurship is a multifaceted phenomenon that cuts across many disciplinary boundaries. Studies falling under the rubric of "entrepreneurship" have pursued a wide range of purposes and objectives, asked different questions and adopted different units of analysis, theoretical perspectives and methodologies (Low & Mac Millan, 1988). This diversity is reflected in the many and varied definitions of entrepreneurship (Hebert & Link, 1988). Schumpeter (1934) defined entrepreneurship as the carrying out of new combinations and innovations, while Knight's (1921) definition focused on the ability to predict the future successfully and to manage the market's uncertainty. On the other hand, Leibenstein (1978) argued that entrepreneurship is the ability to work smarter and harder than the competitors. Kirzner's (1973) concept was closely linked to the ability to correctly anticipate where the next market imperfections and imbalances will be. Accordingly, Cole (1968) defined entrepreneurship as purposeful activity to initiate, maintain, and develop a profit-oriented business. Stevenson et al (1985) suggested that entrepreneurship is being driven by perception of opportunity, rather than resources currently controlled. Similarly, Gartner (1985) defined entrepreneurship simply as the creation of new organizations. The problem with these definitions, is that though each captures an aspect of entrepreneurship, none captures the whole picture. Nowadays, according to Acs et al (2004) entrepreneurship has been placed as the missing link between investment in knowledge and economic growth.

Entrepreneurship is increasingly becoming recognized as a key factor contributing to economic growth (Holcombe, 1998). The finding that increased entrepreneurial activity leads to greater economic growth is now well founded at both the national and local level (Kreft & Sobel, 2005). Reynolds et al (1999) have argued that a country's level of entrepreneurial activity explains a significant portion of the differences in national economic growth rates. According to Henderson (2002), entrepreneurs significantly impact local economies by fostering job creation, increasing wealth and incomes, and ultimately helping to connect local economies to the larger, global economy. In the same manner, Minniti (1999) claims that the entrepreneurs are the catalysts for economic growth, since they have the ability to promote the creation of new ideas and new market formations.



The last two decades have witnessed a wealth of studies analyzing the determinants of entrepreneurship and some of these studies are theoretical (Holmes et al, 1990), while others are empirical (Evans et al, 1989). For instance, Acs & Varga (2005) studied eleven countries and found that entrepreneurship has a positive significant effect on economic development.

However, entrepreneurship has not found a proper place in mainstream empirical economic research on the sources of economic growth (Wong & Autio, 2005). Although many researches have been conducted theoretically and descriptively on how entrepreneurship affects the economy (Porter, 1990; Lumpkin & Dess, 1996), there is lack of evidence based on empirical data. This is partially due to the difficulty in defining the role of the entrepreneur and formalizing its measurement for empirical modelling. Wennekers & Thurik (1999) synthesized these disparate strands of the literature to construct an operational framework linking entrepreneurship and economic growth. They tried to highlight the multiple role of the entrepreneur, beyond that of the innovator, that includes not only something new but also a new entry in the market.

Similarly, Schmitz & James (1989) conceptualised a model motivated by the endogenous growth models as developed by Romer (1986), who concluded that increasing levels of entrepreneurship in an economy generates additional input in the economy. In the same manner, Schumpeter (1934) first claimed that entrepreneurship causes economic growth by allowing the means of production in a society to be used in newer and more efficient combinations. A more recent argument for treating entrepreneurship as an independent factor of economic growth can be found in Audretsch & Keilbach (2004), who examined the exact nature of the relationship between knowledge and economic growth. They argue that a distinction should be made between the general body of publicly available knowledge and economic knowledge – a subset of knowledge from the general body which businesses have found a way to use profitably. The authors actually state that general knowledge is converted into economic knowledge by the efforts of entrepreneurs, who essentially sift through the general body of knowledge until they find something they believe they can exploit and then start a business based on that piece of knowledge. Thus, knowledge by itself is not enough to create economic growth, since entrepreneurship is required to turn general knowledge into economic knowledge (Smith, 2010).

3. Entrepreneurship in Greece

The status and attitudes towards entrepreneurship in Greece can be examined from the data gathered by the Global Entrepreneurship Monitor (GEM). The Global Entrepreneurship Monitor project is an annual assessment of entrepreneurial activity, aspirations and attitudes across 85 countries. The data collected by GEM is 'harmonized', so as to facilitate cross-national comparisons. In order to make comparisons with other European countries, the Greek data will be presented along with the data for six other European countries: Sweden, Portugal, Spain, France, the United Kingdom and Germany. Five main indicators will be analysed:



- 1) Established Business Ownership Rate
- 2) Total early-stage Entrepreneurial Activity
- 3) Necessity-Driven Entrepreneurial Activity
- 4) Entrepreneurial Intention
- 5) Fear of Failure Rate

3.1 Established Business Ownership Rate

According to GEM, Established Business Ownership Rate refers to the percentage of 18-64 population who are currently owner or manager of an established business, i.e. owning and managing a running business that has paid salaries, wages, or any other payments to the owners for more than 42 months. The rates for the seven countries are presented in Table 1.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Greece	-	-	19.6	6.5	10.5	8.2	13.3	12.6	15.1	14.8	15.8
Sweden	5.7	6.8	5.3	6	6.3	5	4.7	5.2	5.8	6.4	7
Portugal	4.7	5.6	6.5	7.3	7.2	7.1	7.1	6.5	6	5.4	5.7
Spain	4.7	8.4	4	7.8	7.7	5.4	6.4	9.1	6.4	7.7	8.9
UK	3.3	5.5	5.8	5.1	5.1	5.4	5.1	6	6.1	6.4	7.2
France	1.6	1.3	1.6	1.5	2.3	1.3	1.7	2.8	3.2	2.4	2.4
Germany	4.2	4.8	4.6	4.3	4.2	3	3.5	4	5.1	5.7	5.6

 Table 1: Established Business Ownership Rate

Source: Global Entrepreneurship Monitor, 2012

By looking at Table 1, we can see that Greece clearly has the highest rate of established business owners from the seven countries compared (available data for Greece start on 2003).

The percentage of business owners has increased from about 6.5% of the population on 2004, to almost 15.8% on 2011.

Figure 1 presents the mean value for the seven countries, for the 11 year period (2001-2011).





Figure 1: Established Business Ownership 11 year period mean %

Greece has the highest mean value of established business ownership for the 11 year period (12.9%), followed by Spain (7%). The country with the lowest mean value is France (2%).

3.2 Total Early-Stage Entrepreneurial Activity

GEM defines Total Early-Stage Entrepreneurial as the percentage of 18-64 population, who are either a nascent entrepreneur or owner-manager of a new business. The results are presented in Table 2.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Greece	-	-	6.8	5.8	6.5	7.9	5.7	9.9	8.8	5.5	8
Sweden	3.8	3.9	4.1	3.7	4	3.4	4.2	4.4	4.6	4.9	5.8
Portugal	5.2	4.9	4.2	3.8	5.6	7	8.8	7.2	5.9	4.4	7.5
Spain	5.4	4.6	6.6	5.1	5.7	7.3	7.6	7	5.1	4.3	5.8
UK	5.4	5.4	6.4	6.2	6.2	5.8	5.5	5.9	5.7	6.4	7.3
France	2.6	3.1	1.6	6	5.4	4.4	3.2	5.6	4.3	5.8	5.7
Germany	5.8	5.2	5.2	4.4	5.1	4.2	4	3.8	4.1	4.2	5.6

Table 2: Total Early-Stage Entrepren	neurial Activity
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Source: Global Entrepreneurship Monitor, 2012

Figure 2 indicates that total early-stage entrepreneurial activity in Greece ranges from 6.8% on 2003, to almost 10% on 2008 and back to 8% in 2010. A decline in the percentage in early stage entrepreneurial activity can be observed after 2008 (after the economic crisis broke out).

Figure 2 presents the mean value for the seven countries, for the 11 year period (2001-2011).





Figure 2: Total early-stage Entrepreneurial Activity 11 year period mean %

Source: Global Entrepreneurship Monitor, 2012

Greece has the highest mean value of total early stage entrepreneurial activity (7.2%), followed by the UK (6%). Sweden and France have the lowest ones (4.3%).

3.3 Necessity-Driven Entrepreneurial Activity

As defined from GEM, Necessity-Driven Entrepreneurial Activity refers to the percentage of people who are involved in entrepreneurship, because they had no other option for work. The results are presented in Table 3.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Greece	-	-	38	29	14	21	10	31	26	28	25
Sweden	11	17	9	9	14	7	10	11	12	13	6
Portugal	19	21	23	26	21	15	10	14	18	22	18
Spain	22	22	5	12	14	15	15	15	16	25	26
UK	14	13	15	10	11	15	11	14	17	11	17
France	17	3	22	23	39	39	24	10	14	25	15
Germany	17	22	23	28	31	36	32	26	31	26	19

Source: Global Entrepreneurship Monitor, 2012

Table 3 indicates that in Greece, from 2007 onwards, there has been a large increase in the necessity-driven entrepreneurial activity, from 10% on 2007 to 25% on 2011. The highest overall necessity-driven entrepreneurial activity can be observed in Germany, ranging from 17% to 36% during the last decade.

Figure 3 presents the mean value for the seven countries, for the 11 year period (2001-2011).





Figure 3: Necessity-Driven Entrepreneurial Activity 11 year period mean %

As seen in Figure 3, the highest mean value of necessity driven entrepreneurial activity for the 11 year period can be observed in Germany (26.5%), followed by Greece (24.7%). The lowest value can be observed in Sweden (10.8%).

3.4 Entrepreneurial Intention

GEM defines Entrepreneurial Intention as the percentage of 18-64 population (individuals involved in any stage of entrepreneurial activity excluded), who intend to start a business within three years. Table 4 presents the results.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Greece	-	-	11.4	11.4	14.7	12.5	11.8	12.6	14.6	12.8	10.5
Sweden	12.5	12.7	10	14.3	9.3	9	8.9	8.8	8.7	8.5	9.8
Portugal	-	-		2.2	4.8	7.2	9.8	9.5	9.2	8.8	12.2
Spain	-	7	4.9	4.3	4.2	4.4	4.3	5	4.3	5.8	8
UK	-	4.2	5.4	7.4	6.7	5.6	5.6	5.3	4.3	5.1	8.9
France	-	3	5.8	11.6	11.4	13.3	15.3	12.7	15.9	14.2	17.7
Germany	-	4.5	5.6	4.2	5.3	5.3	4.7	4.2	5.3	6.4	5.5

Table 4: Entrepreneurial Intention

Source: Global Entrepreneurship Monitor, 2012

As seen in Table 4, the highest rates of entrepreneurial intention can be observed in France (17.7% in 2010) and Greece (12.8% in 2010). Sweden presents a decline in entrepreneurship intention (from 14.3% in 2005 to 9.8% in 2010), while Portugal presents a large increase (from 2.2% in 2004 to 12.2% in 2011).

Figure 4 presents the mean value for the seven countries, for the 11 year period (2001-2011).





Figure 4: Entrepreneurial Intention 11 year period mean %

From Figure 4 we can observe that Greece has the largest mean value of entrepreneurial intention from the 7 countries examined (12.3%). The lowest value is observed in Germany (5%).

3.5 Fear of Failure Rate

Finally, GEM refers to Fear of Failure Rate as the percentage of 18-64 population with positive perceived opportunities about entrepreneurship, who indicate that fear of failure would prevent them from setting up a business. The rate is presented in Table 5.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Greece	-	-	49	48	50	48	54	46	45	51	38
Sweden	31	30	30	32	34	28	29	29	29	29	35
Portugal	31	30	29	29	29	29	29	29	30	30	40
Spain	36	42	40	45	42	44	47	47	45	36	39
UK	33	33	31	33	33	33	34	34	32	30	36
France	29	22	34	42	42	43	41	52	47	40	37
Germany	42	37	33	30	40	34	36	40	37	34	42

Source: Global Entrepreneurship Monitor, 2012

As seen from the table, the fear of failure rate is quite high in all the sample countries, ranging from 22% to 54%. The highest fear of failure percentage is observed in Greece (54% in 2007), while the lowest value is observed in France (22% in 2002).

Figure 5 presents the mean value for the seven countries, for the 11 year period (2001-2011).





Figure 5: Fear of Failure Rate 11 year period mean %

In Figure 5 we observe that the highest mean value of fear of failure for the 11 year period, was recorded in Greece (47.7%), while the lowest one in Sweden and Portugal (30.5%).

4. Business Statistics

In order to have a better picture of the Greek business sector, following there is going to be a presentation of Greek business demographic data. Data for the six other European countries previously used will be presented as well. These data come from the OECD, but they concern the year 2007. Despite the six year period since then, these statistics can still offer a good insight in the Greek business sector.

The data presented concern the following aspects:

- 1) Enterprises by size class
- 2) Value Added by size class
- 3) Employment by size class

The OECD uses 5 size classes, all measured according to the number of employees:

- a) 1-9 (micro enterprises)
- b) 10-19 (small enterprises)
- c) 20-49 (small enterprises)
- d) 50-249 (medium enterprises)
- e) 250+ (large enterprises)

The first 4 categories are called Small Medium Enterprises (SMEs).



4.1 Enterprises by Size Class

Table 6 presents the total number of businesses by size class for the seven European countries. Size is measured from the number of employees they occupy. In the last column we see the total amount of businesses counted in every economy.

	1-9	10-19	20-49	50-249	250+	Total
Germany	1510416	174615	81156	43727	8995	1818909
UK	1468612	116995	51449	27433	6.083	1670572
Spain	2511563	112425	63096	22008	3305	2712397
France	2388341	96070	56334	23184	5125	2569054
Sweden	527618	17117	10223	4861	1012	560831
Portugal	819713	26706	13988	5788	839	867034
Greece	801251	16474	7912	2905	470	829012

Table 6: Enterprises by Size Class 2007 (values)

Source: OECD, 2011

The largest number of businesses is met in Spain (2.7 million), followed by France (2.5 million), Germany (1.8 million), the UK (1.6 million), Portugal (867 thousands), Greece (829 thousands) and finally Sweden (560 thousands). In order to examine size classes in more detail, it is useful to look at percentages, as presented in Table 7 and Figure 6.

 Table 7: Enterprises by Size Class 2007 (%)

	1-9	10-19	20-49	50-249	250+
Germany	83.0	9.6	4.5	2.4	0.5
UK	87.9	7.0	3.1	1.6	0.4
Spain	92.6	4.1	2.3	0.8	0.1
France	93.0	3.7	2.2	0.9	0.2
Sweden	94.1	3.1	1.8	0.9	0.2
Portugal	94.5	3.1	1.6	0.7	0.1
Greece	96.7	2.0	1.0	0.4	0.1

Source: OECD, 2011





Figure 6: Enterprises by Size Class 2007 (%)

Source: OECD, 2011

Looking at the business size percentages, it is evident that most businesses in the seven European countries examined, are micro enterprises, meaning that they have less than 10 employees. The percentage of micro enterprises ranges from 83% in Germany, to 96.7% in Greece. Small enterprises in Greece (those with 10-49 employees) are around 3% (24.386 enterprises), medium are 0.4% (2.905 enterprises) and large only 0.1% (470 enterprises)

4.2 Value added by Size Class

According to the OECD, value added corresponds to the difference between production and any intermediate consumption, where total intermediate consumption is valued at purchasers' prices. Table 8 presents value added by size class for the seven European economies.

	1-9	10-19	20-49	50-249	250+	Total
Germany	189120	93368	113219	233934	543551	1173192
UK	144639	56334	67206	132895	385246	786 320
Sweden	336468	124480	177560	300172	722481	1661161
France	184800	64212	94165	127708	370095	840980
Portugal	17464	7241	9968	15930	21670	72273
Spain	158498	53184	77 666	102082	183888	575318
Greece	26903	6641	9122	11484	17999	72149

Table 8: Value Added by Size Class 2007 (millions €)

Source: OECD, 2011

The highest total value added is recorded in Sweden (1.6 trillion $\textcircledightharpoondown Germany (1.1 trillion <math>\textcircledightharpoondown Germany)$, France (840 billion $\textcircledightharpoondown Germany), Spain (575 billion <math>\textcircledightharpoondown Germany), Portugal (72 billion <math>\textcircledightharpoondown Germany)$ and finally Greece (72 billion $\textcircledightharpoondown Germany). In order to examine the contribution of each size class in more detail, it is useful to look at percentages, as presented in Table 9 and Figure 7.$



	1-9	10-19	20-49	50-249	250+
Germany	16.1	8.0	9.7	19.9	46.3
UK	18.4	7.2	8.5	16.9	49.0
Sweden	20.3	7.5	10.7	18.1	43.5
France	22.0	7.6	11.2	15.2	44.0
Portugal	24.2	10.0	13.8	22.0	30.0
Spain	27.5	9.2	13.5	17.7	32.0
Greece	37.3	9.2	12.6	15.9	24.9

Table 9: Value Added by Size Class 2007 (%)

Source: OECD, 2011



Figure 7: Value Added by Size Class 2007 (%)

Source: OECD, 2011

Micro enterprises in Greece offer 37.3% of total value added, while SMEs offer 75%. This percentage is the largest contribution of SMEs in the economy for the 7 counties. Large enterprises, even though they are only 0.1% of total enterprises, they offer 24.9% of the private sector's total value added. However this percentage is by far the lowest one from the 7 countries examined. The largest contribution of large enterprises is observed in the UK (49%). followed by Germany (46.3%) and Sweden (43.5%).

4.3 Employment by Size Class

Table 10 presents data concerning the number of employees that work in each size class, for the seven European countries. The last column presents the total private sector workforce.



	1-9	10-19	20-49	50-249	250+	Total
Germany	424452	2342985	2457605	4354889	8800230	22199161
UK	3898329	1562194	1590442	2756434	8329493	18136892
France	3673665	1301770	1772748	2389409	5966660	15104252
Sweden	702526	261584	342046	524751	1042929	2873836
Spain	5456091	1540760	1955014	2115745	3 193 120	14260730
Portugal	1389008	350016	413361	545157	627185	3324727
Greece	1513452	213860	241815	276970	353931	2600028

 Table 10: Employment by Size Class 2007 (values)

Source: OECD, 2011

The largest number of employees was recorded in Germany (22.1 million), followed by the UK (18.1 million), France (15.1 million), Spain (14.2 million), Portugal (3.3 million), Sweden (2.8 million) and finally Greece (2.6 million).(Note 1) In order to examine employment of each size class in more detail, it is useful to look at percentages, as presented in Table 11 and Figure 8.

 Table 11: Employment by Size Class 2007 (%)

	1-9	10-19	20-49	50-249	250+
	1-9	10-19	20-49	30-249	230+
Germany	19.1	10.6	11.1	19.6	39.6
UK	21.5	8.6	8.8	15.2	45.9
France	24.3	8.6	11.7	15.8	39.5
Sweden	24.4	9.1	11.9	18.3	36.3
Spain	38.3	10.8	13.7	14.8	22.4
Portugal	41.8	10.5	12.4	16.4	18.9
Greece	58.2	8.2	9.3	10.7	13.6

Source: OECD, 2011





Figure 8: Employment by Size Class 2007 (percentages)

Source: OECD, 2011

Micro enterprises in Greece are responsible for the 58.2% of total private sector employment. This percentage is much higher than all other countries and highlights the importance of micro enterprises in the economy. Large enterprises in Greece occupy 13.6% of private sector workforce, which is the lowest percentage of the seven countries. The largest percentage of large enterprises employment is met in the UK (45.9%), followed by Germany (39.6%), France (39.5%), Sweden (36.3%), Spain (22.4%) and Portugal (18.9%).

5. Business Failure

Having examined Greek entrepreneurship data and structural business statistics, it is useful to see the country's business prospects.

Greece, due to a combination of microeconomic and macroeconomic long term weaknesses, in 2009 was faced with a large deficit problem (15.3% of GDP). This fiscal deficit increased drastically the borrowing interest rates, and as a solution the country turned to the International Monetary Fund (IMF) for assistance. The IMF agreed to lend funds to the Greek government, by signing two cooperation memorandums. These memorandums included various lending terms, as cutting government spending, increasing taxes and lowering wage rates. Even though some of the lending terms were useful for the economy, others have proven completely inefficient and suffocating for the market. The country is in its fourth year of recession and as a result many businesses, especially SMEs, are closing.

Table 12 presents the numbers of Greek enterprises according to Eurostat.

	2005	2006	2007	2008	2009	2010	2011
0-9	796520	799854	801723	782763	756244	719952	695733
10-49	21246	25250	24604	24406	23780	22832	22075
50-249	2519	3496	2947	2982	2965	2893	2894
SMEs	820285	828600	829274	810151	782989	745677	720702
250+	468	429	478	515	556	563	577
Total	820753	829029	829752	810666	783545	746240	721277

 Table 12: Number of Enterprises by Size Class in Greece

Source: Eurostat, 2012 *(2009, 2010, 2011 Eurostat estimates)

The total number of enterprises in 2005 was over 820753, out of which 820285 were SMEs. In 2011 the total number of enterprises was 721277, out of which 720702 were SMEs. The number of large enterprises has increased from 468 in 2005, to 577 on 2011. By subtracting from each year the value of the previous year, we can calculate the increase or decrease in the number of firms. These are estimated as follows:

 Table 13: Business Closures in Greece

-	2006	2007	2008	2009	2010	2011
0-9	3334	1869	-18960	-26519	-36292	-24219
10-49	4004	-646	-198	-626	-948	-757
50-249	977	-549	35	-17	-72	1
SMEs	8315	674	-19123	-27162	-37312	-24975
250+	-39	49	37	41	7	14
Total	8276	723	-19086	-27121	-37305	-24963

Source: Eurostat, 2012 *(2009, 2010, 2011 Eurostat estimates)

During 2006 and 2007 there was an increase in the number of firms in the economy. From 2009 up to 2011, there has been a large decrease in the total number of enterprises, mainly due to massive closure of micro firms. According to Eurostat estimates, the total number of SMEs that closed between 2008, 2009, 2010 and 2011 is 108572. However, the number of large firms has increased from 2007 onwards.

Business closures have also affected employment. The data presented on Table 14 originate from Eurostat and regard employment by size class in Greece for the period 2005-2011.



	2005	2006	2007	2008	2009	2010	2011
0-9	1401535	1500792	1515228	1519819	1500075	1447218	1410339
10-49	392811	446709	459983	462716	457256	438792	423499
50-249	242704	304802	281041	281860	277996	264427	256885
SMEs	2037050	2252303	2256252	2264395	2235327	2150437	2090723
250+	455304	337117	380594	383779	379192	362055	349399
Total	2492354	2589 420	2636846	2648174	2614518	2512492	2440121

Table 14: Employment by Size Class in Greece

Source: Eurostat, 2012 *(2009, 2010, 2011 Eurostat estimates)

The total number of employees working in the private sector in 2005 was over 2.4 million, out of which 2 million worked in SMEs. In 2011 the total number of employees was 2.4 million, out of which again 2 million worked in SMEs. In large enterprises, even though as seen in Tables 13, their number has increased during the period 2005-2011, the number of employees occupied has decreased.

Again, by subtracting from each year the value of the previous year, we can calculate the increase or decrease in employment by size class. These are estimated as follows:

	2006	2007	2008	2009	2010	2011
0-9	99257	14436	4591	-19744	-52857	-36879
10-49	53898	13274	2733	-5460	-18464	-15293
50-249	62098	-23761	819	-3864	-13569	-7542
SMEs	215253	3949	8143	-29068	-84890	-59714
250+	-118187	43477	3185	-4587	-17137	-12656
Total	97066	47426	11328	-33656	-102026	-72371

 Table 15: Job Losses in Greece 2006-2011

Source: Eurostat, 2012*(2009, 2010, 2011 Eurostat estimates)

From 2009 onwards we can notice that there have been continuous job losses in all business size classes. Total job losses between 2009 and 2011 amount to 208053 (33656+102026+72371). The job losses in SMEs between 2009 and 2011 were 173673 (29068+84890+59714), while in large enterprises they were 34380 (4587+17137+12656).

Moreover, according to the 2011 Yearly Report on Greek Trade, by the National Confederation of Greek Trade, the closures expected for 2012 range between 50000 and 60000 and the job losses around 100000. Regarding the job losses, the Employment Institute of the General Confederation of Greek Workers is more pessimistic. It expected around 500000 job losses in 2012.

6. Business Barriers

Many of the business closures mentioned above are a result of the barriers met by Greek



enterprises. Barriers are met both during the start up phase as well during their daily operation. Following there is going to be a reference on various researches made on the topic.

In a research carried out by the World Bank on 2008, about the ease of starting a business, Greece was in the last position among 58 countries. On the same research for 2011, it was in the 101th position from 183 countries. This research evaluated the ease of starting a business based on the following aspects: Starting a Business, Dealing with Construction Permits, Getting Electricity, Registering Property, Getting Credit, Protecting Investors, Paying Taxes, Trading Across Borders, Enforcing Contracts and Resolving Insolvency.

The OECD (2011) has carried out research on a relative topic, that of administrative burdens on start-ups. Administrative burdens on start ups measure a country's regulatory environment. They are calculated by using three main indicators: state control, barriers to entrepreneurship and barriers to trade and investment. Figure 9 pictures an analysis of the results for 20 European economies for the year 2008.



Figure 9: Administrative Burdens on Start-Ups (2008) (from 0 to 6 the more restricting)

Source: OECD, 2011 (*Data for Greece and Ireland refer to 2003)

Greece, along with Hungary, was evaluated to be the country with the most administrative burdens on start ups, scoring 2.6 and 2.8 respectively. The countries with the least administrative burdens to start ups were Ireland (0.4), Germany (0.49), the UK (0.55) and Denmark (0.6).

The OECD has also used Word Bank 2010 data, in order to measure the ease of starting a business (Figure 10).





Figure 10: Starting a Business 2010 (Ranking of countries from least to more restricting)

Source: OECD, 2011

Using the World Bank data, Greece is the European country, among the other 20, where it is the most difficult to start a business. It is followed by Spain and the Czech Republic. The country where it is the easiest to start a business is Ireland, followed by the UK and France.

In order to examine which are the exact barriers met by firms that operate in the Greek economy, a reference will be made to a recent study on the topic. According to a study about business barriers made by the Centre for Studies and Research of the Athens Chamber of Industry and Commerce in a sample of 1.104 firms, between 3 and 24 October 2011, the results were the following (Tables 16 and 17):

Table 16: Very Important Barriers Met by Greek Enterprises

Barrier	% of Respondents
Continuous changes and instability in the tax employment and insurance	80%
status	
Market psychology	78%
Height of tax rates and other fees that make up the cost of running a business	62%
Bureaucracy in dealing with the state	57%
Inability to control black markets and shadow economy	57%
Inability to fight tax evasion	55%
Corruption in transactions between businesses and state	52%
Reduction in purchasing power of workers and pensioners due to the	51%
lowering of salaries and pensions	
Difficulty in accessing the banking system for financing	49%
Height of social security contributions	41%
Large public sector	45%
Difficulty of accessing local national and European funding programs	37%



Barrier	% of Respondents
Wage costs	43%
Rent	33%
Delayed privatization and opening of the professions	26%
Demonstrations and marches	25%

The results of this research are very enlightening. Business owners in Greece agree that the most important barriers they face are tax rates, employment and insurance status, market psychology and state bureaucracy. Three out four barriers originate directly from the government while the other one market psychology can be tackled by government action e.g. investments.

However, the policies that have been proposed by the IMF and have been applied in Greece so far, have increased tax rates, changed more than once the employment and insurance status, "froze" market psychology, due to public and private sector wage cuts and did almost nothing to lessen bureaucracy. It also striking that wage cost is not considered an important barrier by business owners. Many businesses have cut wages and fired personnel, in an attempt to minimise costs and escape closure, but this is due to the fact that businesses themselves cannot change any of the important barriers they face.

Another research on the same topic was carried out by the World Economic Forum in 2010. From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country, and to rank them between 1 (most problematic) and 5. The results were as follows:

Factors	% of Respondents
Inefficient government bureaucracy	27.2%
Corruption	14%
Restrictive labor regulations	12%
Policy instability	11.5%
Tax regulations	11.1%
Access to financing	9.9%
Inadequate supply of infrastructure	3.9%
Tax rates	3.7%
Poor work ethic in national labor force	2.3%
Government instability/coups	2.3%
Inadequately educated workforce	1.4%
Inflation	0.6%
Crime and theft	0.1%
Poor public health	0.1%
Foreign currency regulations	0%

Table 18: Problematic Factors for Doing Business in Greece

From Table 18 again we notice that most barriers are related with the state. The most



problematic factor is government bureaucracy (27.2%), followed by corruption (14%) restrictive labor regulations (12%), policy instability (11.5%) and tax regulations (11.1%). Access to financing was also considered a problematic factor for businesses.

7. Conclusions – Policy Recommendations

Entrepreneurship plays a vital role in the Greek economy, as about 15% of the active populations are entrepreneurs. Most of the entrepreneurs have micro enterprises, which make up 96% of Greek businesses. These micro enterprises, offer 33% of the total business sector value added and occupy 58% of the business sector workforce SMEs in total offer 75% of total value added and occupy 77% of the total private sector workforce. However SMEs prospects at the moment are not good. During the last four years, at least 100 000 businesses have gone out of business and about 200000 employees have lost their jobs. For 2012 another 50000 businesses are expected to close due to the recession, adding up more unemployed to the economy.

Large enterprises even though they are only 0.1% of total enterprises, they offer 24.9% of the private sector's total value added and occupy 13.6% of total private sector workforce. Even though the number of large enterprises has increased during the last years, the number of employees has decreased by 34380.

As the role of the SMEs is vital for economic growth and innovation in every economy in the world, the Greek government must support them with every mean possible. The government should aim at abolishing the most important barriers met by Greek enterprises. According to the business owners, these are tax rates, employment and insurance status, market psychology and state bureaucracy.

The policies that have been proposed by the IMF and have been applied in Greece so far, have done exactly the opposite: they have increased tax rates, changed more than once the employment and insurance status, "froze" market psychology due to public and private sector wage cuts and did almost nothing to lessen bureaucracy. Notably, wage cost is not considered an important barrier by business owners. Many businesses have cut wages and fired personnel in an attempt to minimise costs and escape closure, but this is due to the fact that businesses themselves cannot change any of the important barriers they face.

As three out of four barriers originate directly from the government, while the other one, market psychology, can be tackled by government action, there is an urgent need for the Greek government to proceed to some decisive measures: lowering of taxes, minimization of the state bureaucracy and corruption, establishment of fair and effective employment and insurance laws and finally increases in wages, so as to increase buying power, are some of the basic policies that need to be followed in order to secure SMEs' short term survival and long term prosperity. The formation of more public private of mixed ownership large enterprises, would also be very helpful for boosting domestic productivity and employment.



References

- Acs, Z., & Varga, A. (2005). Entrepreneurship, agglomeration and technological change. *Small Business Economics*, 24, 323-334. http://dx.doi.org/10.1007/s11187-005-1998-4
- Acs, Z., Audretsch, D., Braunerhjelm, P., & Carlsson, B. (2004). *The missing link: The knowledge filter, entrepreneurship and endogenous growth.* Working Paper, Centre for Economic Policy Research, London.
- Audretsch, D., & Keilbach. M. (2004). Entrepreneurship and Regional Growth: An Evolutionary Interpretation. *Journal of Evolutionary Economics*, 14(5), 605–616. http://dx.doi.org/10.1007/s00191-004-0228-6
- Cole, A.H. (1968). Meso-economics: A contribution from entrepreneurial history. *Explorations in Entrepreneurial History*, 6(1), 3-33.
- Employment Institute of the General Confederation of Greek Workers. (2012). Greek Economy and Employment. *Yearly Report 2011, Athens.*
- Eurostat Structural Business Statistics Database. (2012). Retrieved from http://epp.eurostat.ec.europa.eu
- Evans, D., & Leighton, L. (1989). Some Empirical Aspects of Entrepreneurship. American Economic Review, 79, 519-535.
- Gartner, W.B. (1985). A conceptual framework for describing the phenomenon of new venture creation. *Academy of Management Review*, *10*(4), 696-706.
- Global Entrepreneurship Monitor Database. (2012). Retrieved from http://www.gemconsortium.org
- Hebert, R., & Link A. (1988). The Entrepreneur. Praeger Publ, New York.
- Henderson, J. (2002). Building the Rural Economy with High-Growth Entrepreneurs. *Federal Reserve Bank of Kansas City Economic Review*, 87(3), 45-70.
- Holcombe, R. (1998). Entrepreneurship and Economic Growth. *The Quarterly Journal of Austrian Economics*, 1, 45-62. http://dx.doi.org/10.1007/s12113-998-1008-1
- Holmes, T.J., & Schmitz, J.A. (1990). A Theory of Entrepreneurship and its Application to the Study of Business Transfers. *Journal of Political Economy*, 2, 265-94. http://dx.doi.org/10.1086/261678
- Kirzner, I. (1973). Competition and entrepreneurship. The University of Chicago Press.
- Knight, F. (1921). Risk, uncertainty, and profit. Houghton Mifflin, Boston.
- Kreft, S., & Sobel, R., (2005). Public Policy, Entrepreneurship, and Economic Freedom. *Cato Journal*, 25(3), 595-616.
- Leibenstein, H. (1978). *General X-efficiency and economic development*. Oxford University Press.



- Low, M., & MacMillan I. (1988). Entrepreneurship: Past Research and Future Challenges. *Journal of Management*, 14(2), 139-161. http://dx.doi.org/10.1177/014920638801400202
- Lumpkin, T., & Dess, G. G. (1996). Clarifying the Entrepreneurial Orientation Construct and Linking it to Performance. *Academy of Management Review*, *21*, 135–172.
- Minniti, M. (1999). Entrepreneurial Activity and Economic Growth. *Global Business and Economics Review*, 1, 31-42. http://dx.doi.org/10.1504/GBER.1999.006134
- National Confederation of Greek Trade. (2011). Yearly Report on Greek Trade. Athens.
- Organization for Economic Cooperation and Development. (2011). *Entrepreneurship at a Glance*. OECD Publishing.
- Porter, M. E. (1990). The competitive advantage of nations. Macmillan, New York.
- Reynolds, P., Hay, M., & Camp, S.M. (1999). *Global Entrepreneurship Monitor*. Kansas City, Missouri: Kauffman Center for Entrepreneurial Leadership.
- Romer, P. (1986). Increasing Returns and Long Run Growth. *Journal of Political Economy*, 94, 1002-1037. http://dx.doi.org/10.1086/261420
- Schmitz. Jr., & James A. (1989). Imitation, Entrepreneurship, and Long-Run Growth. *The Journal of Political Economy*, 97(3), 721-739. http://dx.doi.org/10.1086/261624
- Schumpeter, J. A. (1934). *The Theory of Economic Development*. Harvard University Press, Cambridge.
- Smith, D. (2010). The Role of Entrepreneurship in Economic Growth. Undergraduate Economic Review, 6(1), Art. 7.
- Stevenson, H., Roberts, M., & Grousback H. (1985). New business ventures & the entrepreneur. Homewood, Irwin.
- Wennekers, A. R. M., & Thurik, A. R. (1999). Linking entrepreneurship and economic growth. Small Business Economics, 13, 27–55. http://dx.doi.org/10.1023/A:1008063200484
- Wong, P, Ho Y., & Autio E. (2005). Entrepreneurship, Innovation and Economic Growth: Evidence from GEM Data. Small Business Economics, 24, 335-350. http://dx.doi.org/10.1007/s11187-005-2000-1
- World Bank. (2008). Doing Business. Retrieved from http://www.doingbusiness.org
- World Bank. (2010). Doing Business. Retrieved from http://www.doingbusiness.org
- World Bank. (2012). Doing Business. Retrieved from http://www.doingbusiness.org
- World Economic Forum. (2010). The Global Competitiveness Report 2010-2011



Note

Note 1. In the year 2007 the population count was Germany: 82.2 m. France: 63.7 m. UK: 61.1 m. Greece: 11.1 m. Portugal: 10.6 m. Sweden: 9.1 m and Spain: 45.2 million.

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