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New Firm Creation in Greece: Evidence from the Last Two Laws of Investment - Incentives

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This paper aims at studying the issue of entrepreneurship, through information on new firm creation for the case of Greece. The paper examines a topic, which hasn't been studied so far. Entrepreneurship is very important for the dynamism of every economy, while new firms create jobs, foster competition and contribute to the national economic growth. The analysis relies on data on new firm establishments for which government funding has been approved through the 2 last laws of investment- incentives and since 2006. The analysis is based on the examination of a sample of 520 Greek firms. Results basically present the 'portrait' of the Greek investment- incentives law during the economic crisis and the IMF's involvement. The economic crisis that started in 2008 has negatively affected the majority of countries. Nearly all OECD countries have suffered a fall in GDP and trade flows and an increase in unemployment due to the global economic crisis. The crisis has also limited entrepreneurship and underpinned innovation. Results show that government subsidies have been mainly directed in the sector of energy (photovoltaic establishments) and, secondarily, in tourism, industrial production and logistics. On the contrary, there are very few investment projects in more technologically advanced activities and all of them are related to the sector of services. However, investment plans and therefore firms in energy don't create any new job. Thus, the analysis shows the non- developmental and non- entrepreneurial character of the investment- incentives law in a period that the country needs completely the opposite, namely a push to growth and the creation of new jobs. Moreover, the creation of new jobs is implicit in the concept of entrepreneurship. Results could or ought to mark a law revision on the part of policy makers and this paper could be the starting point for that.

JEL Codes: L52, M13, O38, O52 and R58

1. Introduction

Economic growth relies on both the fostering of entrepreneurship and the production of innovation. In fact there is a wide acknowledge of the significant role played by both entrepreneurship and innovation in economic growth (Baumol 2002, Djankov et al. 2002, Klapper et al. 2006). Entrepreneurship is also very important for the dynamism of every economy, as it is usually expressed by the establishment of new firms, which create jobs and foster competition finally leading to economic growth. Schumpeter (1934) defines entrepreneurship as 'the assumption of risk and responsibility in designing and implementing a business strategy or starting a business'. Gough (1969) argues that 'entrepreneurship refers to a person who undertakes and operates a new enterprise or venture, and assumes some accountability for the inherent risks'. Klapper et al. (2010) interpret entrepreneurship as the 'activities of an individual or a group aimed at initiating economic activities in the formal sector under a legal form of business. Based on the above definitions, it can be argued that concepts like 'discovery', 'creation' and profitable exploitation for goods and services' are implicit in the entrepreneurial process. Finally

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and focusing on the philosophy of policy practitioners, entrepreneurship has generally been viewed as the process of creating new wealth.

However, the assumption of risk, the taken up and running of a new business and the initiation of economic activities aren't always easy, especially during periods of economic crisis and more generally of economic instability. In such difficult cases and periods, the government intervention and the state aid are more than ever justified and one form of intervention and aid is the so called national grants-subsidies. A subsidy is a grant or other financial assistance given by one party (e.g. central, regional, local government) for the support or development of another (e.g. producer, prospective entrepreneur. According to the OECD definition, a subsidy is a 'measure that keeps prices for consumers below market levels, or keeps prices for producers above market levels or that reduces costs for both producers and consumers by giving direct or indirect support' (OECD 2006). Subsidies can be direct (cash grants, interest- free loans) or indirect (tax breaks, insurance, low- interest loans, depreciation write-offs, rent rebates). This form of support can be legal, illegal, ethical or unethical. Subsidies are used for a variety of purposes, including employment, production and exports. Subsidies are often regarded as a form of protectionism or trade barrier by making domestic goods and services artificially competitive against imports. Subsidies may distort markets, and can impose large economic costs (Parkin 2005, Amegashie 2006).

The objective of this paper is the study of entrepreneurship, through the examination of information for new firm creation for the case of Greece. The analysis is based on raw data for new establishments and is further limited to those new establishments for which government funding, in the form of national grants-subsidies, has already been approved during the last four years of reference. Greece has many and different schemes of grants-subsidies. However, the Greek investment-incentives law of grants-subsidies is considered to be the most important. The analysis basically presents results on new firm creation during a period that the country faces its deepest economic crisis, while implementing a very austere fiscal program imposed by the IMF and the European Union. Therefore it seems to be very important to see how the Greek, existing and prospective, entrepreneurs have reacted to this new 'national reality'. This is the main motivation for this study in combination to the fact that the paper examines a topic, which hasn't been studied so far. The paper is structured as follows: Section two discusses the theoretical and empirical framework of providing grants-subsidies, while describing the experience of a number of countries. Section three describes the data that has been used and the methodology that has been followed in the study. Section four focuses on the empirical results of the study based on the Greek case. Section five synthesizes, further discusses the results, presenting at the same time some concluding remarks.

2. Literature Review: Theoretical and Empirical Evidence

Nowadays, it is widely accepted that entrepreneurship contributes significantly to economic growth. Entrepreneurship is responsible for the creation of new organizations, products, services, jobs, and opportunities for complementary economic activities. Nowadays, it is also widely accepted that a reciprocal and interdependent relationship exists among entrepreneurship, economic growth and innovation.

Entrepreneurship becomes a difficult task in periods of crisis and, more generally, of economic difficulties. The economic crisis that started in 2008 has negatively affected the majority of countries. Nearly all OECD countries have suffered a fall in GDP and trade flows and an increase in unemployment due to the global economic crisis. The global economic crisis has also limited entrepreneurship and underpinned innovation, while the recorded severe drop in demand may have negative implications for long-term economic growth by, for example restricting the entry of innovative start-ups and diminishing knowledge transfer and the diffusion and adoption of technology. The crisis has revealed and amplified weaknesses (and strengths) which pre-existed, across countries, sectors and firms. Business innovation and R&D activities couldn't stay untouched. International figures show that Business enterprise R&D activities and expenditures as well as patent filings were hit by the crisis. However, large firms have recovered quickly, as confirmed by their growth rates in R&D investments and sales of top EU and US corporate R&D investors. Large medium-tech manufacturers (e.g. automobile) have been hit strongly. Generally, more destruction could be seen than creation (OECD 2011). Recovery may be easier for large nations and firms, but is considered to be more difficult for small and problematic nations, in which the large majority of firms are small and medium sized. This is the Greek case and this is the main reason why government funding, namely national grants-subsidies, has always been a major part of the Greek policy and a main instrument for entrepreneurship, employment growth and regional development. Especially during periods of crisis, government funding could be even more important, as access to financing becomes more difficult. Policy analysts argue that access to financing is one of the most significant challenges for the creation, survival and growth of SMEs. In addition, government funding has always been a significant mechanism that both the potential and existing entrepreneurs mostly use in order to start and expand- modernize their economic activities respectively.

Grants-subsidies, generally defined as incentives, have been a source of controversy among economists for decades (see for a review the work of Baum 1987): The group of economists being positive with grants-subsidies argues that there many cases where subsidies can increase both local and national economic welfare, leading therefore to economic growth. On the contrary, the negative ones argue that subsidies are unlikely to increase local economic welfare and are likely to decrease national economic welfare. In this context, the no need of such financial assistance schemes is stated in the research of Wren (1987). Studying and examining the effect of local authority financial assistance on the operation and employment of establishments over the period 1980-84 (using data collected as part of a survey of 201 establishments located in the North-East of England) he argues that local authority assisted projects performed well, but nearly two-thirds of these projects would have gone ahead without being assisted. For or against the provision of grants-subsidies, it is generally accepted that the provision of provision of financial assistance to a part or the whole economy has formed a growing and important part of the economic development policies of many countries.

Most countries have their own scheme of national funding programs and/ or subsidies or other kinds of aid: For examble Britain has also a wide range of grants and subsidised loans available to its firms. Finance is available to help support business expansion, to provide funding for research and development, to support training initiatives, to help acquire new premises or refurbish existing buildings or to support international expansion. Whilst the provision of actual cash is usually the most important issue, grant aid help can come in many different forms. For example, certain grant agencies will provide assistance in finding investors, to help in generating new export leads or introducing experts to accelerate the development of new product ideas and strategies. The availability of grants and subsidies often depends on which sector a business is in, where it is located, how well the application is made and timing. The key factor in winning grants and subsidies is whether the funding results in the creation of jobs, especially in regional or local areas that particularly need them. France has over 250 different grants and subsidies (often referred to as 'incentives', although strictly these are financial) available to individuals for starting up a personal enterprise or small business, particularly in rural areas. These include EU subsidies, central government grants, regional development grants, redeployment grants, and grants from departments and local communities. These grants may take the form of assistance to buy buildings and equipment (or the provision of low-cost business premises), subsidies for job creation, or tax incentives. Most government subsidies are intended to provide support for small businesses already up and running, but there are occasionally specific subsidies available for new businesses, particularly for individuals who have been unemployed for a long period (OECD 2011).

3. Methodology and Data

The ministry of Development and Competitiveness is the main government authority for providing national grants-subsidies to investors, who submit their investment plans and ask for a grant-subsidy under the implementation of the Greek law of investment-incentives. Generally, it is required a seven-step process from submitting to being funded:

- Step one- submission of application (business plan and supported documents);
- Step two- pre-evaluation;
- Step three- evaluation (decision on funding approval or no funding);
- Step four- inclusion;
- Step five/six- payment (50% and 100%) (after economic and technical control);
- Step seven- completion (completion- commissioning of economic activity).

The data for this study is based on government documents in the form of paper sheets. Each government document presents in summary information on the related investment plan. Totally, four documents are published in the platform called 'diavgia': The first after the approval of funding (step four- inclusion), the second and third after payments are made (step five/ six) and the forth is the document of completion, when the investor is about to start its economic activity. In this context, three kinds of government documents have been collected and three databases have been constructed respectively with information on all investment plans after 2008. The analysis starts from 2008, because the platform called 'diavgia' started to operate in 2008 publishing such government documents. Before that date they only available data is paper sheets saved in the archives of the Ministry, but impossible to further work with them. The first database contains documents of firms' inclusion for funding (sample 420 firms' investment plans), the second includes documents of payment (sample 880 firms' investment plans) and the third documents of completion (sample 330 firms' investment plans). Obviously, a firm may be linked to more than 1 government documents and maximum 4 (e.g. inclusion, payment 1, payment 2, completion). Consequently, all documents have been cross-checked for double or triple firms' records and this led to a final sample of 520 firms. The analysis that follows concerns this final sample, which includes Greek firms that took funding from the Greek government in order to start or alter/modernize their economic activity after 2008 and depending on their date of inclusion are now at step four, five-six or seven.

Table 1: The two Greek Laws of investment-incentives- Main features

Feature	L. 3299/ 2004	L. 3908/ 2011
Policy priorities	Horizontal measures in support of financing	Support to sectoral innovation in manufacturing
Targeting specific sectors	No specific sector, No specific thematic focus	No specific sector Supported investments could address any technology field
Start- End date	2001- 2015	2011- No end date planned
Sub-measure structure		a) general entrepreneurship, b) regional cohesion, c) technological development, d) youth entrepreneurship, e) large investment plans, f) integrated multi-annual business plans, h) partnerships and networking
Mode of Funding	Grants Leasing Labor costs Tax incentives	Grants Leasing Soft loans by the National Fund for the Entrepreneurship and Development (ETEAN) Subsidized loans (including interest allowances) Tax incentives (including reduction of social charges)
Elegible costs	Equipment External expertise (consultants, studies, etc.) Infrastructure (buildings) Labour costs (including overheads)	Equipment External expertise (consultants, studies, etc.) Infrastructure (buildings) Labour costs (including overheads) Training (including study trips)
Sources of co-financing	Co-financed by the Structural funds (ERDF, ESF,etc.) Co-financed by the private sector	Co-financed by the Structural funds (ERDF, ESF,etc.) Co-financed by the private sector
Overall budget	946,000,000	4,200,000,000

Source: Own elaboration of Greek public documents.

Table 1 presents the main features of the law of investment-incentives. Generally, the Greek Laws of investment-incentives aim at financing sustainable investment projects that are environmentally friendly, promote innovation, regional cohesion, youth entrepreneurship, and create jobs. The law is an attractive incentive to invest more than 100,000€ in all sectors of the economy, implemented in the whole of Greek territory by businesses of all sizes, focusing on small and medium enterprises and emerging sectors of the economy. In order to be supported, an existing or potential investor should submit a detailed business plan which documents the specific investment and the need for public support. The two most recent Laws seek to harmonize the Lisbon guidelines through the better access to domestic and international finance (L. 3299/ 2004) and improvements in innovation support services, particularly for dissemination and technology transfer, and the creation and development of innovation to bridge the technology gap between regions (L. 3908/ 2011). The First Law (L.3299/04) addresses private investment in general though acquisition of technology and innovation in the sectors of agriculture, manufacturing, tourism and other services through direct incentives (subsidies to investment, to leasing and to new jobs created) as well as tax allowances to firms. The second Law (L. 3908/ 2011) aims at counterbalancing the significant reduction of liquidity of the banking system and the high interest rates due to the current crisis, and at providing incentives to companies for investing in business plans that could increase their competitive position in the local but also in the international market. The measure provided incentives for investments (innovative or not) across sectors in both manufacturing and services. Although all types of investments are supported emphasis is given on innovative entrepreneurship, green development, development of young innovative enterprises, and outward oriented investments. Incentives to investments related to innovative activities may receive subsidies from 30% to 40% (depending on the state aids regional map), which may go up to 55%, for SMEs. Recently, the Government envisages the increase of the tax allowance to the level to produce similar effect as direct subsidies.

4. Main Results

Traditionally, the Greek Law of investment-incentives is the main instrument for support of investments with a strong regional orientation. The Law 3299/2004 provided funding of €847m and mobilised one additional euro of private investment per funded euro and created 1 new job per €154,048 of funding. However, its performance has been considered to be very low compared with its predecessor investment Law 2061/1998, which distributed €2.56b and for each funded euro mobilised two euro of private investment while it created 1 new job per €44,057 of funding. Meanwhile, the Law has been criticised as inefficient to mobilise private investments and this is the main reason for the creation of the Law 3908/2011, which replaced the old one. More specifically, the demand from the business sector was not as high as it was expected. Although the budget for 2011 was €4.2b in the first call only 142 companies applied investments plans of 726m requesting only €94m of tax allowances and €97m of grants. In the second call with deadline October 2011, 179 companies applied investments plans of 854m. Although no information regarding the requested support has been announced, it is estimated on the basis of the results of the first round that the requested funding approximately amounts to €225m. Thus, the total amount requested (approximately €400m) is less than 10% of the budget. In total, the number of supported firms is fixed to 11,300 with a total number of new jobs of 15,450 for the period 2007-2013

Table 2 presents the main features of the Greek Law of investment-incentives, such as the number of firms' investment plans per year, the types of subsidy-aid, the percentage rate of subsidy, the selected economic activities, the geography of funding (regional distribution) and some other features. Results also show that the great majority of the firms' investment plans concern new establishments (new firms), while investors, both existing and potentials, prefer the direct grant-subsidy from the government among the five available types of subsidy-aid (e.g. grant-subsidy, subsided loans, labor cost subsidy, tax relief, leasing subsidy and soft loans). Therefore, results confirm that government funding, through national subsidies, has always been a major part of the Greek policy and a very important instrument for entrepreneurship, employment and regional development. In addition, it is also confirmed that government funding has always been a significant mechanism that potential entrepreneurs usually use in order to start their economic activities. The rate of government funding starts from 10% and can end up to 70% for a small group of firms, which exploit special and particular settings of the law. However, grants- subsidies range from 40-50% for the large majority of the firms' investment plans.

Table 2: The Greek law of investment- incentives- Main features (%)

Number of firms' projects per year		Types of subsidy-aid (%)	
2008 and before	1.19	Grant-subsidy	92.53
2009	0.59	Subsided loans	0.20
2010	19.21	Labor cost	0.39
2011	58.22	Tax relief	6.68
2012	20.40	Leasing subsidy	0.39
2013	0.40	Soft loans from ETEAN	0.00
% of subsidy- aid		Basic type of economic activities	
10-20	2.56	New establishment	70.00
20-30	2.96	Modernization	23.50
30-40	14.20	Expansion	6.50
40-50	68.64		
50-60	8.68		
55-60	0.20		
60-70	2.76		
Geography of funding: Regional distribution		Economic activities- Sectors	
Eastern Macedonia-Thrace	6.20	Agricultural sector	0.59
Attica	6.79	Other activities	0.98
Northern Aegean	2.56	Storage	1.18
Western Greece	6.40	Industrial Production	7.86
Western Macedonia	3.35	Energy	64.64
Epirus	3.15	Logistics	7.66
Thessaly	3.94	Constructions	0.20
Ionian Islands	1.57	Transportation	1.18
Central Macedonia	16.04	Tourism (Hotels)	12.97
Crete	19.09	Services	2.75
Southern Aegean	4.53		
Peloponnesus	17.52		
Sterea Ellada	8.86		

Source: Own elaboration of the firms' investment plans database.

The two last parts of table 2 show the investors choices, as expressed by the selected economic sectors, and their geographical origin, as expressed by the regional distribution of the firms' investment plans. Results show that most investment plans have been classified in the sector of energy (64.64%), followed by the sector of tourism- defined as hotel infrastructure (12.97%). The share of 'industrial production' is placed rather low, while investment plans in the sector of agriculture are almost non- existent. Among all the resting economic sectors, only 'logistics' could be characterized as important. Last but not least, the regional distribution of the firms' investment plans shows that Crete is ranked first, Peloponnesus second and Central Macedonia third. On the contrary, the share of Attica, namely the region of the capital of Greece, accounts for 6.79%.

A cross-examination and cross-combination of data reveals the following: First, investment plans in energy are all related to new establishments, which are financed with 40%. The Law describes plans in energy as those that aim at production of electricity from mild types of energy and especially solar energy, wind energy, hydro electrical energy, geothermic energy and biomass, investment plans for co-production of electricity and heat. Results show that most plans in energy are related to the 'photovoltaic infrastructure' (90%), namely activities that need much sunshine and for many hours per day. This result also explains the regional distribution of plans and their concentration in the southern regions of the country. Second, investment plans in tourism are still important and more equally divided between new establishments and actions of modernization. The Law finances the modernization of already functioning hotel units (complete type) and the creation of additional installations by adding new common areas. The regional parameter is also very important, as the majority of investment plans concern activities located in the Greek islands. However, more plans in modernization and expansion were expected or should be expected. Third, the provision of supply chain services (e.g. logistics) seems to be an emerging subsidies' sector, which, contrary to the previous investment plans, is only related to existing firms located in large urban centres and more specifically in Athens. Fourth, the category 'industrial production' divided among new establishments (54%), production modernization (37%) and expansion (9%). Apart from the fact that the share of 'industrial production' plans is considered to be low, the further examination of the investment plans reveals their traditional orientation, also in line with the existing industrial structure. More specific, plans in 'food and beverages' are the most important (28%), followed by those of chemicals and rubber- plastic products (both 36%) and machinery (10%). The remaining 15% is related to activities, such as those of aluminium production, non mineral products, paper-textiles and wood.

5. Conclusions

This paper studied the issue of entrepreneurship, through information for new firm creation for the case of Greece. Results show that the government grants-subsidies were mainly directed in energy, tourism, industrial production and logistics. Therefore, the majority of new investment plans concern a direct financial aid to the Greek citizens, who are land owners in order to raise their personal income by selling energy to the national monopolistic producer- distributor of energy in Greece (DEI). However, there is a main issue with investment plans in energy: They don't create any new job and there is no obligation for that, according to the provisions and restrictions of the Law under examination. On the contrary there are very few investment projects in more technologically advanced activities, while all of them are related to the sector of services. In fact, based on a sub-sample of 370 firms' plans with information on new job creation it can be seen that the subsided investment plans are supposed to create 5,300 new jobs for a total of 1,806,742,164.00€ of investment and 1,325,874,482€ of public funding (government aid). This means that each new job costs 25,000€ to the Greek government.

Thus, the analysis shows the non-developmental and non-entrepreneurial character of the Greek Law of investment-incentives. After 8 years of economic downturn and crisis (after the Olympic Games of 2004) and 3 years of the IMF's involvement, which made Greece implement a very austere program of fiscal and economic adjustment, the country continues to follow the same development path. The investors' choices are motivated by opportunism and a desire for fast profit, without any vision for way out of the crisis. After so many measures, which mainly hit people with low and medium fixed income, Greek figures show that the demand has been straggled, the unemployment rates still increase, the production faces very important difficulties and the economy hasn't yet started recovering. Recovery can't be realized with these investment choices and plans.

The paper results created knowledge in a field that hasn't been studied so far, while moved the knowledge forward. It shed some light on how the Greek investors have responded to the crisis and how the Greek government has conceived assisting to the domestic entrepreneurship. However, two points have to be taken into consideration: the analysis focused on new firm creation after 2008 and through the channel of government funding of the laws of investment-incentives. Obviously, there is more new firm creation as the Greek government also launched other funding programs during the same period of time and there is no knowledge on what happened before 2008. These are the limitations of this paper, but at the same time the motivation and the starting point for further research.

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