Entrepreneurial Policies: Portugal in the context of the European Union

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Biographic note

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Abstract

This thesis aims at analyzing entrepreneurship activity in Portugal since 1994. A comparative analysis with the Netherlands is developed, since this country is one of the European innovation driven countries, as recognized by the Global Entrepreneurship Monitor. A mapping of entrepreneurship policies of both countries is proposed in order to identify the areas that should be as priorities for enhancing entrepreneurial activity in Portugal by the government. With this mapping, and also based on the analysis of relevant statistical indicators, we systematize a set of measures that may be able to promote a better performance in terms of the growth dynamics of Portuguese Small and Medium Enterprises (SME).

Keywords: entrepreneurship, innovation, government policy
JEL-codes: M13, O25, O38

Resumo

Esta tese analisa o fenómeno do empreendedorismo em Portugal, desde 1994 até aos dias de hoje. É desenvolvida uma análise comparativa com a Holanda, que é um dos países europeus orientados para a inovação, como é reconhecido pelo *Global Entrepreneurship Monitor*. É proposto um mapeamento das políticas de empreendedorismo lançadas pelos governos dos dois países desde 1994, com o objetivo de identificar as áreas prioritárias para a promoção do empreendedorismo em Portugal. Com base neste mapeamento e também a partir da análise de indicadores estatísticos relevantes, é sistematizado um conjunto de medidas capazes de melhorar o desempenho da dinâmica de crescimento das Pequenas e Médias Empresas em Portugal.

Palavras-chave: Empreendedorismo, Inovação, Políticas Governamentais
Códigos JEL: M13, O25, O38

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1. Introduction

Several countries in the European Union (EU) are facing substantial economic difficulties, deepened by the sovereign debt-crisis. Southern European countries have been particularly affected since they are characterized by severe structural problems, namely at the production level (Haidar, 2012).

In the above context, entrepreneurship is being seen as a way to surpass these crises, as there is a clear identified relation between entrepreneurship and economic growth which is the main objective of the Global Entrepreneurship Monitor (GEM). GEM offers a broad study on this topic in 2012, encompassing 69 countries including Portugal. This organism has been evaluating in a regular basis the worldwide entrepreneurial activity since 1999; for Portugal every three years since 2001 (GEM Portugal, 2010). The goals of the GEM report are to measure the differences in entrepreneurial activity between countries, to facilitate decisions that help policy making authorities and to suggest policies that can increase entrepreneurial activity in each country (GEM, 2012).

The relation between economic growth and the entrepreneurial activity of a country is analyzed by several authors, for example Baumol (1990) and North (1990) (in Hall *et al.*, 2012). The first author refers that economic growth is mostly determined by institutions that encourage entrepreneurial activities, while the second author sustains that economic growth is the result of incentive structures that encourage individual efforts and investment, and is mostly shaped by society's productive structures (Hall *et al.*, 2012).

Entrepreneurship has been associated with different meanings, as it will be discussed in Section 2.1. One of the most important approaches concerns the relationship between entrepreneurship and economic growth, which has been studied throughout the years by different authors (Casson, 2006). This phenomenon has been a topic of discussion within policy makers since World War II. Since then the typical firm structure has changed, with new and smaller firms emerging and offering new products and with foreigner entrants in traditional American industries, such as the automobile industry. The larger firms that have dominated the US market were then mostly replaced by firms with this new structure (Acs and Szerb (2006). These new firms have been major

drivers of economic growth. This new economic reality, characterised by a shift from a managerial economy to an entrepreneurial economy, was only possible because several federal policies were implemented to make entrepreneurship an encouraging and interesting option. Some of those polices were tax reforms designed to enhance entrepreneurship and federal legislation that accelerated the commercialization of innovative ideas produced in universities (Acs and Szerb, 2006).

The relation between the emergence of new firms and economic growth was analysed by Audretsch (2002). The author refers that new firm formation should stimulate the growth of the economic and of employment. This conclusion comes from the idea that the role played by new firms in technological development is important since creates more room for innovative ideas to succeed. Growth would be more significant in the regions where these innovative ideas appear.

In the particular context of EU, throughout the past decade, European public institutions launched some entrepreneurial incentives, so that innovation and entrepreneurship could be the main drivers of European growth.

Europe 2020 is a strategy created by the European Commission for promoting smart, sustainable and inclusive growth, avoiding the European decline (European Commission, 2010). A new concept emerged - smart growth, which is associated with the ideal of an economy based on knowledge and innovation and, hence, able to maintain a sustainable growth path. This document is coherent with the conclusions of the previously mentioned literature, since knowledge and innovation are identified as the main drivers of future growth. Inclusive growth refers to growth that achieves social and territorial cohesion. Employment is the key to promote this kind of economic growth.Job creation is a need that may be fulfilled by entrepreneurship. In European Commission (2010), several measures are proposed in order for European countries to reach smart and inclusive growth, namely promoting flagship initiatives that allow young students to obtain entrepreneurial skills through education around Europe, and designing and implementing programmes to promote innovation less developed in regions among the EU state members.

These actions are coherent with previous initiatives by the EU. The European Charter for Small Enterprises (2000) and the Green Paper on Entrepreneurship in Europe (2003)

are examples of entrepreneurial policies launched by the European Commission in the beginning of this century.

The first initiative, describes small firms as a source of job creation and a tool to develop entrepreneurial ideas. This proposal described easier ways for developing private entrepreneurial ideas, through the improvement of either entrepreneurs' skills or the conditions for the emergence of start-ups.

The Green Paper on Entrepreneurship in Europe emerged from the need to reach the goals previously set by the European Charter for Small Enterprises. The document describes how to increase the number of entrepreneurs and also the importance of the creation of new business ideas, helping entrepreneurs to turn their ideas into profitable activities.

In the present dissertation these European initiatives and policies will be deeply analyzed, with a special focus on their impact on the Portuguese economy. At the theoretical level, the literature on entrepreneurship and economic growth will be explored and, in a more empirical perspective, we will propose a mapping of Portuguese entrepreneurship policies launched since 1994, comparing to another European country, the Netherlands, in order to systematize a set of measures that might be implemented in order to further stimulate entrepreneurship and economic growth.

The Portuguese entrepreneurship policies that will be analyzed are those mentioned in the strategic programmes financed by the EU funds since the entrance in the EU: the *Quadros Comunitários de Apoio* (QCA) II, from 1994 to 1999, and III, operating from 2000 to 2006, and *Quadro de Referência Estratégica Nacional* (QREN), in vigour from 2007 to the end of 2013. The purpose of this work is to contribute to the literature on entrepreneurship policy, by offering a systematic analysis of initiatives such as those above mentioned. This task is going to be complemented with a statistical comparison of the available data and a mapping of the policies that were launched in Portugal and in the EU..

This dissertation is structured in chapters. The first proposes a literature review on the concepts of entrepreneurship and entrepreneurial policies. In the second chapter, the methodology and main results are presented, and in the third chapter, the main conclusions, limitations and future research are discussed.

2. A Literature Review on Entrepreneurship

As mentioned above, entrepreneurship has been the subject of several studies and theories, which inspired different entrepreneurial policies. In this chapter, we start by presenting some concepts of entrepreneurship. We also review the concepts of entrepreneurship policies, organized in distinct typologies, mentioning the entrepreneurship policies that were promoted by European and Portuguese policy makers.

2.1. Concepts of Entrepreneurship

The definition of entrepreneurship is not consensual. In this chapter, three approaches to the concept of entrepreneurship will be presented: the economic, the psychological and the corporate management perspectives.[1]

2.1.1. The economic approach

The first economists to use the term entrepreneurship were Richard Cantillon (1730), Jean Baptiste Say (1816) and John Stuart Mill (1848) (in Herbert and Link, 1988). The first author identifies the entrepreneur as an individual who is willing to bear the personal risk of a business venture, also considering the entrepreneur as someone who engages in exchanges for profit and who exercises business judgements when facing uncertainty (Herbert and Link, 1988). The concept proposed by Cantillon would later be widened by other author, Jean-Baptiste Say.

Say defines entrepreneurship as the way of creating value by moving resources out of less productive areas and into more productive ones, stressing the importance in the ability of the entrepreneur to allocate resources to turn its business into a profitable one (Sobel, 2008).

John Stuart Mill defines the entrepreneur as the person who assumes both the risk and the management of a business. The author distinguishes himself from Cantillon, making a division between the entrepreneur and a business owner. The last agent does not

[1] For the topic of entrepreneurship concepts, Duarte (2008) offers an extensive literature review, including some other perspectives that are not mentioned because they are not relevant for this work.

participate in day-to-day operations (Sobel, 2008). The author also states that a crucial difference between the entrepreneur and a manager is the fact that the entrepreneur has to bear and manage risk (Cunningham and Lischeron, 1991).

In the following discussion, three additional ways of defining entrepreneurship will be analyzed. Kirzner, Knight and Schumpeter have different concepts of the term and their perspectives are going to be explained and compared with each other.

Entrepreneurship as opportunity identification

Kirzner (1973, 1997) refers to entrepreneurship as the facility of awareness, or alertness, to profit opportunities that exist in a world of disequilibrium (in Klein *et al.*, 2010).

The alertness to profit opportunities is provided by market information and it is through the interpretation of that information that the entrepreneur defines his targets and how to should pursue them. Kirzner argues that the value of the entrepreneur is to take advantage of unexploited profit opportunities that emerge from the misallocation of resources (Chell, 2008).

Landström (2011) also states that the entrepreneur, as conceived by Kirzner, searches for imbalances in the market system and tries to coordinate resources in a more effective ways, leading to a new equilibrium. These imbalances are, for example, associated with the asymmetry of information.

In other words, the entrepreneur takes advantage of market failures. In taking advantage of this kind of events, the economy approaches a situation of equilibrium. Kirzner defends that the role of the entrepreneur is to achieve the kind of adjustments that will move the economic markets toward the equilibrium state. Also, Kirzner does not see the possession of capital as main condition for being an entrepreneur (Herbert and Link, 1988).

Entrepreneurship as a judgemental decision making

Knight (1921) (in Klein *et al.*, 2010) describes entrepreneurship as a judgemental decision making about investments under uncertainty. Knight's concept puts substantial emphasis on the role of constant change in the entrepreneur's life. According to him, if

change is predictable, there is no opportunity for profit because it is through uncertainty that business opportunities emerge (Landström *et al.*, 2012).

Knight distinguishes risk and uncertainty, sustaining that some forms of risk (systematic risk) are associated with known probability distributions. This probability is measured by the number of times a single individual was exposed to the same risk (Herbert and Link, 1988). In other words, the entrepreneur associates an entrepreneurial opportunity to a probability measured by his/her previous experiences or based on the practices of others.

The perspective of Knight is different from Kirzner's. Although bearing risk is a common point, Knight states that an entrepreneur has to possess capital and to have the skill to measure uncertainty (Foss, 2005).

Casson (1982) sees the entrepreneur as someone who specialises in taking judgemental decisions. This author defines a judgemental decision as a situation where individuals acting under similar circumstances make different decisions. These different decisions are taken accordingly to private information and available public information (Chell, 2008).

When Casson uses the terms public and private information, he makes the same distinction between risk and uncertainty that Knight made. When information is public and available to all the market players, they face the same, known risk. His private thoughts and information are the ones that the entrepreneur has doubts of being right or wrong because the author is referring to his judgement (Chell, 2008).

Entrepreneurship as innovation

Schumpeter (1934) defines the entrepreneur as an innovator; an agent that disturbs the common patterns of resource allocation through bold, creative action (Klein, 2010). The author refers to the entrepreneur as the main actor in economic development by introducing new goods or methods of production (Sobel, 2008).

This process of introducing new goods or services to the market is the essence of economic development. This is defined by Schumpeter as "creative destruction", where entrepreneurs through the creation of something new, destroy something old by making it obsolete (Herbert and Link, 1988). In other words, entrepreneurship is described by

Schumpeter as the force that prevents the economy to stay in a stationary state, as proposed by the neoclassical approach (Ricketts (2006) in Casson, 2006).

Schumpeter is also the first economist to treat innovation as an endogenous process where the entrepreneur leads the economy away from equilibrium positions (Landström *et al.*, 2012).

Schumpeter's and Kirzner's perspectives are different: Schumpeter says that the entrepreneur creates disruption in the market through innovation, whereas Kirzner says that the entrepreneur explores market failures and helps the market to reach equilibrium (Klein *et al.*, 2010).

Leibenstein's perspective is similar to Schumpeter's. The author defends that the entrepreneur's role is to coordinate the firm's assets in order to create or carry on an activity that fills in for market deficiencies. Leibenstein refers to this type of entrepreneurship as "new type" or Schumpeterian entrepreneurship, which is crucially responsible for assuming the functions of gap filler and input completer (Leibenstein, 1968).

The Schumpeterian definition of entrepreneurship will be reviewed below, associated with the management approach to the concept of entrepreneurship.

2.1.2. The psychological approach

This approach is related to the personality of the entrepreneur. It is argued that to be a successful entrepreneur, certain personality traits, values and beliefs must be present (Cunningham and Lischeron, 1991). The psychological side of the entrepreneur is here emphasised, highlighting the personal characteristics of the entrepreneur.

There are divergent opinions concerning the relation between the personal values of the entrepreneur and the entrepreneurial activity. In this subsection some perspectives that corroborate the relation between personality and entrepreneurship will be presented. This school of thinking believes that entrepreneurs are people with an ethical sense and have social-oriented behaviour. But there is also the stereotype that entrepreneurs and other business men pursue relentlessly their goals, and do not care how they are achieved (Cunningham and Lischeron, 1991). Lachman (1980) states that people who share the same personal traits as entrepreneurs are more likely to engage in

entrepreneurial activity than people who do not possess those characteristics (in Koh, 1996).

This subsection analyzes the relation between entrepreneurs and personality traits, which are the risk-taking propensity, the need for achievement, the locus of control and the tolerance for ambiguity.

The risk-taking propensity

The relation between risk and entrepreneurial activity has been studied by some of the most well-known economists. John Stuart Mill states that the most important characteristic of an entrepreneur is his ability to bear and calculate risk (in Cunningham and Lischeron, 1991). In Mill's opinion, the ability of the entrepreneur to bear risk is what distinguishes him or her from a manager (Brockhaus, 1980 in Birley, 1998).

The degree of risk aversion is related to the need for achievement. Entrepreneurs prefer intermediate risk opportunities because they present challenges whose goals are reachable. Those challenges are pursued by entrepreneurs with high need for achievement. On the other hand, people with high levels of failure avoidance pursue both low risk goals because they are easier to reach, and extremely high risk goals since inability to obtain success is more easily explained (Atkinson, 1957 in Shane, 2000).

Moreover, the risk faced by the entrepreneur is not just the risk of a business to go wrong. When an individual starts his own firm, he has also to manage the influence this decision might have on his career, his family and his psychological health (Liles, 1974 in Birley, 1998).

The need for achievement

The identification of this personality trait of the entrepreneur was earlier proposed by McClelland (1961). The author distinguished entrepreneurs as "high achievers" since they have a drive to achieve goals in relation to a set of standards, trying to accomplish some defined targets. Typically, entrepreneurs want to take personal responsibility for finding solutions to problems; hate situations in which they succeed by chance and like to have fast feedback, so that they can decide if there is something that needs to change in their business or not. As remarked before, they prefer intermediate risk situations,

because those situations present a challenge and are not beyond their capabilities (in Chell, 2008).

The relation between need of achievement and the entrepreneurial activity is confirmed in subsequent studies. Komives (1972) finds that high levels of need of achievement are a common characteristic in a sample of 20 successful high-tech entrepreneurs. Smith and Miner (1984) find that there is a positive relation between high needs of achievement among entrepreneurs and the growth rate of their companies (Begley and Boyd, 1987 in Birley 1998).

However, there is some criticism concerning the need of achievement as a personality trait of an entrepreneur. The need of achievement of a person may not be always related to the will of starting a business. The person may want to achieve a certain job position or status in his own community and that has nothing to do with entrepreneurship. That is why need of achievement may be a weak predictor of an individual's tendency to start a business (Cunningham and Lischeron, 1991).

Locus of Control

The concept of the locus of control as a personal trait was first introduced by Rotter, (1966) in Chell (2008). The author states that people with an internal locus of control are those who believe that they are in control of their own destiny, whereas people with an external locus of control believe that factors outside of their control, such as more powerful people and luck, have a dominant effect on their lives (Chell, 2008).

The connection with entrepreneurial activity is made in several studies (Rotter, 1966 in Chen, 2008) that relate the locus of control between firm founders and the rest of the population. Studies show that firm founders are more internal than the rest of the population. Brockhaus (1982) found evidence that owners of surviving firms have a higher internal locus of control than those who have failed (Begley and Boyd, 1987 in Birley, 1998).

Nevertheless, there are studies that do not find evidence of internal locus of control as a personal trait for an entrepreneur (Babb and Babb, 1992). This conclusion comes mostly from the attempt to compare firm founders and firm managers, despite the fact that there

are firm managers that can also be highly entrepreneurial, for example the manager of a recently founded firm, characterised as high-technologically advanced (Shane, 2000).

Tolerance for ambiguity

Tolerance for ambiguity is a personal trait that has been connected to entrepreneurs by some authors. Budner (1982) defines it as the propensity to see situations without clear outcomes. Schere (1982) argues for the importance of the concept because the challenges and the results of a start-up company are unpredictable (in Shane 2003).

Tolerance for ambiguity is also related to entrepreneurship because individuals with a high level of tolerance for ambiguity find ambiguous situations as challenging and strive to turn an unpredictable situation and have a good performance (Koh 1996).

Begley and Boyd (1987), Schere (1982), and Miller and Drodge (1986) find that firm founders have higher levels of tolerance of ambiguity than managers. Sexton and Bowman (1986) are also in line with these authors perspective, identifying tolerance for ambiguity as a distinguishing psychological characteristic, which enables to distinguish between firm founders and managers (in Shane 2003).

In Section 2.2.3 we will systematize the relevance of the above concepts for entrepreneurship policy making, highlighting common features and main divergent aspects. Before this, in the next section, we will bring in a discussion on entrepreneurship policies.

2.1.3. Corporate entrepreneurship

In the previous subsections, we analysed the contribution of some economists to the definition of entrepreneurship, being focused the personality traits of an entrepreneur. Now, the perspective of corporate management will be studied.

Corporate entrepreneurship does not have a unique definition. Zahra (1991) defines Corporate Entrepreneurship as the formal or informal activities that take place at the corporate, division, functional or project levels, whose goal is to create new businesses in established economies, through production, process and market innovations (Morris *et al.*, 2007). Corporate entrepreneurship also bridges the gap between science and the marketplace (Hisrich *et al.*, 2008).

Guth and Ginsberg (1990) state that corporate entrepreneurship occurs through the creation of new ventures within existing organizations or the transformation of those organizations through strategic renewal. Sharma and Christman (1999) define corporate entrepreneurship as the process that creates a new organization, or as innovation within organizations (in Morris *et al.*, 2007).

A relevant factor within the corporate entrepreneurship framework is the importance of competition, as already stressed by Schumpeter. The process of creative destruction describes competition between companies, when they try to turn obsolete the products of other companies. To invest in new products, companies have to feel the pressure to innovate.

In this era of hyper competition, the need for new products and for implementing the entrepreneurial spirit makes companies even more attracted to develop an entrepreneurial corporate environment (Hisrich *et al.*, 2008). This transformation of the company can also occur by the inability or the unwillingness to adapt to market transformations (Tushman *et al.* (1986) in Kuratko (2007)). So, corporate entrepreneurship needs to be supported by proactive market orientation and flexible management practices (van Wyk and Adonisi, 2012).

Companies need to respond to the threats that they face. Competition between firms creates pressure on the quality of their products and on satisfying the customers' needs. This probably induces the company to spend more on Research and Development (R&D) so that its products meet market needs and gain competitive advantage. Thus, the company develops strong efforts in order to ensure that the strategy followed is the right one (Ahuja and Lampert, 2001).

Corporate entrepreneurship takes two different forms: corporate venturing or strategic entrepreneurship (Kuratko, 2007). Corporate venturing refers to the creation, addition and investment in new businesses. Corporate venturing can be internal, cooperative or external. The internal form is characterized by the introduction of new products produced by the company. So, internal cooperative corporate venturing happens when a company, alongside its partners, promotes entrepreneurial activity. External corporate venturing refers to entrepreneurial activity that the company purchases from others (Morris *et al.*, 2007).

A company that engages in a process of corporate venturing is seeking to (Kuratko, 2007):

- Exploit underutilized resources;
- Extract further value from existing resources;
- Apply competitive pressure on internal suppliers;
- Spread the risk and costs of product development;
- Divest noncore activities.

Miles and Convin (2002) state that firms engage in corporate venturing for three reasons: to build an innovative capability so that the company can be more entrepreneurial and more prone to change; to extract greater value from the existing competencies or to expand the firms' operations and the knowledge in areas of interest; and generate quick financial returns (Morris *et al.*, 2007).

The other form of corporate entrepreneurship is strategic entrepreneurship where the goal is to innovate in the pursuit of competitive advantage, which involves opportunity-seeking and advantage-seeking behaviors (Ireland *et al.*, 2003). Here the main goal is to achieve and maintain a competitively advantageous position for the firm. This type of corporate entrepreneurship can assume the following forms (Morris *et al.*, 2007):

- Strategic renewal;
- Sustained regeneration;
- Domain redefinition;
- Organizational rejuvenation;
- Business model reconstruction.

Strategic renewal is a transformation of a firm's scope of business or strategic approach (Zahra, 1996) and occurs when a firm changes the way it competes, redefining the relationship established with its competitors (Cavin and Miles, 1999 in Saéz-Martinez *et al.*, 2011). In other words, it is the transformation of organizations through the renewal of their key ideas (Guth and Ginsberg, 1990 in Morris *et al.*, 2007). Strategic renewal is

not just a change of strategy; it also involves repositioning efforts in order to change its perspective concerning its reference market (Morris *et al.*, 2007).

As the name suggests, sustained regeneration refers to a type of entrepreneurial activity where a company introduces new products or enters new markets in a consistent way. This type of entrepreneurial activity is more common in markets whose products have short life-cycles, changing technological standards or segmented product categories (Morris *et al.*, 2007).

Domain redefinition is an entrepreneurial activity where a company decides to be the first mover in an unknown or unexploited market. This move is caused by radical innovations where these new products are viewed by consumers as highly replaceable, yet completely different from other products ((Kelley *et al.*, 2005 in Morris *et al.*, 2007).

Organizational rejuvenation refers to the process where a company tries to sustain or improve its competitive advantage by changing its internal mechanisms and capabilities (Covin and Miles, 1999). A successful organizational rejuvenation process enables a firm to reach a competitive advantage without changing its strategy, product offers or markets (in Morris *et al.*, 2007).

Business model reconstruction happens when a firm tries to relate the design or redesign of its business model in order to increase its operational efficiencies or differentiate itself from industry competitors, which is valued by the market (Kuratko and Audretsch, 2009).

2.2. Entrepreneurship Policies: a discussion

2.2.1. Policies of entrepreneurship: a theoretical perspective

Lundström and Stevenson (2005, pp. 45-46) define entrepreneurship policy as a policy measures taken to stimulate entrepreneurship, aimed at the pre-start, start-up, and early post start-up phases of the entrepreneurial process, designed and delivered to address the areas of "Motivation", "Opportunity" and "Skills", as defined in Lundström and Stevenson's book. The primary goal of entrepreneurship policy was to encourage more people to consider entrepreneurship, to move into the nascent stage and proceed into the start-up and early phases of a business.

The areas of "Motivation, Skills and Opportunity" deserve substantial attention from Lundström and Stevenson. These authors state that there are higher levels of entrepreneurial activity in an economy if people see entrepreneurship as a real career option and are willing to explore that way of life. Moreover, they must have access to opportunities in order to gain the knowledge, skills and ability to pursue such an endeavour and (Lundström and Stevenson, 2005).

Lundström and Stevenson also defend that it is not enough to create the right conditions for the emergence of start-up entrepreneurs. It is also crucial to help start-ups in the initial survival and growth phases, when they are already competing in the market. The authors define a 42 month period for an effective entrepreneurial policy because new firms are very vulnerable in the first three to five years (OECD, 2002) and high growth firms usually start their development in their early years of activity. The 42 month limit period is also an idea shared by the GEM research team (Lundström and Stevenson, 2005).

The definition of entrepreneurship policy is often confused with Small and Medium Enterprises (SME) policy. Audretsch (2004) provides a distinction for these two types of policy. The author defines SME policies as those implemented by national governments with the purpose to promote SME, like fiscal incentives and access to finance. In contrast, an entrepreneurship policy has a wider focus, where the focus of the policy is the environment that influences the entrepreneurial activity, encompassing subjects like education, trade and immigration (Audretsch, 2004).

Hölzl (2010) also offers a way to distinguish both policies. SME policy only focuses on the needs of start-ups and SMEs, and its goal is to level the size-related disadvantages of small firms. Entrepreneurship policy focuses not only on that kind of companies, but also aims to provide the right economic environment for any firm to succeed, and the size of that company is not the relevant criterion (Hölzl, 2010).

2.2.2. Main typologies for entrepreneurial policies

According to Lundström and Stevenson (2005) there are four different types of entrepreneurial policies:

- Entrepreneurship - Extension Policy;

- New Firm Creation Policy;
- "Niche" Policy;
- Holistic Entrepreneurship Policy.

The definition of these types of entrepreneurial policies will help to understand the different areas where entrepreneurial policy making and its different instruments may act in order to promote entrepreneurship as a viable career option.

Entrepreneurship - Extension Policy

The *E-extension policy*, mainly concerned with offering better conditions for new entrepreneurs, has the goal of improving the access to information for starting-up a business. Taking into account the concept of entrepreneurship policy above described, this policy stimulates "Opportunities". It reduces asymmetries of information, making it easier for entrepreneurs to obtain relevant information to start a business. This policy is concerned with the development and emergence of small and medium enterprises (SME), aiming at the creation of new jobs. Within this type of policies, government authorities provide micro-loans and consulting for entrepreneurs (Lundström and Stevenson, 2005).

New firm creation policy

The goal of these policies is to simplify start-up processes by eliminating administrative and regulatory barriers to business entry and exit, so that there can be a higher number of start-ups. The objective of this type of policy is to reduce the costs and time of creation of firms.

This type of policy involves economic, legal and fiscal changes in a country's law. Some of these changes are: less harsh bankruptcy laws, reduction of the tax burden of start-ups, and fewer business registration steps (Lundström and Stevenson, 2005).

"Niche" target group policy

The objective of these policies is to increase entrepreneurial activity among specific groups of the population. In Lundström and Stevenson's book, two types of specific

groups are considered as the *niche groups*: the under-represented groups in business ownership levels (Type 1) and technologically-oriented researchers and experts (Type 2). These groups face some barriers: concerning the first, women and ethnical minorities may face social prejudice and economic struggles; regarding the second, technological-based businesses face high uncertainty levels. Different policy measures can be taken in order to enhance entrepreneurship in those two different groups: implementation of entrepreneurial development programmes for women entrepreneurs and ethnic minorities; funding for the incubation of new firms, pre-seed funding for R&D that can be commercialized and national business plan competitions (Lundström and Stevenson, 2005).

Holistic entrepreneurship policy

Holistic entrepreneurship policy incorporates all the three policy types: reducing barriers to business entry ensures that the small business support system responds to the needs of nascent and new entrepreneurs making financing available for start-up businesses. It also promotes entrepreneurship by integrating entrepreneurship in the education system and by the creation of a positive climate for start-up initiatives (Lundström and Stevenson, 2005).

The tendency nowadays is to define an entrepreneurship policy as a horizontally oriented policy. This means that there is not just the concern to help everybody to create their own business and job, and to provide assistance through the first phases of growth. There is also a government obligation to make sure that the legal system is aligned with entrepreneurs' needs, providing the bridge between technology owners and market demand and making sure that entrepreneurship is a part of the education system (Hölzl, 2010).

2.2.3. The contribution of the entrepreneurial concepts to policy making

As already mentioned in the Introduction, the goal of this dissertation is to make a comparative analysis of European and Portuguese entrepreneurial policies. The concepts studied in the previous sections help demystifying some previous conceptions about being an entrepreneur.

When studying the importance of the psychological characteristics of an individual considering an entrepreneurial career, it was observed that a risk taking propensity is one of the most important personality traits. However, there is a misconception associated to the idea that entrepreneurs are extreme risk takers (Morris, 2007). In fact, most entrepreneurs prefer situations involving an intermediate level of risk. As it was mentioned, one of the main areas of entrepreneurial policy is reducing risk through the reduction of entry, early stage growth and exit barriers (Lundström and Stevenson, 2005). The reduction of risk can be achieved by legislators providing better conditions to entrepreneurship, through the lift of the tax burden and making easier for a company to start-up a business (or smoothing costs associated with closing business).

Another stereotype that exists in the characterization of the entrepreneur is that there is a standard profile for entrepreneurs which is totally innate and cannot be stimulated (Morris, 2007). This conception has some truth because it was shown that there is a positive relation between people with a high need for achievement and a high internal locus of control, and people who start their own business. However, it has also been proved that entrepreneurial activity can be positively influenced by the creation of an environment that promotes the start up of new businesses. Promoting this environment must be a fundamental element in the educational system of each country at the secondary level and in universities (Lundström and Stevenson, 2005).

To follow a career as an entrepreneur, common sense tells us that the typical entrepreneur is lucky in his activity and, if he has a stable economic situation and money to invest, he can be successful (Morris, 2007). Although that might be true, it is also a fact that there is merit to this agent in the identification and exploitation of opportunities (in Klein *et al.*, 2010). The identification of market failures and their full exploitation is the essence of entrepreneurship. Capital is also an important factor as it is recognized by public policy when it finances start-up businesses. However, this is not enough because if entrepreneurs have capital to invest, but there is inability to reach the needs of the market, its economic wealth is useless. This is why there are programmes, alongside start-up financing, that make the connection between technology-based industries and the market, incubators an example (Lundström and Stevenson, 2005).

This relevance will be evident in the next section when it will be reviewed the entrepreneurship policies and initiatives launched by European policy makers in the twenty-first century. As we are going to notice, some of the situations above explained correspond to some of the policies that will be described, which are the basis of entrepreneurship strategies in Europe, launched in this century.

2.2.4. European entrepreneurship policies

Audretsch *et al.* (2009) consider that public policy makers within the EU should develop instruments that create conditions to support entrepreneurial activities and lead not only to economic and social dynamics but also to cultural change. Within this context a perspective about the historical framework of European entrepreneurship policies will be provided. The goals and results that some EU policies achieved, or tried to achieve, are detailed below (see also Table 1).

Table 1: EU entrepreneurship policies since 2000

Year	Policy	Main goal
2000	Lisbon Strategy	Increase competitiveness and achieve sustainable economic growth, through the creation of the proper conditions for the emergence of start-ups.
2000	European Charter for Small Enterprises	Satisfy the needs of small enterprises.
2003	Green Paper "Entrepreneurship in Europe"	Turn the European society into a more entrepreneurial one, which goal is to increase the number of start-ups
2010	Europe 2020	Get out of the crisis by achieving sustainable, smart and inclusive growth.

In March 2000, the European Council launched the *Lisbon Strategy*, which encompassed the conviction that entrepreneurship was a crucial tool to promote innovation, growth and employment. In the past, it was believed that large firms would be the dominant force in the European economy (European Council, 2000). However, globalization exposed some of the weaknesses of Europe, especially in the industry sector, where production was being shifted to countries with lower production costs. Low technological levels were still a concern, as Europe was behind Japan in the industry sector (European Commission, 2003). Besides unemployment and the gap that existed in technology, the underdeveloped service sector and the low level of feminine

and elderly participation in the labour market, were also concerns in 2000 (Audretsch *et al.*, 2009). The goal of the strategy was to overcome those limitations until 2010.

The EU focused on increasing competitiveness and achieving sustainable economic growth. When the Council met in Lisbon, it tried to reach these goals through the building of an "Information Society for all" and through the modernization of the European Social Model. The first goal consisted in the creation of the proper conditions for the emergence of start-ups and economic reforms for a more efficient internal market. The modernization of the European Social Model focused on reforming education, so that people could pursue better job opportunities, decreasing the level social exclusion (Audretsch *et al.*, 2009).

In the same year, the European Commission launched the *European Charter for the Small Enterprises*. This initiative focused on small enterprises as the main drivers of innovation, employment and social and territorial cohesion in Europe (European Commission, 2000).

By approving the *European Charter for the Small Enterprises*, the European Commission committed to follow ten action lines to satisfy the needs of small enterprises (European Commission, 2000):

1. Promote education and training for entrepreneurship;
2. Stimulate cheaper and faster start-ups, where the start-up costs should be the cheapest in the world;
3. Provide better legislation and regulation, where small enterprises should receive special attention in terms of their juridical obligations;
4. Promote availability of skills, where the Commission should make sure that training institutions are providing the education and the skills required for the needs of small enterprises;
5. Improve online access, where companies could receive counselling or to simply obtain online information in a cheaper and faster way.
6. Beneficiate more from the single market;
7. Adapt taxation and financial matters to the needs of small enterprises;

8. Strengthen the technological capacity of small enterprises;
9. Stimulate successful e-business models and top-class small business support;
10. Develop stronger, more effective representation of small enterprises' interests at the EU and national levels.

In 2003, the *Green Paper "Entrepreneurship in Europe"* was launched, focused on the role of entrepreneurship in the European business context. Throughout the document, policy measures that should be taken in order to enhance entrepreneurship were explained. The main objective was to turn the European society into a more entrepreneurial society (European Commission, 2003).

European citizens considered that the administrative conditions to start a company were still complex and felt that there was not enough financial support to start their own business. In order to respond to such worries, the Green Paper proposes ways of reducing the costs to create a company and the creation of an institution that helps entrepreneurs in that process. To complement these two initiatives, the EU should promote the risk sharing between private and public sector in order to increase the access to financial support and promote education so that people can be aware of real career opportunities, taking their own skills into account (European Commission, 2003).

To help the transformation of an idea into a profitable business, the Green Paper states that bureaucracy should be diminished; fiscal measures adequate to start-ups should be built; the growth and survival of companies must be promoted, namely by facilitate the access to financial support and helping companies to internationalize. Moreover, the initiative states the need to pursue a more entrepreneurial society through the building of more positive attitudes to entrepreneurial spirit, stressing the role of entrepreneurship as a way to reach social goals, such as employment and social cohesion (European Commission, 2003).

However, these initiatives, especially the Lisbon Strategy, were not very successful. Five years after the Council meeting in Lisbon in 2000, it was clear that the stated goals were not going to be achieved. Hence, it was time to build a new and more down-to-earth strategy that would turn Europe into a more attractive place to work, invest in knowledge and innovation for growth, and create job opportunities (Audretsch *et al.*, 2009).

It was in this context that the Europe 2020 strategy emerged (European Commission, 2010). The goal of this strategy is also to produce a way out of the financial and economic crisis that started in 2008. According to the European Commission, only through a smart, sustainable and inclusive growth will be possible to escape from the crisis context. ”Smart growth” is identified by the European Commission as the development of an economy based on knowledge and innovation; “sustainable growth” is associated with the need to promote a more resource-efficient, greener and more competitive economy; and, finally, “inclusive growth” regards fostering a high-employment economy delivering social and territorial cohesion (European Commission, 2010). These priorities are the same as the ones mentioned at the end of the last paragraph. In order to achieve the described goals, the European Commission defined the following targets that should be reached until 2020 (European Commission, 2010):

- The employment rate of the population aged from 20 to 64 years old should be at 75%;
- The EU and each one of the state members should invest at least 3% of the Gross Domestic Product (GDP) in R&D;
- Greenhouse gas emissions should be reduced by 20% compared to 1990, the share of renewable energy sources in the final energy consumption should increase by 20% increase and energy efficiency should rise 20%;
- The rate of early school leavers should be reduced to 10% and 40% of the population aged from 30 to 34 should have a degree; and
- 20 million people should be lifted out of a poverty situation.

The strategy is made of seven different flagship initiatives to pursue the goals and targets already mentioned. The “Innovation Union” is one of the most important ones, and its goal is to improve framework conditions and the access of research and innovation to finance so that more ideas can be turned into businesses that can create growth and jobs. This initiative is, of all the flagship initiatives, the one that describes the relation between entrepreneurship and economic growth of a particular country or the economic growth of all the European Union (European Commission, 2010).

2.2.5 Entrepreneurship policies in Portugal

In this section an analysis of the entrepreneurial policies that were launched by Portuguese public authorities and the evaluation of the Global Entrepreneurship Monitor to the structural conditions of entrepreneurship in Portugal will be detailed.

Portuguese Entrepreneurial Policies and the Actors in the National Innovation System

The entrance of Portugal in the EU (1986) provided funds for the country development. This access to European funds allowed the development of the Portuguese National Innovation System through the programmes *Ciência* and *Programa Específico de Desenvolvimento da Indústria Portuguesa* (PEDIP I). In the 1990s some more initiatives like *Intervenção Operacional Ciência e Tecnologia* PRAXIS and PEDIP II were launched, which had the goal to support incubators and stimulate entrepreneurship. Other initiatives emerged such as the *Programa Operacional da Economia* (POE), *Programa Operacional da Ciência, Tecnologia e Inovação* and the *Programa Operacional para a Sociedade da Informação* (POSI) (Duarte, 2008).

Nowadays, QREN is the main public programme that aims promoting Portuguese social and economic cohesion through the upgrade of knowledge, science, technology and innovation, and hence promoting a sustainable economic growth (QREN, 2012). This programme integrates three different incentive systems to promote (Duarte, 2008):

- R&D and firms' technological development;
- Innovation;
- The qualification and internationalization of SMEs.

As it was mentioned above, the Portuguese National Innovation System was reorganized when Portugal started receiving EU funds. This system is composed by different organizations that play different roles in the creation of better conditions for the emergence of start-ups (*Unidade de Coordenação do Plano Tecnológico*, 2005):

- Public Research Laboratories, which goal is to work within the context of the scientific and technological policies adopted by the Portuguese government, giving expertise knowledge to support policy making;

- Technological Centres, which objective is to promote knowledge flows between industries and firms;
- Technological Parks that promote scientific, technological and industrial development through the flows between firms and universities;
- Incubation Centres, which goal is to help in the development of start-ups;
- Associated Laboratories, that work with the government in order to define scientific and technological programmes;
- Knowledge Transfer Centres;
- Innovation Relay Centre Network, that interacts with the network of SME support for an easier transfer of technology between firms;
- New Technological Centres, that accelerates the incorporation of new technologies in the industrial processes; and
- Armed Forces Investigation Units.

The role of Portuguese public authorities is to promote the link between these organizations in order to create innovation and knowledge at the economic and social level (*Unidade de Coordenação do Plano Tecnológico*, 2005).

After describing the entrepreneurship policies that took place in Portugal since the entrance of Portugal in the EU, we now proceed to a critical systematization of these policies, also supported by some statistical analysis. A mapping of Portuguese policies, in comparison with another European country, will be implemented, aiming at identifying the areas where entrepreneurship policies should mainly operate.

3. Mapping entrepreneurship policies in Portugal and in the EU

In the previous section, the most important entrepreneurial policies in the European Union and in Portugal were identified, being mentioned their goals and the way that public authorities were trying to achieve them.

In order to bring more clarity and rigour to the comparative analysis of those policies, we propose to implement their mapping, based on a systematic registering procedure.

Our information will be gathered from GEM, which records in a regular way the evaluation made by national experts in each country concerning the development of entrepreneurship in the respective economy. Another source of information is the annual report made by the World Bank (2013), named *Doing Business*. This report measures the easiness for a local entrepreneur to run a small or medium-size business: it measures and tracks changes in regulations affecting 11 areas in the life cycle of a business, from which we will select and mentioned later the relevant ones to this dissertation.

Previously, we will develop a statistical analysis of the evolution of the main indicators on entrepreneurship in Portugal, comparing with European innovation driven economies.

3.1. Statistical Analysis of Entrepreneurship in EU

In this section we intend to provide a comparison of entrepreneurship indicators across the EU, focusing on the European innovation driven economies,[2] where Portugal is included. In fact, and according to the GEM (2010), in spite of the development of entrepreneurship policies in Portugal and the work made by authorities, entrepreneurial activity is still not a career option that the Portuguese follow, being that one of the reasons why this subject was chosen as a theme for this thesis.

[2] Innovation driven economies: Australia, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Iceland, Israel, Italy, Japan, the Netherlands, Norway, Portugal, Slovenia, Spain, South Korea, Sweden, Switzerland, United Kingdom and USA (GEM, 2012).

Inspired in the Global Entrepreneurship Monitor, we will select statistical information at different levels. We start by considering external determinants of entrepreneurship (or input indicators) either linked with financial conditions to start a new business or related with infrastructures that are relevant for the entrepreneurial activity as well as some firms' demographic indicators that may give a perception of the results of entrepreneurship policies (output indicators).

As input indicators, we will consider variables such as the measurement of the efficiency of the financial conditions to start a business, based on the opinion of experts about the access to financial sources, the bureaucratic characteristics of the start-up process and the tax burden. The assessment of the entrepreneurial supporting infrastructures includes the evaluation of the role played by incubators and science parks, while the quality of communication networks is assessed in terms of their importance to the emergence of the entrepreneurial activity. Finally, the output indicators include information about firms' demography such as firms' birth rates by sector of activity; proportion of entrepreneurs aged 18-64; qualification of entrepreneurs, etc.

After collecting this information we will use descriptive statistics to portrait the entrepreneurial activity in Portugal and other European countries.

The data used in this statistical analysis are collected from the GEM and from Eurostat.[3] In order to keep a fair evaluation of entrepreneurship in Portugal, we will focus on European innovation driven economies, as defined by the GEM.

3.1.1. Entrepreneurship conditions in Portugal (input indicators)

As mentioned above, the evaluation of experts about the easiness to start a business, either measured by financial or legal reasons and other factors that can provide help to the development of small businesses, is going to be evaluated in this subsection.

The GEM defines a national team per country, where it is made a survey called National Experts' Survey (NES) where nine Entrepreneurial Framework Conditions (EFCs), that

[3] There are tables where some innovation driven economies are not mentioned due to lack of information about those countries in the Eurostat statistics.

are factors that can influence the climate for entrepreneurship and the level and nature of this activity, are evaluated by national experts. The nine EFCs are (GEM, 2012):

- Entrepreneurial Finance (1): refers to the availability of financial resources, equity and debt, for new and growing firms, including grants and subsidies;
- Government Policy (2a and 2b): mentions the extent to which government policies are size neutral or encourage new and growing firms;
- Government Entrepreneurship Programmes (3): refers to the extent to which regulations and taxes encourage the growth of new firms;
- Entrepreneurship Education (4a and 4b): measures the extent to which the promotion of entrepreneurial abilities is incorporated in the education and training system;
- R&D Transfer (5): evaluates the extent to which R&D leads to new commercial opportunities and if it is available for start-ups;
- Commercial and Legal Infrastructure (6): evaluates the presence of commercial, accounting and other legal services and institutions that encourage entrepreneurship;
- Entry Regulations (7): measures the market dynamics and openness;
- Physical Infrastructure (8): measures the access to available physical resources at a non discrimination price for start-ups;
- Cultural and Social Norms (9): that encourage (or do not interfere) new ways of conducting businesses.

The NES questionnaire aims at gathering the views of experts on a wide set of items designed to capture a different dimension of a specific EFC. The evaluation of a set of statements is based on a five-point Likert scale, where 1 means the statement is completely false and 5 means it is completely true (GEM, 2011).

Table 2 presents the NES' results for the EU countries included in the 2011 GEM Global Report:[4]

[4] The 2012 NES results are not available yet.

Table 2: Entrepreneurial Framework Conditions (EFC) for EU countries

	1	2a	2b	3	4a	4b	5	6	7a	7b	8	9
Finland (FIN)	2,6	3,2	2,9	2,7	2,3	2,8	2,6	3,3	2,9	2,6	4	2,7
France (FRA)	2,5	3,1	2,9	3,6	1,9	2,7	2,4	3	3,2	2,1	4,2	2,4
Germany (GER)	3	2,9	2,9	3,6	1,9	2,6	2,9	3,3	2,9	3	3,8	2,6
Greece	1,9	1,9	1,8	2	1,9	2,6	2,1	2,9	3,1	2,2	3,5	2,4
Ireland (IRL)	2,4	2,7	2,6	3.2	2.0	2.9	2,8	3,3	3,1	2,9	3,5	3,2
Netherlands (NET)	**2,9**	**2,5**	**2,6**	**3,1**	**2,9**	**3,2**	**2,9**	**3,6**	**2,6**	**3,3**	**4,6**	**3**
Portugal	**2,9**	**2,5**	**2,1**	**2,9**	**1,9**	**2,9**	**2,6**	**3,1**	**2,9**	**2,4**	**4,1**	**1,9**
Slovenia	2,4	2,4	2,1	2,7	1,8	2,6	2,5	2,9	3	2,5	4	2,2
Spain	2,1	2,1	2,2	2,7	1,6	2,3	2,1	2,6	2,7	2,2	3,5	2,2
Sweden	2,7	2,6	2,6	2,8	2,3	2,8	2,6	3,1	3,2	2,5	4,4	2,9
United Kingdom (UK)	2,3	2,6	3	2,3	2,2	2,6	2,2	3,3	3	3	3,9	3,1
Average	**2,5**	**2,6**	**2,5**	**2,8**	**2,1**	**2,7**	**2,5**	**3,1**	**3,0**	**2,6**	**4,0**	**2,6**
Highest score (country)	GER	FIN	UK	FRA/GER	NET	NET	NET	NET	FRA/SWE	NET	NET	IRL

1 – Entrepreneurial Finance; 2a – Entrepreneurship as a relevant economic issue; 2b – Taxes or regulations are either size-neutral or encourage new and SMEs; 3 – Government Entrepreneurship Programs; 4a – Entrepreneurship Education at basic school; 4b – Entrepreneurship Education at post-secondary levels; 5 – R&D transfer; 6 – Commercial and Legal Infrastructure; 7a – Internal Marker Dynamics; 7b – Internal Market Openness; 8 – Physical Infrastructure; 9 – Cultural and Social Norms.
Source: GEM Global Report (2011).

For most of the EFC categories, Portugal has results that are close to the EU average. The lowest level is registered in the category Cultural and Social Norms (EFC9) and in the Entrepreneurship Education in the Basic School (EFC4a); the highest is scored for the access to Physical Infrastructures by entrepreneurs (EFC8).

In what respect the easiness of accessing credit and effectiveness of the financing instruments (EFC1) that are available for Portuguese entrepreneurs, the experts rank them in a very positive way, giving a 2,9 score that is above average. A positive evaluation is also given to access to commercial and legal infrastructure (EFC6), where science parks and incubators and their role on developing businesses is measured in this EFC.

One of the EFCs that has a lower evaluation in Portugal is the one concerning the governmental support to the entrepreneurial activity, where the tax burden is evaluated (EFC2b). This low score refers that the tax burden in Portugal is not friendly for start-up companies.

3.1.2. Business demography and characteristics of Portuguese entrepreneurs (output indicators)

In this subsection, some statistics concerning firms' demography and entrepreneurs profile will be presented. We start by considering the birth and death of companies in several EU countries (Table 3):

Table 3: Entrepreneurship in Europe: birth and death of firms (2010)

Countries	Firms' births in the EU (number)	Firms' births over population (%)	Firms' deaths 2010 (number)	Firms' deaths over population (%)
Belgium	27969	0,30%	18558	0,20%
Denmark	23266	0,40%	26820	0,50%
Germany	258076	0,30%	235281	0,30%
Ireland	11237	0,30%	31440	0,70%
Spain	242228	0,50%	80317	0,20%
France	376631	0,60%	202274	0,30%
Italy	265060	0,40%	308624	0,50%
Netherlands	77530	0,50%	53170	0,30%
Portugal	103950	1,00%	174589	1,6%
Slovenia	12757	0,60%	9725	0,50%
Finland	28887	0,50%	31598	0,60%
Sweden	50214	0,50%	40687	0,40%
United Kingdom	210955	0,30%	285195	0,50%
EU average	*129905*	*0,48%*	*115252*	*0,42%*

Source: Eurostat (2010).

When considering the proportion of enterprises' births in the population, Portugal is clearly above the average in the EU countries. Focusing on firms' deaths, Portugal has the second highest position in this ranking, both in absolute and relative terms. As it can be seen in this table, there are, on average, more companies being founded than the ones

that do not survive, which is also the case for Portugal. So, there is a bigger struggle to keep a company alive than to create it.

One of the factors that may lead to the poor performance in terms of firms' deaths is the level of education of Portuguese entrepreneurs, as it can be seen in table 4:

Table 4: Level of Education of Entrepreneurs

Countries	All ISCED 1997 levels	Primary and lower secondary education	Upper secondary education	Post-secondary non-tertiary education	First and second stage of tertiary education
European Union	202048	18,65%	27,61%	32,44%	21,29%
Denmark	7433	22,33%	20,76%	16,79%	40,12%
France	22181	22,39%	32,78%	0,00%	44,83%
Italy	37449	35,62%	49,14%	1,93%	13,31%
Portugal	49319	53,07%	23,47%	6,07%	17,40%
Slovenia	2168	4,34%	37,22%	26,66%	31,78%
Sweden	5920	18,28%	37,16%	19,61%	24,95%

Source: Eurostat (2005)

As it can be noticed in Table 4, most entrepreneurs in Portugal have only the primary and lower secondary education, while the proportion that reach a tertiary education degree is one of the lowest in the countries that are mentioned in this table.

In Table 5, we show the proportion of enterprises in each sector of activity and size class:

Table 5: Enterprises by sector and size

	Manufacturing					Services					Construction				
Country	**1-9**	**10-19**	**20-49**	**50-249**	**250+**	**1-9**	**10-19**	**20-49**	**50-249**	**250+**	**1-9**	**10-19**	**20-49**	**50-249**	**250+**
Belgium	83,1	7,0	5,9	3,3	0,8	95,2	2,5	1,5	0,7	0,1	94,7	3,1	1,7	0,5	0,6
Denmark	80,2	8,2	6,7	4,1	0,9	92,3	4,0	2,4	1,1	0,2	90,6	5,8	2,7	0,8	0,9
Finland	82,6	7,4	5,6	3,5	0,9	93,8	3,3	1,8	0,8	0,2	93,3	4,1	1,9	0,5	0,6
France	86,5	5,5	4,7	2,6	0,7	95,2	2,5	1,5	0,6	0,1	94,8	3,0	1,7	>0.1	>0.1
Germany	61,6	20,7	7,8	8,0	2,0	85,8	7,7	4,3	1,9	0,3	83,6	10,8	4,2	1,3	1,4
Ireland	48,0	22,0	15,8	11,1	3,1	90,4	5,3	2,6	1,5	0,2	96,0	2,6	1,0	>0.1	>0.1
Israel	70,8	12,1	9,4	6,5	1,2	85,1	7,9	4,7	2,0	0,4					
Italy	82,0	10,5	5,0	2,1	0,3	96,4	2,3	0,8	0,4	0,1	95,1	3,6	1,1	>0.1	>0.1
Netherlands	82,7	6,9	5,5	4,1	0,8	94,9	2,5	1,5	0,8	0,2	94,9	2,7	1,6	0,7	0,8
Norway	80,4	8,1	6,8	3,9	0,8	94,5	3,0	1,6	0,7	0,1	92,2	4,8	2,3	0,6	0,7
Portugal	82,0	8,7	6,0	3,0	0,4	97,3	1,5	0,8	0,3	0,1	92,6	4,6	2,0	0,6	0,7
Russia	54,0	14,8	14,7	12,1	4,4	76,9	11	7,6	3,9	0,5					
Slovenia	87,4	5,1	3,5	3,3	0,7	95,7	2,5	1,2	0,5	0,1	93,2	4,1	1,9	0,7	0,8
Spain	82,9	8,3	5,9	2,4	0,4	95,2	2,7	1,4	0,6	0,1	92,9	4,5	2,0	0,6	0,6
Sweden	87,4	5,4	3,9	2,6	0,7	96,0	2,1	1,2	0,5	0,1	94,3	3,4	1,8	>0.1	0,5
Switzerland	55,5	19,3	14,0	9,2	2,0	73,3	16	7,4	3,0	0,5	64,4	20,2	11,3	3,8	4,2
United Kingdom	75,9	10,4	7,6	5,0	1,1	90,4	5,2	2,7	1,4	0,3					
Average	75,5	10,6	7,6	5,1	1,2	91,1	4,8	2,7	1,2	0,2	90,9	5,5	2,7	1,0	1,1

Source: Eurostat (2013)

Table 5 shows us that typically, for all European innovation driven economies and considering the above sectors, the large proportion of firms consists in small enterprises with less than 10 employees.

Another important statistics in order to evaluate the entrepreneurial activity in Portugal is the number of people aged from 18 to 64 years old, who are either a nascent entrepreneur or an owner-manager of a new business Total early-stage Entrepreneurship Average (TEA). Being a nascent entrepreneur is, for the GEM, anyone that is actively involved in starting up a business or eventually own or co-own a business, whereas an owner-manager is someone who is currently an owner-manager of a new business. Table 6 gives us the values registered in TEA in several European countries in the year 2012.

Table 6: TEA in several countries, 2012

Country	2012
Belgium	5,2
Denmark	5,4
Finland	6
France	5,2
Germany	5,3
Greece	6,5
Ireland	6,2
Israel	6,5
Italy	4,3
Netherlands	10,3
Norway	6,8
Portugal	7,7
Russia	4,3
Slovenia	5,4
Spain	5,7
Sweden	6,4
Switzerland	5,9
United Kingdom	9
Average	6,2

Source: GEM (2012)

As it can be seen in Table 6, Portugal is one of the innovation driven economies with a better TEA, meaning that more people are an owner manager of a new business or a nascent entrepreneur than in most of the countries above.

In the next section we will briefly introduce the origin of the entrepreneurial policies in EU, and in particular, in Portugal, having in mind the goal of mapping the entrepreneurial policies that will be done in section 3.3.

3.2. The EU Funds

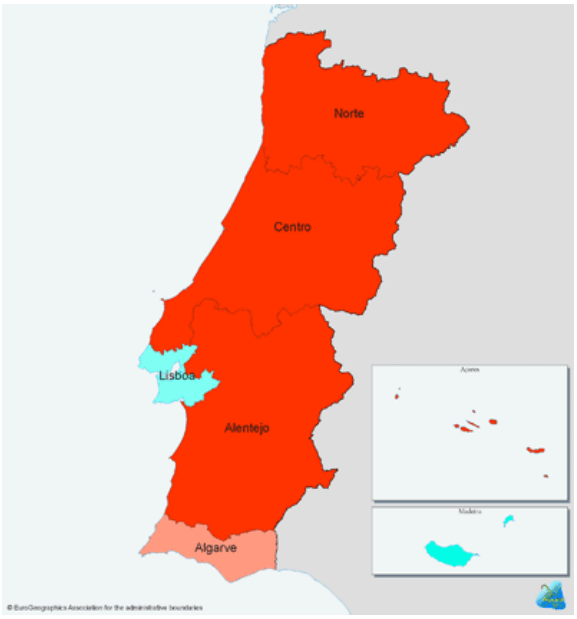
The adhesion of Portugal to the EU meant the reception of Structural Funds that allowed the development of the Portuguese economy. From 1989 to 2006, three QCA were launched and in 2007 the QREN was launched. These initiatives were supported

by the two major funds provided by the EU: the European Regional Development Fund (ERDF) and the European Social Fund (ESF).

The ESF is EU's main instrument for supporting jobs, helping people get better jobs and ensuring fairer jobs opportunities for all EU citizens. The European Commission sets four priorities on how to spend its resources: adaptability of workers, access to employment, vocational training and help disadvantaged groups.

The ERDF aims to strengthen economic and social cohesion in the European Union by correcting imbalances between its regions. This fund finances direct aid to investments in companies to create sustainable jobs, infrastructures linked notably to research and innovation, telecommunications, environment, energy and transport; financial instruments to support regional and local development and to faster cooperation between towns and regions and technical assistance measures. It also acts in regional policy, considering three types of regions: Convergence (objective 1), Regional Competitiveness and Employment (objective 2) and European Territorial Cooperation (objective 3).

Figure 1: Regions in Portugal



Convergence regions
Phasing-out regions
Phasing-in regions
Competitiveness and Employment regions

Source: http://ec.europa.eu/regional_policy/atlas2007/portugal/index_pt.htm

In Figure 1, the Portuguese territory is divided by regions, according to their development levels. The objective for regions *Norte*, *Centro*, *Alentejo* and *Açores* is convergence, which means that the priorities in these regions are to modernise and diversify economic structures and to create sustainable jobs. The region *Algarve* represents a region with a phasing-out situation, meaning that it is moving out of an economic and employment objective region, into a convergence one. The region *Madeira* is a phasing-in region that is moving into an economic and employment objective region. Finally, the region *Lisboa* is the only region under the objective 2, meaning that the priorities are based on innovation and knowledge-based economy, promotion of good quality of the environment and access to transport and telecommunications services of general economic interest.

3.3. Mapping of entrepreneurial policies

A mapping of entrepreneurial policies will be implemented in order to measure the occurrence and significance of each type of entrepreneurship policy/tool. Our goal is to clarify which areas in Portugal should be improved in order to enhance the entrepreneurial activity, offering a policy-oriented guide. More precisely, our purpose is to analyze to what extent distinct national entrepreneurship policies are influencing entrepreneurship activity and what type of policies should be implemented in order to further stimulate entrepreneurship. Our starting point is, once again, the GEM which provides information about types of entrepreneurship policies and their occurrence in several countries, namely in Portugal. As it was mentioned above, this institution evaluates each year the world entrepreneurial activity, and the Portuguese levels of entrepreneurship in each three years. The information collected from the GEM reports will also allow us to measure the results of entrepreneurial policies, particularly for the Portuguese case, and conclude in which areas the Portuguese government should invest more.

3.3.1. The selection of the benchmark country

In order to achieve our goal, the comparison will be made between Portugal and the Netherlands, evaluating the incidence of each type/tool of entrepreneurship policy. The criterion behind the selection of Netherlands was the fact that this is the country with

the most consistent higher rankings amongst EU economies regarding the EFC, represented in the GEM (2012). In fact, and as it is shown in Table 2, the Netherlands is ranked in the first position amongst the EU countries in several EFC: Commerce and Legal Infrastructure, Market Openness, Physical Infrastructure, Entrepreneurial Education and R&D transfer framework.

In Table 7 we present some indicators that allow a brief comparison between Portugal and the Netherlands.

Table 7: Some statistics about Portugal and Netherlands

	Portugal	**Netherlands**	**Sources**
Population (number)	10.541.840	16.730.348	Eurostat, 2012
Age Structure (%)	0-14: 14.8% 15-64: 65.8% 65+: 19.4%	0-20: 23.3% 21-64: 60.5% 65+: 16.2%	INE (Portugal) CBS (Netherlands), 2012
Unemployment Rate (%)	17.3%	5.8%	Eurostat, 2012
Attainders of tertiary education (%)	8.72%	17.3%	OECD, 2012
GDP per capita (PPS)	77	131	Eurostat, 2011
TEA (%)	7.5%	8.2%	GEM, 2011
Necessity-driven TEA rate (%)	1.3	0.8	GEM, 2011
Medium-High Job Expectation (%)	1.8	2.3	GEM, 2011
Perceived Opportunities (%)	17	48	GEM, 2011
Perceived Capabilities (%)	47	42	GEM, 2011
Fear of Failure (%)	49	37	GEM, 2011
Nascent Entrepreneurship (%)	4.6	4.3	GEM, 2011
Owner-Managers in New Business (%)	3.0	4.1	GEM, 2011
Owner-Managers in Established Business (%)	5.7	8.7	GEM, 2011
Entrepreneurial Employee Activity (EEA) (%)	2.6	5.6	GEM, 2011
Private Sector EEA Rate (%)	2.0	3.3	GEM, 2011

It is possible to see that the Dutch population is relatively younger than the Portuguese and has a higher index of college degree graduates. In 2010, according to the OECD database (2012), only less than 10% of the Portuguese population completed the tertiary education, whereas in the Netherlands this percentage is 17.3%.

The lower level of graduation and an older population might be reasons that explain why the TEA is lower in Portugal than in Netherlands. The Netherlands observe a

higher TEA and also a higher GDP per capita comparing with Portugal. Typically, it is observed a negative correlation between TEA and GDP per capita for countries with a low GDP per capita, where people are forced to pursue an entrepreneurial career (GEM, 2011). The proportion of people who are entrepreneurs because they do not have any career option but to start their own business is named Necessity driven TEA.

However, being both countries classified as innovation-driven economies and with a higher development level, the negative relation between GDP and TEA is not verified. According to GEM, economies with higher GDP such as Netherlands possess a greater availability of resources and more affluent markets, stimulating more and better opportunities for entrepreneurship, and therefore showing a higher level of TEA. This fact is corroborated with the great rankings of the Netherlands in the EFCs used by the GEM to evaluate the entrepreneurial activity in each country.

On the other hand, Portuguese people do not feel the urgency of starting up a business as people who are born in Sub-Saharan African countries, for instance, which are countries where necessity driven entrepreneurship is higher. Thus, the Necessity driven entrepreneurship levels registered in Portugal are not sufficient to surpass the overall TEA of the Netherlands. This difference might also be explained by the fact that in countries with higher GDP per capita, there is a tendency for the existence of larger established firms, which are the main employers of these kinds of countries. This is also an explanation for a low level of entrepreneurship activity by necessity motives in Portugal.

The higher levels of the Necessity TEA observed in Portugal are also corroborated by another indicator that shows that our country has lower perceived opportunities. This variable is defined by the GEM as the percentage of people aged from 18 years old to 64 who perceive good opportunities to start a firm in their living area. The relation between the necessity TEA and perceived opportunities might be explained, once more, by the more favourable conditions Dutch population has in order to follow entrepreneurship as a career. In fact, whilst the Dutch chooses entrepreneurship because this option suits their lifestyle and it is the best option for a career, the Portuguese become entrepreneurs because they are obliged when they face the absence of other viable options.

Associated with their solid and high evaluation of the EFCs, the Dutch have also a lower Fear of Failure rate, defined as the percentage of entrepreneurs aged from 18 to 64 years old who find fear of failure as a reason to prevent them to start their own business (GEM 2011). With a higher level of governmental support (as it is clear from the evaluation of the relevant associated EFC), it might be more comfortable to follow an entrepreneurial career in the Netherlands than in Portugal. The negative correlation between perceived opportunities and perceived capabilities is common amongst European countries. Perceived capabilities are defined as the percentage of people aged from 18 to 64 years old who believe that they have the skills and knowledge to start a business. Southern countries, like Portugal, have higher perceived capabilities and lower perceived opportunities, when the inverse is found amongst Northern European countries, like the Netherlands. This relation seems to be explained by cultural reasons (GEM, 2012).

Another cultural difference emphasized by the GEM report is the fact that the Dutch are much more intervenient in entrepreneurial activities for their employer, a concept similar to intra-entrepreneurship. It is important to note that the GEM defines entrepreneurial activity in general as the development of an idea for a new activity and/or the preparation and implementation of a new activity, whereas the particular situation of an entrepreneurial activity for an employer consists in applying those types of activity to the individual's workplace. This last situation corresponds to the dimension defined in GEM as Entrepreneurial Employee Activity (EEA), for which the Netherlands have higher rates. The same occurs for the so-called Private EEA, which is a subset of the EEA describing only the role of employees in entrepreneurial activities for the private sector.

The countries in analysis also show differences regarding the property and management of their own businesses. Amongst the Dutch entrepreneurs there is a higher percentage of individuals that also assume the management of the businesses (both new and established businesses), which corroborates the higher entrepreneurial spirit of Dutch people comparing with the Portuguese.

3.3.2. Entrepreneurial facilities in Portugal and Netherlands

In this section, it will be analyzed some entrepreneurial data related to the EFCs that allow a better understanding of the differences between the two countries. The World Bank alongside the International Finance Cooperation launched the *Doing Business* project that gathers and analyzes quantitative data that measures the regulations that best suit SMEs in their life cycle. The part of this project that concerns the making of this thesis is the one concerning with the ease of doing business. Some variables measure this ease, which will be mentioned according to the EFC that is related to.

According to this report, it is easier to do business in Portugal, being one spot ahead of the Netherlands. In Table 8 we show the ranking of both countries in this study among the 185 economies that participate in the report and according to variables measured:

Table 8: Rank of Portugal and the Netherlands in Doing Business variables

Economy	a)	b)	c)	d)	e)	f)	g)	h)	i)	j)	k)
Portugal	30	31	78	35	30	104	49	77	17	22	23
Netherlands	31	67	89	67	49	53	117	29	12	32	6

a) Ease of Doing Business Rank; b) Starting a Business; c) Dealing with Construction Permits; d) Getting Electricity; e) Registering Property; f) Getting Credit; g) Protection Investors; h) Paying Taxes; i) Trading Across Borders; j) Enforcing Contracts; k) Resolving Insolvency.
Source: World Bank (2013).

The first EFC that is going to be related to the project, is Government Policies, specially the area concerning the bureaucracy and to the tax burden that are associated with the start-up process (Table 9).

Table 9: Starting a Business

Indicator	**Portugal**	**Netherlands**	**OECD high income**	**OECD**
Procedures (number)	5	5	--	5
Time (days)	5	5	--	12
Cost (% of income per capita)	2.3	5.1	--	4.5
Paid-in Min. Capital (% of income per capita)	0.0	49.4	--	13.3

Source: World Bank (2013)

According to Table 9, Portugal has actually better conditions in terms of the bureaucracy and the costs of formation of a new business. In each country, it takes 5 days to receive all the documentation needed to start a company, but the Dutch have to spend more money in the procedures in order to make their idea reach the market. As it is noticed in the table above, the Paid-in Min. Capital (% of income per capita) variable, is higher in the Netherlands, meaning that it is required a higher amount of the entrepreneur's income in a bank or a notary before the business being registered.

Table 10 refers the amount of taxes required for starting up a business:

Table 10: Paying Taxes

Indicator	Portugal	Netherlands	OECD high income	OECD
Payments (number per year)	8	9	--	12
Time (hours per year)	275	127	--	176
Profit tax (%)	14.5	20.6	--	15.2
Labour Tax and contributions (%)	26.8	18.1	--	23.8
Other taxes (%)	1.4	1.3	--	3.7
Total tax rate (% profit)	42.6	40.1	--	42.7

Source: World Bank (2013)

Although the amount of taxes paid is higher in Portugal, it is not as different, and so, we may not point the tax burden as a reason to the TEA of the Netherlands to be higher than the Portuguese. As it can be seen, there is a higher percentage of the profit that is paid as a tax in Portugal, but it is slightly below the OECD average.

Another important EFC is the one concerning the access to financing, which is analyzed in Table 11. The *Doing Business* project develops a variable named Getting Credit that uses two frameworks to analyze this problem. The first analyzes the legal framework for secured transactions by looking at how well collateral and bankruptcy laws facilitate lending and the second looks at the coverage, scope and quality of credit information available through public credit registries and private credit bureaus. These two assess the creditworthiness of clients, while legal rights can facilitate the use of collateral and the ability to enforce claims in the event of default.

Table 11: Getting Credit

Indicator	Portugal	Netherlands	OECD high income	OECD
Strength of legal rights index (0-10)	3	6	--	7
Depth of credit information index (0-6)	5	5	--	5
Public registry coverage (% of adults)	90.7	0	--	10.2
Private bureau coverage (% of adults)	22.9	81.7	--	67.4

Source: World Bank (2013)

As seen in table 11, neither of the two countries has a high protection of legal rights, being both below OECD average, which means that there is not consistent protection of lenders and borrowers when it comes to finance projects, not encouraging the financing of start-ups. However, both countries keep a historical archive that mentions the creditworthiness of borrowers, being the Dutch made by private bureaus and the Portuguese by the Central Bank.

Obviously, there is a need to support a start-up process, but entrepreneurship has a high level of risk involved. So the next tables refer the conditions that both countries have in when it comes to declare insolvency.

Table 12: Resolving Insolvency

Indicator	Portugal	Netherlands	OECD high income	OECD
Time (years)	2	1.1	--	1.7
Cost (% of estate)	9	4	--	9
Outcome (0 as piecemeal sale and 1 as a going concern)	1	1	--	1
Recovery rate (cents on the dollar)	74.6	88.8	--	70.6

Source: World Bank (2013)

As it is noticed in Table 12, it is still a going concern among entrepreneurs the process to declare insolvency. However, the Netherlands offer better conditions, with a higher level of recovery rate and it is also a faster process.

One EFC that was not mentioned in the mapping of entrepreneurial policies is the EFC named Entry Regulation. The next tables will show the conditions to export and import new products.

Table 13: Trading Across Borders

Indicator	Portugal	Netherlands	OECD high income	OECD
Documents to export (number)	4	4	--	4
Time to export (days)	13	6	--	10
Cost to export (US $ per container)	685	895	--	1028
Documents to import (number)	5	4	--	5
Time to import (days)	12	6	--	10
Cost to import (US $ per container)	899	975	--	1080

Source: World Bank (2013)

As it is noticed in Table 13, there is a negative relation between the cost and the time that it takes to either import or export. The Netherlands have much faster process to import or export, having also fewer documents needed for a foreign company to export to the Dutch market than to the Portuguese. However, the costs to make these kinds of transactions are more expensive in the Dutch case.

3.3.3. Mapping of public entrepreneurship policies: Portugal and Netherlands

In this subsection, we implement a mapping of the entrepreneurship policies launched in Portugal and in the Netherlands since the year 1994. This year is very significant in terms of the entrepreneurial policy both in Portugal and in the Netherlands. In fact, in 1994 there was the implementation QCA II in Portugal, and it was also the beginning of a revolution of public entrepreneurial policies in the Netherlands associated with the election of a left-liberal coalition government in the country that started a deregulation of the start-up processes, encouraging more people to pursue entrepreneurship as a viable career opportunity.

As we have seen in previous sections, much of these policies were supported by the Structural Funds received from the EU. Each policy is characterized for each country

and then the mapping is made taking into consideration the EFCs, which, as above described, are used by the GEM to measure the entrepreneurial activity in Portugal and in the Netherlands.

Much of the Dutch and Portuguese national entrepreneurship policies are financed by the European Regional Development Funds (ERFD). Each country has a National Strategic Reference Framework (NSRF) that is integrated in the Ministry of Economic Affairs in the Netherlands and in the first place in *Ministério do Ambiente, Ordenamento do Território e do Desenvolvimento Regiona*l in Portugal, being currently under the management of *Ministério da Economia*.

The Portuguese NSRF was responsible for the implementation of the QCA I (1989-1993), II (1994-1999), III (2000-2006)) and the QREN (2007-2013) that oriented the destiny of the EU Structural Funds, and that were divided into different operational programmes. The Dutch NSRF was also responsible for the allocation of EU funds by the Dutch government. Instead of distinguishing the several operational programmes by theme, the Dutch NSRF defined four different multiregional operational programmes: North, South and East Netherlands, and Urban Areas in the period from 2000 to2006, and North, South, West and East Netherlands in the period 2007-2013. We will also analyse some other entrepreneurial policies that were also launched by the Dutch Government since 1994 that were not directly a part of a strategy supported by Structural Funds.

Portugal

The QCA II was launched in Portugal, in 1994. This strategic framework aimed to support the convergence of Portugal to EU and to reduce regional asymmetries. In order to achieve these two goals, several operational programmes and four lines of intervention were defined. These intervention lines are the following (QCA, 1994):

- Raise the level of qualifications of the population and the quality of employment;
- Enhance the competitive factors of the Portuguese economy;
- Promote life quality and social cohesion;

- Strengthen the regional economy basis.

From the above list, the second intervention line is the one most related with our analysis since it focus on the need to invest in raising the competitive edge of Portuguese companies. Regarding the operational programmes proposed by QCA II, the most relevant for our mapping exercise are the *Plano Operacional de Modernização do Tecido Económico* (POMTE), which aimed to modernize the Portuguese economy, and the PRAXIS XXI, concerned with policy intervention in industry and technology.

The POMTE programme has as strategic goals the promotion of the competitive edge of Portuguese companies: the internationalization of businesses, the improvement of the qualifications of human resources and of the economic structure. In order to achieve these goals, the POMTE programme defined six measures, of which three have a direct relevance for our purpose analysis (POMTE, 2003).

More precisely, the second measure of the POMTE programme involves the promotion of different tools to finance SMEs such as the use of risk capital and mutual guarantee systems (POMTE, 2003).

The third and fourth measures that are mentioned in the POMTE programme aim at strengthening firms' strategies in order to increase their productivity, quality and internationalization. Within these measures we find several lines of action related to the promotion of entrepreneurship in Portugal in association with the goal to modernize economic activities, for example incentives to R&D transfer, and support and counselling for companies strategically choosing internationalization (POMTE, 2003).

In what regards the PRAXIS XXI programme, there is a specific focus on technological change. It enhances the importance of R&D laboratories, R&D transfer and the access to physical infrastructures for the development of specific manufacturing activities (PRAXIS XXI, 2002).

In the year 2000, the QCA III was launched by the Portuguese Government to promote innovation in the Portuguese economy. Its main goal was to implement the 2000 Lisbon Agenda in Portugal.

The three main areas of intervention defined by QCA III (QCA, 2000) to increase the competitive edge of Portuguese companies are:

- Human Potential, since it was acknowledged that the low productivity of the Portuguese economy is strongly related with the low level of qualification of the population;
- Productive Activity, to provide competitiveness for Portuguese firms through helping them in defining efficient strategies and in perceiving scientific progress and technological innovation as fundamental to improve competitiveness;
- Territorial Organization, since the Portuguese territory is considered as a factor of cohesion and integration in the European economy. The intervention at this level is based on the construction of infrastructures to promote the development of all Portuguese regions, aiming to reduce regional asymmetries.

The part of QCA that is related to the research goal of the present dissertation is mentioned in the Operational Programme *Economia* that frames the goal of increasing the competitive edge for Portuguese SMEs. The QCA establishes that the support to SMEs should represent 50% or 60% of the budget defined to this programme because the promotion of economic growth and employment is considered its main priority. In this framework, the measures proposed to support SMEs are (QCA, 2000):

- Improve the access to financing;
- Stimulate innovation;
- Provide information for a successful internationalization strategy;
- Support R&D transfer;
- Improve the support services for SMEs.

The main role of QCA is twofold: (i) to turn the entrepreneurship process into a more flexible one, so that it can play a bigger role in creating jobs, and (ii) to raise the level of education of the Portuguese population. It also aims at decreasing the importance of direct supports to investment, raising the relevance of alternative forms of financing, like risk capital funds, mutual guarantees system and other type of refundable supports (QCA, 2000).

Another Operational Programme with relevance for our analysis is *Ciência, Tecnologia e Inovação,* which focuses on the issue of R&D transfer within entrepreneurship. This

programme stimulates R&D transfer policies like economic support to technology and patents acquisition, improvements in information networks and promotion and diffusion of existing opportunities (QCA, 2000).

QREN (2007-2013) aims at providing a strategic framework for the implementation of EU policies focused on economic and social cohesion in Portugal. This framework is designed in order to promote the upgrade of knowledge, science, technology and innovation in the Portuguese economy, as well as high and sustainable levels of economic and social development. It is also oriented towards territorial qualification, to be achieved by valuing opportunity equality in public institutions, making them more efficient (QREN, 2012).

In order to prosecute that strategic framework, QREN creates three Operational Agendas: Factors of competitiveness, Human potential and Territorial Enhancement. For our research purposes, the most relevant is the first one, describing the factors that can provide competitiveness to the Portuguese economy. This Operational Agenda is called COMPETE and centres its activity on stimulating sustainable economic development. This agenda aims at achieving its goal by (COMPETE, 2012):

- Centring on the investments and collective services that can create long term competitiveness and job creation;
- Raising investment in human capital;
- Transforming and restructuring the production ability of each Portuguese region;
- Increasing institutional capabilities able to create and execute effective policies.

COMPETE defines six different lines of action so that its main goal can be more easily prosecuted (COMPETE, 2012):

1. Technological knowledge and development;
2. Innovation and transformation of the business model and specialization patterns of Portuguese companies;
3. Financing and risk sharing;
4. Achieving a better and more efficient public administration;
5. Business development networks;

6. Technical assistance.

The first line of action defends that to achieve a sustained economic growth, Portugal should centre its economic activity on innovation and knowledge. It is defended by the document, being these conclusions based on successful cases, that there should be an increase of the importance given by firms to R&D expenditures (in order to raise the country's competitiveness) and a need to strengthen the relations between knowledge centres (colleges and R&D institutions) and companies, accelerating the diffusion, transfer and knowledge provided by the R&D activity developed in enterprises (COMPETE, 2012).

In order to achieve the first goal of this line of action, the programme defines as a priority the fact that the investment on R&D should be coherent with the national and European priorities, improving the Portuguese National Scientific and Technological System (COMPETE, 2012).

The strengthening of the relations between knowledge centres and companies will be achieved through supporting R&D transfer, the creation of R&D nucleus in companies and raising technological demand. These actions will provide a connection between the creation of knowledge and the market, making the investment on the creation of knowledge profitable (COMPETE, 2012).

In second place emerges another action that proposes the need to design policies that are able to guide firms in pursuing their best strategy. Within this line of action also appears as crucial the investment oriented towards promoting higher levels of employment and benefiting from economic regions with high growth potential (COMPETE, 2012).

The third line of action is focused on the financing of start-ups. Much of the financing that supports the creation of new businesses comes from loans provided by banks. However the conditions that these institutions offer to entrepreneurs are not adequate, making nearly impossible for their idea to flourish. So, this line of action defends that there is a need to promote alternative ways to finance the creation of new firms. These alternative ways of financing are risk capital, microcredit and the consolidation of the mutual guarantee system. The COMPETE programme also mentions that is important to facilitate the access to financial support to women and to the youth, which are demanded for more guarantees than the rest of the population. This way, there is room

to enhance the competitiveness and innovative potential of the Portuguese economic sector, where financial constraints should not be an excuse for firms to develop their strategies, either in start-up process but also in growth and for a possible internationalization (COMPETE, 2012).

The efficiency of the public sector in making entrepreneurship as a viable career option appears associated with the fourth line of action. This efficiency must be focused on reforming and modernizing the Public Administration system, through administrative and legislative simplification and rationalizing the distribution of public services, by promoting the intensive use of Information and Communication Technologies (ICT) (COMPETE, 2012).

The fifth action line refers to the need of improving public services in order to provide better services to start-ups and promote cooperation between them. The offer of the services that support start-ups, should be focused on the needs of SMEs, where it is promoted a better link between SMEs and universities, promoting better access to market information and stimulating cooperation and network between companies (COMPETE, 2012).

Finally, the sixth line of action describes the importance of creating infrastructures able to support entrepreneurial activity, namely in what concerns technical assistance (COMPETE, 2012).

In spite of not focusing directly on the promotion of entrepreneurship, the operational agenda of QREN regarding human capital might also be relevant for our research purpose. As it was shown in Table 3, in comparison with the Netherlands, Portugal has a lower percentage of population with tertiary education, meaning that the Portuguese population is relatively less qualified. This Operational Agenda has four main goals: overcome the situation of sub qualification of the Portuguese population; promote scientific knowledge, innovation and modernization of the Portuguese companies and Public Administration; stimulate not only the creation but also the quality of jobs; and promote equal opportunities, avoiding social exclusion (POPH, 2007).

One line of action that the Operational Agenda on human capital promotes in order to achieve the four goals previously mentioned, is the one that supports entrepreneurship. This line of action defines six main goals (POPH, 2007):

- Support the creation of jobs and entrepreneurship;
- Support projects that target the creation of SMEs promoting the creation of jobs for people currently unemployed;
- Promote local economies, through low scale investments, minimizing the inequalities between Portuguese regions, in terms of their ability to attract workers and investors;
- Support the transition of students to job market;
- Guarantee job security and the improvement of qualifications of the Portuguese people, even in less prosperous economic situations;
- Improve employment levels and stimulate the reintegration in the labour market of unemployed individuals.

Table 14 refers to the EFCs that are presented in the two QREN operational programmes and in QCA III. Following Oliveira and Teixeira (2009), we implement the mapping of entrepreneurship policies by identifying the presence of relevant associated measures with 1 and its absence with 0.

Table 14: Mapping EFCs in Portugal since 1994

EFCs	QCA II (1994-1999)	QCA III (2000-2006)	QREN (2007-2013)
1. Entrepreneurial Finance			
Policies providing different ways of financing SMEs	1	1	1
Consolidation of a mutual guaranty system	1	1	1
2. Government Policy			
Reduction of bureaucracy	0	0	1
Reduction of the tax burden	0	0	1
3. Government Entrepreneurship Programmes			
Support for the creation of SMEs	0	1	1
4. Education on entrepreneurship			
Promote Entrepreneurship in the Educational System	0	0	0
5. R&D Transfer			
Policies stimulating R&D efforts	1	1	1
Networks between companies and R&D research centres	0	0	1
6. Commercial and Legal Infrastructure			
Creation of structures that provide technical and logistic support	1	1	1
7. Entry Regulations	0	0	0
8. Physical Infrastructure			
Provide access to communications	0	0	1
Guarantee good ICT service	0	0	1
9. Cultural and Social Norms			
Make entrepreneurship as suitable career option for youngsters	0	0	1
Make entrepreneurship as suitable career option for women	0	0	1

As we can observe, there are three EFCs that are not represented in the policies documented: Education on Entrepreneurship and Entry Regulations. The absence of policies in these EFCs might be one of the reasons why Portugal ranks lower than the Netherlands in most of the rankings of entrepreneurship provided by the GEM. We then proceed with the Dutch entrepreneurship policies interpretation and sum up with a comparison of the two countries.

The Netherlands

Werk Don Ondernemen (in English, Jobs Through Enterprise) is a policy paper released in the Netherlands, in 1995, focused on the importance of the entry of new businesses for the growth of structural employment. This policy paper was also relevant because it led to policies whose goal was to reduce the barriers of starting up a business, improve the quality of entrepreneurship and the access to venture capital for techno-starters and high growth firms. Fiscal measures were also implemented in order to improve the tax environment for all SMEs, reduce the regulatory burden and create a more flexible labour market (Stevenson and Lundström, 2001).

It was also created a Ministerial Commission for Market Function, Deregulation and Quality Legislation in the country that aimed at investigating ways to reduce costs of regulation, abolish unnecessary constraints for competition and improve the quality of legislation. Within this framework, it was also proposed the implementation of seed financing programmes for techno-starters and R&D initiatives. Additionally, there was a renewal of the Small and Medium-Sized Enterprises Credit Guarantee Scheme. The BBMKB, as it is named in Dutch, is a government secured loan for SMEs. Within this scheme, the Dutch Government assures up to 50 percent of the credit request and, hence, lowers the risk of the loans to start-ups. If the business turns to be unsuccessful, the government will reimburse the banks for part of the loan (Stevenson and Lundström, 2001).

Another programme that promoted the entrepreneurial activity through fiscal incentives was the *Aunt Agatha Agreement* launched in 1996, later named *Regeling Durfkapitaal*, (in English, Venture Capital Scheme). Within this programme, the Government offers fiscal incentives to anyone who decides to lend capital for a start-up business (Ministry of Economic Affairs, 2009).

The benefits for the lender consist in an exemption of up to 55 145 € on the value of the investment, and a deduction as a personal allowance for losses on the loan for bad debts up to 46 984 € (Ministry of Economic Affairs, 2009).

In 1997, the Dutch Government launched the PSB programme (in English, Starters on Foreign Markets). It offers support to firms with little or none export experience to step up to a new or partly new foreign market. The implementation of internalization involves commercial or legal issues, and the PSB programme helps the firms at this level (Ministry of Economic Affairs, 2009).

Another important policy paper launched by the Dutch Government was The Entrepreneurial Society in 1998. It defined three priorities in order to increase the business start-up rate by 25 % in 2001 (Stevenson and Lundström, 2001):

- Reduce barriers to the entrance of new firms, such as permits, legal hurdles and other requirements to the start-up process;
- Insert the entrepreneurship subject in the education system, forming a full program of entrepreneurship *curricula* and resource materials across all levels of the education system;
- Organize the network of small business support organizations in order to meet the needs of new start-ups.

In order to pursue the above priorities, the Dutch Government created several programmes and services. For the first priority, it was formed the *Slechte* Commission in 1998, that intends to advise which administrative burdens should be reduced, since one of the obstacles to start a business is the excess of bureaucracy and taxes that discourage the entrepreneurial process (Stevenson and Lundström, 2001).

In order to reach the second priority, the Dutch Government launched, in 2000, the *Leren Ondernemen* programme (in English, Learning Entrepreneurship). This initiative is a joint effort of the Ministry of Economic Affairs and the Ministry of Education, Culture and Science. The goal is to promote entrepreneurship among young people by implementing the recognition of its role in all education levels in the Netherlands, since primary school to the post secondary levels. Starting in the primary school level, students are introduced to the notion of entrepreneurship as an option, *i.e.*, that they can

become not just an employee, but an employer. Also, several activities are developed to enhance general skills, like working in group projects. In the following levels of education, students experiment to run their own virtual company in school projects supported by their teachers. In the upper education level students have at their disposable technology to produce a new good or service. Here, there is the intervention of public intermediaries to promote the transfer of knowledge between the college students and firms (Stevenson and Lundström, 2001).

As it was mentioned, these measures implemented by the Dutch Government aimed at making entrepreneurship a viable career option for the population. Several programmes to support the creation of small businesses were launched, through mentoring and the creation of incubators that helped the development of companies which activity is based on technology. There are also programmes that promote entrepreneurship as a viable career option among women, unemployed and ethnic minorities, sectors of the population that need support from the government due to financial constraints or suffer prejudice from the other sectors of society (Stevenson and Lundström, 2001).

As it was mentioned, in the Netherlands there is not a national programme that defines the use of the Structural Funds as it is done in Portugal. However, we will mention some common points of the four operational programmes that were implemented in order to make a fair comparison with Portugal. These following programmes are fully financed by the ERDF.

From the year 2000 to 2006, four regional programmes supported by Structural Funds provided by the EU were launched. The four programmes were classified in two different categories, being the Urban Areas Netherlands and the East Netherlands programmes named as multiregional programmes, and the South and North Netherlands as regional programmes.

The multiregional programmes had four priorities in order to boost each regional economy:

- Urban Economic Environment;
- Stimulating Economic Activity;
- Enforcement of Social Economic Potential;

- And Technical Assistance.

The priority most relevant for our analysis is the second one listed above. In both programmes, this priority mentions the importance of boosting the regional economy through the reinforcement of business competitiveness by innovating, encouraging the transfer of knowledge and technology, favouring cooperation between companies and improving business facilities. These measures are centred on the needs of the Dutch SMEs. There is also the encouragement to establish new firms in the Urban Areas Netherlands operational programme.

The other two programmes have also four priorities:

- Consolidation of the Private Sector;
- Development of Urban Centres;
- Improve the functioning of the Labour Market;
- And Technical Assistance.

Both programmes refer to importance of improving the material conditions necessary to establish a new business and encouraging technology transfer as ways to boost regional economic competitiveness.

In 2006, the Dutch NSRF published a document on the predictable use of Structural Funds by the Netherlands. The key objective was to boost national competitiveness by strengthening innovativeness and entrepreneurship (National Strategic Reference Framework, 2006).

Each of the four operational programmes defines four priorities to boost the regional economic competitiveness:

- Knowledge, entrepreneurship and innovation;
- Attractive Regions;
- The Urban Dimension;
- And Technical Assistance.

The most relevant priority for this thesis is the first one. Each region has its own defined strategy in order to improve Knowledge, Entrepreneurship and Innovation. However,

there are common points, like the importance of strengthening the importance of R&D between SMEs and universities in order to enhance the innovative capacity of those companies and to commercialize the existing knowledge from the knowledge institutions. The Dutch Government has a Technical Partner Programme which supports that type of activities through the *Subsidieprogramma KennisExploitatie* (SKE) (in English, Knowledge Exploitation Subsidy Programme) (Ministry of Economic Affairs, 2009).

The financing of start-ups is also a concern because it seems to be difficult for SMEs to attract sufficient capital. This occurs due to the denial of banks and investment funds to support this market segment. The other financial policies like BBMKB and the Venture Capital Scheme are still at the disposal of Dutch entrepreneurs.

According to the NSRF document, another concern is the use and the development of ICT services. The Dutch Government position in this area is different from the rest of the EFC's. In the other dimensions, the Government provides services in order to enhance entrepreneurship in specific areas. In this one, the Government has a neutral role, allowing the firm to decide what the most adequate service is. The government's role is also to guarantee solid options for SMEs, in relation to quality and price (Ministry of Economic Affairs, 2009).

Table 15: Mapping EFCs in the Netherlands since 1994

EFCs	Jobs Through Enterprise (1995)	Venture Capital Scheme (1996)	PSB (1997)	The Entrepreneurial Society (1998)	NSRF (2000-2006)	NSRF (2007-2013)
1. Entrepreneurial Finance						
Policies that stimulate the use of different ways of financing SMEs	1	1	0	0	1	1
Consolidate a mutual guaranty system	1	1	0	0	1	1
2. Government Policy						
Reduce bureaucracy	1	0	0	1	0	0
Reduce the tax burden	1	0	0	1	0	0
3. Government Entrepreneurship Programmes						
Support for the creation of SMEs	1	0	0	1	1	1
4. Entrepreneurship Education						
Promote Entrepreneurship in the Educational System	0	0	0	1	0	0
5. R&D Transfer						
Policies that stimulate R&D efforts	1	0	0	0	1	1
Connection between companies and R&D creation centres	1	0	0	1	1	1
6. Commercial and Legal Infrastructure						
Creation of structures that provide technical and logistic support	0	0	1	1	1	0
7. Entry Regulations	0	0	0	0	0	0
8. Physical Infrastructure						
Provide access to communications	0	0	0	0	0	1
Guarantee good ICT service	0	0	0	0	0	1
9. Cultural and Social Norms						
Make entrepreneurship as suitable career option for youngsters	0	0	0	1	0	0
Make entrepreneurship as suitable career option for women	0	0	0	1	0	0

One of the conclusions found by the analysis of the two tables referring to the entrepreneurial activity of Portugal and the Netherlands is the fact that the Dutch authorities have been concerned with the importance of entrepreneurship before the Portuguese Government, creating specialized policies in developing the entrepreneurial activity. Although the QCA II was created almost at the same as the first Dutch entrepreneurial policy, the fact is that Jobs through Enterprise mentions more EFC's than the QCA II, being much more elaborated than the last instrument.

It also should be mentioned that the only EFC for which Portugal does not have a policy to promote entrepreneurship is education. According to the documents in analysis, there are not activities developed at basic school levels to promote entrepreneurship skills. Hence, we will systematize some measures that have taken place in the Netherlands and could be implemented in Portugal.

The topic of education for entrepreneurship becomes more relevant if we take in consideration the information presented in Table 5, which shows that the level of education of the Portuguese entrepreneurs is quite low.

According to Table 2, the evaluation from the experts about the entrepreneurship education, in EU, at the basic school level is negative. The report mentions that most of the countries teach entrepreneurship as a cross-curricular activity, which means that it is integrated in different subjects. Just at the lower secondary level it is taught as a separate subject. At this level of education, the Dutch government launched a programme named Education and Entrepreneurship Action Programme in 2007 and 2009. Here, teachers received a training programme to ensure that they could successfully encourage entrepreneurial behaviour in their students (European Commission, 2012).

4. Conclusions

This dissertation aimed at analysing the state of entrepreneurship in Portugal, trying to highlight the areas where government policy should act in order to increase the level of the national entrepreneurial activity.

In Chapter 2, a theoretical review of the seminal contributions in the field was made, in order to understand the various concepts that have been associated to the entrepreneur, at the lens of distinct perspectives, namely, economics, corporate management and psychology.

F the economic approach, three main concepts of entrepreneurship were discussed: first, the perspective of Kirzner (1973, 1997) that defines entrepreneurship as opportunity identification, where an entrepreneur takes advantage of market failures, shifting the market from a disequilibrium to an equilibrium situation; second, the view of Knight (1921) (in Klein *et al.*, 2010)that sustains the idea that the entrepreneur bases his decisions on previous experiences, assigning different levels of uncertainty; finally, the Schumpeterian view of the entrepreneur as an innovator. The author brings the concept of creative destruction, where the process of introducing new products turns the existing ones obsolete. Here, the entrepreneur creates a disequilibrium situation by innovating.

The psychological approach brings the perspective that there are personality traits that are common amongst entrepreneurs. Four different personality traits are studied: risk taking propensity, need for achievement, locus of control and tolerance for ambiguity. The relation between entrepreneurs and the need for achievement was brought by McClelland (1961), who defines entrepreneurs as high achievers that prefer riskier situations that are not beyond their capabilities. Rotter, (1966) in Chell (2008) sustains that successful entrepreneurs have a high internal locus of control, which means that they are in full control of their decisions. Tolerance for ambiguity refers to the propensity of the entrepreneurs to see situations without clear outcomes, where entrepreneurs with a high level of tolerance find ambiguous situations challenging, appreciating the process of turning them into successful ones.

The management view of entrepreneurship adopts an organization perspective. This perspective is studied due to the increasing competition between companies and the two

main forms of corporate entrepreneurship are defined by Kuratko (2007): corporate venturing and strategic renewal.

After the literature review, in Chapter 3, we have analyzed statistical data in order to compare the performance of firms, level of education of entrepreneurs and the evaluation made by national experts about each country's EFC.

Some important conclusions are possible to derive. First, the less developed intervention areas for promoting entrepreneurship are: a relatively low sensitivity for the fact that taxes should encourage the creation of SMEs; the implementation of entrepreneurship as a primary subject at the basic school level, and the cultural component of entrepreneurship (see Tables 2 up to 5).

Specifically, important evidence emerges from the analysis of Table 3. First, in 2010, the number of firms that died or went into a bankruptcy process was higher that the number of new bourn or founded firms. Portugal has the highest value of more firms' deaths *per* population in comparison with the other countries analyzed in Table 3.

At least in part, a possible explanation for this last evidence is that the level of education of Portuguese entrepreneurs is quite low, with the majority just having completed the mandatory level of education, which is primary and lower secondary (Table 4).

The data of the World Bank (2013) report about entrepreneurship, *Doing Business*, mentions that Portugal is actually a better country to start a business than the Netherlands. However, the analysis developed throughout this thesis, shows that Portugal must improve several dimensions regarding the promotion of entrepreneurship. For instance, at the fiscal level, it is significantly high the amount of taxes payed by firms (Table 10) and it is highly bureaucratic and long the processes associated with insolvency situations (as seen in Table 12).

Moving on to the mapping exercise for entrepreneurship policies in Portugal and in the Netherlands, it is clear the conclusion that the only EFC that Portugal has not a specific strategy is the one associated with the education curricula. This fact is consistent with the EU average situation since national experts rate as low the implementation of entrepreneurship education at the basic school level. The Netherlands emerges as the better rated country in GEM, which is certainly associated with the higher number of

specific strategies that this country have been implementing on each of the EFCs in analysis.

As further research, it would be interesting to identify average distance means and other relevant statistical indicators after the qualitative comparison of both countries, Portugal and the Netherlands.

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