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Greek entrepreneurship: The case of Greek startup companies

Evgenia Deliandreadou

Supervisor: Panagiotis Tachinakis

Patras, Greece, July 2019
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Greek entrepreneurship: The case of Greek startup companies

Evgenia Deliandreou

Supervising Committee

Supervisor: Panagiotis Tachinakis
Associate Professor
University of Macedonia

Co-Supervisor: Michail Diakomichalis
Professor
University of Ioannina

Patras, Greece, July 2019
Evgenia Deliandreadou, Greek entrepreneurship: The case of Greek startup companies

“To my family”
Abstract

The purpose of this dissertation is the investigation of the greek startup companies, focusing on the study of their financial options and their importance in the creation of a startup. For this purpose a review on the literature on entrepreneurship and startup entrepreneurship was conducted both in international and national level and then the main financial tools are examined. Afterwards, the methodology and the results of the conducted survey are presented. The research was focused on the use of the available financial tools by startups in Greece and the data were collected in a field research through a questionnaire addressed to startup companies operating less than five years and more specifically to their founders.

From both the empirical study and the existing literature, greek startups have emerged after the financial crisis and have significantly grown. Access to financial tools is vital for their performance. Supportive structures are highly used but funding in Greece has proven to be a challenging area. Opportunity is the main incentive of startup creation but funding is what mostly affects this decision. This proves that the whole startup ecosystem in Greece is still in early stages and there are a lot to be done to improve its functionality.

Keywords

Entrepreneurship, Startup, Startup ecosystem, Startup financial resources.
Περίληψη

Σκοπός αυτής της διπλωματικής εργασίας είναι η εξερεύνηση των ελληνικών νεοφυών επιχειρήσεων, εστιάζοντας στη μελέτη των χρηματοδοτικών εργαλείων και πόσο επηρεάζουν την ίδρυσή τους. Για το σκοπό αυτό έχει μια βιβλιογραφική ανασκόπηση της επιχειρηματικότητας καθώς και της νεοφυών επιχειρηματικότητας τόσο σε διεθνές όσο και σε εθνικό επίπεδο και έπειτα παρουσιάστηκαν τα χρηματοδοτικά εργαλεία. Στη συνέχεια, παρουσιάστηκαν η μεθοδολογία και τα αποτελέσματα της έρευνας. Η έρευνα εστίασε στην χρήση των χρηματοδοτικών εργαλείων από τις νεοφυείς επιχειρήσεις στην Ελλάδα και τα στοιχεία συλλέχθηκαν μέσω έρευνας πεδίου με ερωτηματολόγιο που απευθυνόταν αποκλειστικά σε νεοφυείς επιχειρήσεις που έχουν λειτουργούν όχι παραπάνω από πέντε χρόνια και πιο συγκεκριμένα στους ιδρυτές τους.

Από την εμπειρική ανάλυση καθώς και τις βιβλιογραφικές πηγές, οι ελληνικές νεοφυείς επιχειρήσεις εμφανίστηκαν μετά την οικονομική κρίση και αναπτύχθηκαν σημαντικά. Η πρόσβαση στα χρηματοδοτικά εργαλεία είναι ζωτικής σημασίας για την απόδοσή τους. Η χρήση των δομών στήριξης είναι αρκετά εκτενής αλλά η χρηματοδότηση στην Ελλάδα είναι πρόκληση. Το κύριο κίνητρο δημιουργίας των νεοφυών επιχειρήσεων είναι η ευκαιρία αλλά η χρηματοδότηση επηρεάζει σημαντικά την απόφαση ίδρυσής τους. Αυτό αποδεικνύει πως το οικοσύστημα των νεοφυών επιχειρήσεων είναι ακόμα σε αρχικά στάδια στην Ελλάδα και υπάρχουν ακόμα πράγματα να γίνουν για την βελτίωση της λειτουργικότητας του.

Λέξεις – Κλειδιά
Επιχειρηματικότητα, νεοφυής επιχείρηση, οικοσύστημα νεοφυών επιχειρήσεων, χρηματοδοτικά εργαλεία.
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CHAPTER 1. Introduction

1.1 Dissertation Objectives

Entrepreneurship is an essential factor of economic growth. After the financial crisis of 2009 the greek entrepreneurial activity has seen a serious decline. The motivation behind this dissertation is to examine the Greek entrepreneurship field today and more specifically the case of the Greek startup companies. Startups are a new phenomenon in Greece. Their development is basically based on their access to financial resources, a generally problematic area in a country still suffering from economic recession. This dissertation would attempt to identify the financial tools that are available in Greece for startup companies and their importance as motivators for founding one. The main question of the research is “which financial resources are mainly used by greek startups”. The overall goal is to examine the access of startups to the available financial tools and investigate whether access affects the decision of creating one or not.

The results of this research will contribute to the existing literature of the greek startups which is limited since startups have emerged after the greek crisis. Ever since their number has increased significantly and their importance for the country’s economic growth is huge.

1.2 Dissertation structure

The dissertation consists of six chapters. The first chapter is the introduction, where the objectives and the structure of this dissertation are presented.

The second chapter consists of a review on the literature in order to examine the theoretical basis of the following key elements: the concept of entrepreneurship, the concept of innovation as part of the entrepreneurial activity, and the concept of the startups. Moreover, the greek entrepreneurial scene and startup trends are examined.

In the third chapter, the startup financial methods are examined. The startup ecosystem is introduced first and, as fundamental factors for the access to financial resources, the
supporting structures of the startup companies are presented. Then the main available financial tools are thoroughly analyzed and the greek scene is introduced.

The fourth chapter consists of the methodology of the research performed. The goals of the research are outlined first. Then the sampling method and the tools used for the survey performance are presented.

The fifth chapter is about the analysis of the data. The results of the research are presented and compared with previous researches.

The last chapter consists of the conclusions drawn by the research as well as the limitations that have been met during the research and concludes with the proposal of future research subjects.
CHAPTER 2. Literature Review

This chapter examines the concepts of entrepreneurship, innovation and startups. The theoretical base of these terms is presented along with their characteristics by reviewing the existing literature. Moreover, the case of Greece in relation with these terms is analyzed.

2.1 Entrepreneurship

2.1.1 Theories - Concepts

Entrepreneurship is a field of high importance nowadays that has been combined with economic growth. Research on entrepreneurship has been developed over the recent years and still offers future research potential (Zahra, 2007). It has been the center of research for a lot of academics and scientists, but there is no consensus among them of one definition of what entrepreneurship or the role of an entrepreneur is and is often confused with small business ownership and management (Shane and Venkataraman, 2000). There are numerous definitions in the literature given to the term through the years, based on different views and perspectives.

The term was first introduced by French economist Richard Cantillon back in 1755 but entered the field of economic theory by Jean-Baptiste Say in the beginning of the 1800s (Bruyat and Julien, 2000). Schumpeter (1934) defined entrepreneurship as taking the risk to exploit new market opportunities through innovation. According to Kirzner (1973), entrepreneurship consists of the competitive behaviors that bring market changes. Stevenson (1983) defined entrepreneurship as the innovation and creation of new business, while Low and MacMillan (1988) propose the definition of “the creation of new enterprise”. Amit, Gloste and Muller (1993), suggest that it is “the process of extracting profits from new, unique and valuable combinations of resources in an uncertain and ambiguous environment”. Davidsson (2003) defines entrepreneurship as essentially being a new entry in the market.

The above definitions are a small sample of the definitions given to entrepreneurship through the years. As we can see the perspectives differ and scholars have addressed
several issues. It is clear that the main aspects of entrepreneurship are the entrepreneur, the opportunity and the acts towards the creation of a new venture. Gartner (1989) states in his work that in order to understand entrepreneurship we must focus on the creation of the new organization. He examines entrepreneurship firstly from a behavioral approach in which he treats the entrepreneur as a part of the process of creating a new venture and from a traits approach, by which he examines the features of the entrepreneur. Baumol (1993) believes that there are two kinds of entrepreneurs, the firm-organized ones and the innovating ones, with the latter linked with economic growth. On the other hand, Shane and Venkataraman (2000), focus on the opportunity, defining entrepreneurship as an activity that involves the discovery, evaluation, and exploitation of opportunities to introduce new goods and services, as well as the set of individuals that discover, evaluate and exploit them.

According to GEM (Global Entrepreneurship Monitor) entrepreneurship is defined as "any attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of an existing business, by an individual, a team of individuals, or an established business”.

2.1.2 Entrepreneurial Opportunity

Entrepreneurial opportunities can generally be defined as the means of generating profit that have not been exploited yet (Baron, 2006). For Casson (1982), as cited in Shane and Venkataraman (2000), “entrepreneurial opportunities are the situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at a price greater than their cost of production”. Short et al. (2010) describe opportunity as “an idea or dream that is discovered or created by an entrepreneurial entity and that is revealed through analysis over time to be potentially lucrative”. Baron (2006) considered entrepreneurial opportunities as innovative opportunities and opportunity recognition as the process that allows individuals to realize that they have found one, which is the first step towards generating profit through the creation of a new venture.

Alvarez and Barney (2007) make a distinction between discovering and constructing opportunities. According to them, from the discovery point of view, an entrepreneurial opportunity already exists but has not been detected. It arises exogenously through
changes that disrupt the market equilibrium, such as technological, demographic, political and social changes (Kirzner, 1973; Shane and Venkataraman, 2000). These opportunities are not meant to be discovered by everyone as there will be no competitive profit (Kirzner, 1973). Their discovery is affected by two components. First is the possession of prior information, which is the outcome of previous experience and include how information is perceived by the individual. The second is the ability to recognize means-ends relationships which is different in each individual (Shane and Venkataraman, 2000).

On the other hand, from the creation point of view, an opportunity is constructed endogenously through the actions of the entrepreneurs in a search to create new products or services and not necessarily into an existing industry. This theory suggests that the opportunity is a “social construction” and is linked with the entrepreneur’s actions. Entrepreneurs observe, experiment and create opportunities through interaction with their social environment. The idea behind the opportunity creation is not clear until it reaches the stage of its formation (Alvarez and Barney, 2007).

Sarasvathy et al. (2003) present three views of entrepreneurial opportunity and link them to uncertainty. First there is opportunity recognition, which is the matching of the existing demand with supply. Second is the opportunity discovery, which is the discovery of the non-existing side of either demand or supply and third is the opportunity creation, which is the creation of a non-existing market. All three views depend on uncertainty which is different than risk as pointed by Knight (1921). Risky situations have a known future distribution so probabilities of an outcome can be calculated while uncertain situations have unknown future distribution and the outcomes can only be estimated. So the entrepreneur has to deal with the uncertainty of the success or failure of the opportunity exploitation (Sarasvathy et al. 2003).

2.1.3 The entrepreneur and the entrepreneurial motivation

The entrepreneur is defined as the individual who has the knowledge, education, personal background and attitude that allows him to recognize and exploit opportunities (Schumpeter, 1934; Kirzner, 1973). For Knight (1921) the entrepreneur undertakes the risk of uncertainty for the returning profit. According to Casson and Wadeson (2007), there are four approaches to define the entrepreneur: function, role, personal
characteristics, and behavior. The main functions are innovation, risk taking, and the improvement of coordination. Roles include the ownership of a firm, management, and the employment of labor. Personal characteristics include attitude, culture and life history and behavior includes taking the initiative, improvising quick decisions and leadership (Casson and Wadeson, 2007).

As mentioned before, opportunities are not recognized by all individuals. Differences in individuals allow them or not to recognize, discover or create an opportunity and proceed to exploit it. What motivates individuals to exploit opportunities involves several aspects, such as opportunity cost, prior experience, perception, optimism, willingness or the need for achievement and it is also affected by the nature of the opportunities (Shane and Venkataraman, 2000). The literature presents several slightly different classifications of entrepreneurial motivations. Gartner (1985) distinguishes entrepreneurs from non-entrepreneurs due to psychological and social characteristics. Psychological characteristics include the need for achievement, locus of control and risk taking propensity. Social characteristics include job satisfaction, previous work experience, family business background, education and age. For Birley and Westhead (1994) the entrepreneur’s motivation of creating a new venture include the need for approval, the need for independence, the need for personal development, the welfare considerations, the use of personal wealth, tax reduction and indirect benefits and role models following. For Watson et al. (1998), entrepreneurial motivations are classified in four groups: entrepreneurship-related, personal, market and financial drivers. Amit and Muller (1995) categorize entrepreneurial motivation according to the push and pull approach, which distinguishes “push” factors as the negative factors that force entrepreneurs into self-employment and “pull” factors as the factors of profitable business opportunities and the desire for independence and work autonomy (Amit and Muller, 1995).

2.1.4 Entrepreneurship in Greece
Since 2009 Greece is experiencing a severe economic recession. The economic activity has been significantly reduced making the entrepreneurial ecosystem non-competitive and therefore unfriendly to entrepreneurship development. This is imprinted in the GDP rates that have fallen dramatically ever since, in the rise of the inflation and unemployment rates
and in the huge number of the enterprises that failed to survive the crisis (Hellenic Statistical Authority, 2019).

Recent research of the Foundation for Economic and Industrial Research (IOBE), member of the Global Entrepreneurship Monitor, showed that there is a steady decrease in early stage entrepreneurial activity from 7,9% in 2014 to 4,8% in 2017, even though between 2013 and 2014 there was an increase, as well as a steady increase in terminating the entrepreneurial activity from 2,8% in 2014 to 4,7% in 2017. According to GEM, the rate of early stage entrepreneurial activity shows the percentage of working age population (18-64) about to start an entrepreneurial activity (nascent entrepreneurs) or have started one from a maximum of 3 years and half (owning-managing a new firm). This decrease is associated with the unstable political and economic situation of the country combined with the increase of the tax rates in the entrepreneurial activity and self-employment. It should be noted though that the rate of the established businesses in Greece, meaning the businesses existing for more than 3,5 years, is among the highest in EU countries. (IOBE, 2018).

GEM distinguishes individuals to opportunity entrepreneurs and necessity entrepreneurs. Opportunity entrepreneurs are the ones that recognize an opportunity and exploit it in order to gain profit or be independent. On the other hand, necessity entrepreneurs are the ones who have no other choice than engage in an entrepreneurial activity. In Greece in 2017 29% of the individuals engaged in an entrepreneurial activity because of necessity, which is higher than the percentage of the innovation countries (22,9%). In contrast, 37% of the individuals were motivated by an opportunity, a percentage lower than the innovation countries (53,5%). Even though there is a steady increase in Greece from 2014 which was 30,5%.

However there are factors that affect the decision of entrepreneurial activity. In the research of IOBE (2018) the main reason that deters individuals to proceed in entrepreneurial activity in Greece is the fear of failure (70,2%), a factor that has been increasing since 2009. Demographic characteristics also have a role. The age group that engages in new entrepreneurial activities is mainly between 25 and 44, while the lowest rates are between 45 and 54, which is way lower than in the other countries. Also female entrepreneurship in Greece is generally lower than the male entrepreneurship, even though it has increased the recent years, and is slightly lower than the other European countries.
Additionally, innovation and the use of technology are still in early stages in Greece, compared to the European innovation countries.

Entrepreneurship for Greece is an important matter as it can serve the country’s economic growth and eventually the exit of the crisis. Actions are taken towards this direction since the beginning of the crisis mainly in collaboration with the European Union in order to enhance greek entrepreneurship. As most researchers and academics agree, entrepreneurship is directly connected with the economic growth of a country (Schumpeter, 1934; Baumol, 1993).

2.2 Innovation

2.2.1 Definitions

Innovation is a multidimensional concept. The term has been given different definition from different perspectives, often overlapping each other, but none of them prevailed. The one thing most of these definitions have in common is the feature of “newness” (Varis and Littunen, 2010).

Schumpeter (1942) defines innovation as “the process of creative destruction”. This definition appears very often in literature of economic growth as it suggests that it is its driving force. For Drucker (1985), innovation is the mean to entrepreneurship. For both Schumpeter (1934) and Drucker (1985), innovation must include either new knowledge or the combination of existing pieces of knowledge. Thompson’s (1965) definition is that “innovation is the generation, acceptance and implementation of new ideas, processes, products or services”. For Van de Ven (1986) innovation is a new idea as long as it is perceived as new when it is implemented. Zahra and Covin (1994) suggest that innovation is widely considered as the power behind corporate survival and growth. For Bessant et al. (2005) innovation represents a renewal process for organizations that unless they change what they offer and the way they create and deliver those offerings, survival and growth are both at risk.

OECD (2005), in the Oslo manual for innovation, has defined innovation as “the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace
organization or external relations”. This definition covers a wide range of innovations, while a narrower one implements a type of innovation. The minimum requirement is that they have to be new to the firm or improved, either by development or by adoption.

Innovative activity is defined as the steps, innovative or not, taken to lead towards the implementation of the innovation and can include R&D that is not related to the specific innovation. Implementation is a common feature of innovation, as the innovative goods or services are introduced to the market. Innovative activities differ among firms, as some are engaged in the implementation of something totally new, while others in the implementation of something significantly improved. The innovative firm is the firm that has implemented an innovation (OECD (2005)).

2.2.2 Types of innovation

There are four main types of innovation: product innovation, process innovation, marketing innovation and organizational innovation, with the two first being closely related to technological innovation and the rest broadening the innovation range (OECD, 2005).

Utterback and Abernathy (1975) define product innovation as a new technology or combination of technologies that meet a user or a market need. OECD (2005) defines product innovation as the introduction of a new or improved product, by using new or already existing knowledge and technology or a combination of them. New products are those that are different in characteristics or in uses from the previously produced ones. Improved products are those that already exist and after some changes in their characteristics their performance is improved. In terms of services, product innovation can also include the way they are provided.

Process innovation is defined as the development and implementation of a new or improved production or delivery method (Utterback and Abernathy, 1975; Van de Ven, 1986; OECD, 2005). A production method generally includes what is used during the stage of production (techniques, equipment and software) and a delivery method is about the logistics. Process innovation includes new or improved methods for the creation and implementation of services, such as changes in equipment, techniques or procedures. This also includes the supportive activities (OECD, 2005). The primary goals of process
innovation are the reduction of the unit costs of the products and the preservation or increase of their quality (Tavassoli and Karlsson, 2015).

Marketing innovation is the implementation of a new marketing method involving Porter’s four famous marketing P’s, i.e., product, price, promotion and place (OECD, 2005; Tavassoli and Karlsson, 2015). The marketing innovation usually aims in the increase of sales through meeting customer needs, exploring or opening up new markets. The marketing method used in marketing innovation can be a new one or can be adopted but it must be new to the firm, meaning that the existing marketing strategy must be replaced and can include both new and existing products. Marketing innovation include changes in product design (appearance and packaging), new product placements such as sales channels and presentation concepts, new ways of product promotion and new pricing strategies.

Organizational innovation is the introduction of a new organizational method in the firm’s practices (OECD, 2005), that aims in increasing the firm’s performance (Tavassoli and Karlsson, 2015). Just like marketing innovation, organizational innovation has to be new to the firm and is a management decision. It includes methods for internal activities and for external relations.

Additionally, it should be noted that there is a distinguish in the literature between technological and non-technological innovation, with the former including product and process innovation and the latter including marketing and organizational innovation, according to the use of technology.

### 2.3 Startup Entrepreneurship

#### 2.3.1 Definitions

Startups are important drivers of economic growth. However, there is not any official definition yet. The definition of the European Startup Monitor includes startups in the category of Small and medium-sized enterprises (SMEs), but not all SMEs are start-ups, because of different set up and vision. EU Recommendation 2003/361 defines a SME according to the number of employees and either turnover or the balance sheet total. For startups, these criteria don’t always apply as a company may have a large number of
employees but not a significant turnover. Also startups need a higher initial capital in order to grow than SMEs and have different financial sources.

According to Steve Blank, “a startup is an organization formed to search for a repeatable and scalable business model”. It is a newly emerged and fast-growing business aiming to enter a market by developing a business model around an innovative idea (Blank, 2010). Paul Graham (2012), the first startup accelerator creator, states that “a startup is a company designed to grow fast. Being newly founded does not itself make a company a startup. Nor is it necessary for a startup to work on technology, or take venture funding, or have some sort of "exit." The only essential thing is growth. Everything else associated with startups follows from growth”. Neil Blumenthal, co-founder of the startup company Warby Parker, defines startup as "a company working to solve a problem where the solution is not obvious and success is not guaranteed”. For Ries (2011) a startup is “a human institution designed to deliver a new product or service under conditions of extreme uncertainty”.

The definition of the European Startup Monitor generally accepts three factors that define startups. First, startups must be in the market for less than 10 years. Second, they must feature highly innovative technologies and/or business models and third, startups should aim to scale up, meaning having the intention to increase their employee number and their market share.

2.3.2 Characteristics

According to the above startups are generally characterized by specific features that distinguish them from SMEs. The main features are listed below:

- Innovation: Innovation is the main characteristic of a startup. It may concern product, process, organizational innovation or a combination of them. Product and organizational innovation are often achieved through new technology use and research findings. Organizational innovation leads to an original business plan. Startups through innovation are basically aiming in creating a new market or changing an existing one by closing the market gaps. As this includes the aspect of originality, their business plan cannot be evaluated and have to undertake the risk of potential failure.
• Repeatable and scalable business plan. This means that the product will be used by all customers without alteration. It suggests the increase of customers without any additional cost in sources and development time.

• Rapid growth. The repeatable business plan is the link to rapid growth. However, the existence of a big market is considered necessary so that the revenues can reflect the startup growth. Eventually, startups are characterized by targeting potential markets that are not defined geographically or require a physical presence or service.

• Form of temporary organization. Their aim is to develop a product and business plan which will define their future. The successful outcome often leads in a more stable form of organization or to the acquisition by or merge with another organization. It should be noted here that startups have generally high risk of failure.

• Diversity and consistency of the team members. Startups usually start their operation with a small number of employees that each engage in different positions that are not easily distinguishable, but there is high consistency and cooperation among them.

2.3.3 Startup life cycle

Researchers have divided startup development into several stages based on different perspectives. According to Crowne (2002), there are four stages in a startup life cycle: startup, stabilization, growth, maturity. The startup stage consists of the period from the idea creation to the first sale. It is the stage where the right skillful team is combined to start building the product. Stabilization starts when the first sale is executed and ends when the product is stable enough to reach customers without any additional change in the product development. The growth stage starts with a stable product development phase and ends when the market size, share and growth rate have been established. The fourth stage is the stage of maturity, when the organization has evolved from a startup to a mature organization that has established both the product and the market (Crowne, 2002).

Another life cycle perspective has been presented by Blank (2015) according to whom startups have three life stages: search, build and grow. Search is about the discovery of a
repeatable and scalable business model, which takes multiple alterations to find a product or market fit - the match between what you’re building and who will buy it. The exit of this stage happens when the startup has customer validation, which is when the sales channel matches how the customer wants to buy and the costs of using that channel are established, sales becomes easily achievable, customer acquisition and activation are defined and Customer Acquisition Cost (CAC) and Life Time Value (LTV) can be estimated for the next 18 months. At this stage the startup consists of less than 40 people. This is the most important stage as it is the stage that most startups fail. The next stage is build, which is when the startup needs to change into one that can scale by growing customers at a rate that allows the company to “achieve positive cash flow and/or generate users at a rate that can be monetized”. In this stage, as more employees are needed (begin around 40 and end with around 700) the company needs to address internal management so that it can be more effective. The last stage is grow, in which the startup company has achieved liquidity (an IPO, or has been acquired by or merged with a larger company) and is growing by repeatable processes (Blank, 2015).

From both models we observe that a startup begins from the execution of the idea conceived. The end though has two different outcomes, success or failure. Success is the optimistic outcome that involves two scenarios. The first is that the company will evolve from the startup form to an autonomous form of organization. The second is to be acquired by or merge with another company. This second scenario is what most startups prefer. On the other hand, the case of failure usually occurs in the early stages. According to a Harvard Business School research (2011) and a CB Insights (2018) research about 75% of early stage startups fail, due to different reasons with the most common being that there is no market need for their product, followed by luck of capital.

2.3.4 Lean Startup

The Lean Startup is a methodology that has proven to be successful among many young, high-tech focused, companies. The idea behind the Lean Startup is the efficiency of the production process by reducing any sort of waste in the process. The concept was introduced by Eric Ries in 2008 according to whom the vital part of a startup is to learn how to build a sustainable business. It was based on the Customer Development Method introduced by Blank (2006), according to which the startup should be focused on
collecting continuous feedback of the customers every step of the way. The Lean Startup suggests that if startups invest their time into iteratively building products or services to meet the needs of early customers, they can reduce the market risks and sidestep the need for large amounts of initial project funding and expensive product launches and failures (Ries, 2011). The concept of Minimum Viable Product (MVP) is introduced in the Lean Startup method as the strategy and process directed toward a minimal version of the product or service that can be offered to customers. The Lean Startup is based on five principles (Ries, 2011):

- Entrepreneurs are everywhere: Startups are a human institution designed to create new products under conditions of uncertainty, which means that entrepreneurs can be found everywhere and the lean startup can apply in all industry sectors no matter their size.
- Entrepreneurship is management: Startups should be managed differently than a traditional business due to conditions of uncertainty.
- Validated learning: Startups exist to learn how to build a sustainable business.
- Build-Measure-Learn: The startup main activity is to iteratively turn ideas into products, measure customer satisfaction, and learn from their feedback. This allows them to decide whether to preserve their product or pivot and repeat the process with a new hypothesis.
- Innovation accounting: It is “a way of evaluating progress when all the metrics typically used in an established company are effectively zero”.

As Blank (2013) describes it the lean method has three components. First, founders instead on focusing on a business plan, should focus on summarizing their hypotheses on a business model canvas (a diagram of how the company creates value for both itself and its customers). Second, the lean startup uses the “get out of the building approach”. This approach is about creating a minimum viable product, offering it to customers and using their feedback, so that the company can pivot and the product can be revised. Third, along with customer development, lean startups practice agile development, which is the elimination of waste of time and resources by creating the product they are testing.
2.3.5 Greek startups

The Greek startup scene was introduced after the economic crisis of 2009 and since then has grown significantly. Startups are a new entrepreneurship model in Greece, which, having the characteristics of innovation and rapid growth, can contribute significantly to the growth of the Greek economy and in the creation of new jobs. Their number is not easily measurable as there is no official database.

According to the European Startup Monitor research in 2016, most of the Greek startups are independent ventures (74.3%) with the majority of them aging about one year (57.1%). More specifically, the average age of Greek startups is 1.3 years, which is the lowest ranking among the European countries (2.4 years on average). The industry in which most startups in Greece operate is industrial technology/production/hardware sector in contrast to the rest European startups that operate in IT/software development sector. Most of the revenues generated are in the domestic market with 52.8%, in comparison with the average of 44.8% of the European countries, followed by 32.1% in European market and 15.1% worldwide. An important finding is that because the degree of internationalization in Greek startups is high (56.3%) the intention of internalization is relatively low (6.3%). On the other hand, the startups that are not internationalized (43.8%) have a high intention of internationalization (93.8%) (European Startup Monitor, 2016).

In terms of Greek startup founders, the gap between male and female founders is quite big (71.6% male, 28.9% female). However, the most important thing here is that Greece has one of the highest percentages of female founders among the European countries (European Startup Monitor, 2016). In a more recent ESM report (2018) though, this gap is increasing with female founders losing their share (14.6%) and coming closer to the average European percentage (15.6%). Most founders are between 25 and 34 years old with the average age being 31.7 years, an average that is decreasing through the years. What is surprising though is that the percentage of the founders of the Greek startups that come from Greece is only 25%, while 75% come from European countries. Also interesting is the fact that almost all Greek startups are founded by teams and not by just one founder (European Startup Monitor, 2016).

As mentioned before, startups can effect employment by creating jobs. Greek startups have an average of 9 employees including founders and plan to hire 5.5, which is lower
than the European average, 12.8 and 7.5 respectively. Most of the employees of the startups are Greek citizens and there is a very small percentage of 10.7% that come from European countries (European Startup Monitor, 2018).

As we can see Greek startups are still in an early stage even though they have significantly increased. For this purpose there has been an effort in supporting systems in Greece and the access to skill, knowledge and financial resources to be enhanced, a subject introduced below. It is important here to mention the Greek Startup Manifesto which, following the EU Startup Manifesto, is an action plan aiming to improve the environment of the startup entrepreneurship in Greece by removing growth barriers and upgrade Greece to an innovation country. Towards this end the Greek Startup Manifesto proposes more fair taxes, government support, less paperwork for the founders, easier access to funds and promotion of entrepreneurship in general (www.startupmanifesto.gr)

### 2.4 Summary of the literature review

In this chapter the basic factors of entrepreneurship and startup entrepreneurship were analyzed. Their main characteristics were presented in order to provide us with an initial image of their function. Also the Greek entrepreneurial scene was introduced. The review of the literature revealed great interest in both entrepreneurship and startups. Their theoretical basis is still blurry since there are different views and perspectives among academics and researchers. Their main consent though is that they promote economic growth.

In Greece startups have been introduced about a decade ago and literature is still limited. However, their contribution to the country’s economy is undeniable. This leads as to the next chapter where their financial resources are identified and the ecosystem they exist in is presented.
CHAPTER 3 Financial options of the Greek startups

This chapter examines the financial options of startups. Funding tools are part of the startup ecosystem. For this purpose, the startup ecosystem and its components are first presented as they are the means for startups to access the available financial resources. Then the financial methods are presented as well as the greek startup financial tools.

3.1 The Startup ecosystem

The term ecosystem was originally coined by James Moore who defined the term as the evolution of how firms interact with suppliers, customers and financial entities (Moore, 1993). An ecosystem is “a set of interconnected entrepreneurial actors (both potential and existing), entrepreneurial organizations (e.g. firms, venture capitalists, business angels, banks), institutions (universities, public sector agencies, financial bodies) and entrepreneurial processes (e.g. the business birth rate, numbers of high growth firms, levels of ‘blockbuster entrepreneurship’, number of serial entrepreneurs, degree of sell-out mentality within firms and levels of entrepreneurial ambition) which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment” (Mason and Brown, 2013). Startup ecosystems are very dynamic entities.

A sustainable and organized startup ecosystem is important for an easier access of the startups to the available financial resources. It consists of individuals, startups of all stages and public and private organizations that work together towards the creation of new startups by providing them with capital and knowledge (Startup Commons, 2014). These organizations include funding organizations, universities, supportive organizations, research institutions and enterprises. This approach emphasizes the complex relationships between institutions, organizations, and individuals that make up the ecosystem.
There is a high number of startup ecosystems worldwide, but 20 of them have prevailed under different developing circumstances. According to the Global Startup Ecosystem Report, Silicon Valley is still the greatest ecosystem worldwide, home to countless startups, but recently has been strongly antagonized by other existing and emerging ecosystems. New York is the second highest performing ecosystem in the world, followed by London, which is the biggest European ecosystem. These are the three ecosystems considered as the top performers worldwide.

However, organised startup ecosystems are highly dependent from the organizations and support systems they include, because without them startups could not have access to resources and new financial methods.
3.2 Startup Incubators

Startup incubators play an important role in enabling entrepreneurial activity. They aim to assist entrepreneurs, mainly the ones focusing on high-technology and the internet, in the establishment of their firms (Lee and Osteryoung, 2004). National Business Incubation Association (NBIA) defined business incubators as facilities that provide shared resources for early-stage businesses, such as office space, consultants, and personnel, as well as access to financing and technical support. Incubators provide a more secure environment for new businesses to grow in until they reach maturity. Alternatively, a business incubator is a network of individuals and organizations that provides startups with assistance and a strategic and value-adding system of monitoring, by controlling and linking resources aiming in the successful creation of a new business and at the same time bearing the cost of a potential failure (Hackett and Dilts, 2004).

Incubators are organizations that accelerate the process of creating successful businesses by providing them with a wide range of assistance, including space, business support services, and clustering and networking opportunities. By providing their clients with services and enabling cost reductions, incubators improve significantly the survival and growth potential of new startups. A successful incubator generates on regular basis new businesses with above the average job and wealth creation potential. However there are different types of incubators. Different stakeholder objectives, admission and exit criteria and the knowledge intensity of projects are some of the aspects that distinguish them (European Commission, 2002; Bergek and Norrman, 2008). So there are certain criteria for a startup to qualify for incubator assistance. Some may search for startups of a specific industry while others may focus on particular locations (Hackett and Dilts, 2004). Ultimately incubators carefully choose the right startups to incubate as their main target is to invest in the ones that have future potential.

The first incubator established was the Batavia Industrial Center in 1959 at Batavia, New York. The earliest incubators focused their efforts on new technologies, light manufacturing and services, with most being established as publicly funded vehicles for job creation and economic revitalization. With time, as the number of incubators increased, there were more privately funded incubators, but still the majority remains publicly funded organizations (Wiggins and Gibson, 2003).
In Greece incubators have evolved recently into dynamic entities that support the growth of greek startups. They provide them with space, access to financial resources, experienced mentors and connection with other networks (Foundation, 2018). Most incubators are based in Athens and in Thessaloniki. The most popular ones are EGG, Orange Grove, Corallia, IQbility, Athens Center for Entrepreneurship and Innovation, The Athens Startup Business Incubator and Thermi Business Incubator.

3.3 Startup Accelerators

Startup accelerators is a relatively recent phenomenon, as the first accelerator was founded in 2005 (Y Combinator by Paul Graham), that has been increasing in numbers ever since. Accelerators are supportive programs that help entrepreneurs define, build and bring their products into the marketplace. Cohen and Hochberg (2014) define accelerator as “a fixed-term, cohort-based program, including mentorship and educational components, that culminates in a public pitch event or demo-day”. More specifically, startups enter accelerators for a fixed-period of time, between 3 and 6 months, as part of a cohort of companies. They are usually provided with a small amount of initial capital, working space, education and mentorship opportunities. Finally, most programs end with a grand event, usually a “demo day” where startups are introduced to a large audience of investors (Cohen and Hochberg, 2014).

Accelerators are often compared with incubators. However they have a number of distinctive features that differentiate them. Accelerators were until recently mostly run by private investors and focused in the web and mobile sector. They are designed to quickly move startups from one stage to the next, while incubators aim to move startups toward self-sustaining, mature businesses (NBIA). Even though accelerator programs differ between each other they have five main features (Miller and Bound, 2011):

1. An application process that is open yet highly competitive: Anyone from anywhere in the world can apply through the web. After a first clearance, the applicants are interviewed and the most promising ones are selected.

2. Provision of pre-seed investment, usually in exchange for equity: Accelerators often provide an initial investment, between €10k and €50k, that exchange with an equity percentage.
3. A focus on small teams not individuals: Accelerators choose small teams instead of solo founders because the amount of work expected cannot be delivered from one person and larger teams need higher investment to cover the costs.

4. Time-limited support comprising programmed events and intensive mentoring: Accelerator programmes last between three to six months, a time frame which reflects the decreasing amount of time needed for the launch of a web startup as well as the rapid growth intention of the programmes. They promote interactions with other professionals who take the role of mentors through structured events, with the ultimate goal being the “demo day”, which is the day the startups introduce themselves to potential investors and launch their products.

5. Startups are supported in cohort batches or ‘classes’: The main advantage of investing in a group of startups is that the interaction with each other acts as a supportive mechanism that can help with feedback and problem solving among the cohorts without external support.

From a structural point of view, five main components have been identified (Clarysse, Wright and Van Hove, 2015)

1. Strategic focus: Strategic focus has a strong relationship with the funding support of the accelerator programme, as there might be different key objectives according to their financial resources (private, public or both). Sector or industry focus is an important choice as accelerators can choose to be generic or specialize in an industry. Geography focus is another choice as they can choose to be locally or internationally active.

2. Programme package: Programme package consists of a standardized training and a mentoring package which usually includes a training programme, an events programme, regular counseling, “demo-days” and co-location for peer-to-peer learning and collaboration. The mentoring packages are complimentary to the standardized ones as mentors are experienced entrepreneurs that can help startups with their business model.

3. Funding structure: There are two elements in funding structure. The first is the accelerator funding which comes mainly from the shareholders. The second is the startup funding which usually comes from the accelerator with the exchange of equity.
4. Selection process and criteria: The selection process is important for accelerators and may differ among them. It usually starts with an online application of the startups after an open invitation, followed by a screening stage and interviews of the applicants. The main selection factor though is the team with some accelerators helping single founders with matchmaking and team formation.

5. Alumni service: Accelerators maintain good relationships with their graduates as they can serve as mentors or investors for the startups to come.

According to these structural features there are important differences between accelerators that can be divided into three groups. First group is the investor-led accelerator that receives funding from investors and aim to fill the equity gap between early stage startups and the ones that are ready to receive investment. Second group is the matchmaker accelerator that is set up by corporates who want to provide a service to their customers or stakeholders in order to strengthen their relationship. Third group is the ecosystem accelerator whose main stakeholder is the government and aims in the development of a specific area or of a technological activity (Clarysse, Wright and Van Hove, 2015).

Greece has an increase lately in the number of the accelerators. However there are a few accelerators that are often confused with incubators. This happens because some incubators may run accelerating programmes, such as Thermi Business Incubator and EGG that along with their incubation programmes have launched acceleration programmes too. Other Greek accelerators are Venture Garden, Metavallon, and the newly launched CapsuleT, EO Accelerator and Enso XL Accelerator.

3.4 Structures promoting entrepreneurship and innovation

3.4.1 Universities - Units of Innovation and Entrepreneurship

Universities are important for the community engagement, economic growth and the creation of new jobs. Most of them have developed units for promoting innovation and entrepreneurship. The target of these units is to develop the entrepreneurial culture of their students and graduates and support them in their innovative entrepreneurial activity. More specifically, these units are designed to locate innovative ideas, convert them into a business plan and help with the connection with other entrepreneurs and firms.
Entrepreneurship promotion through universities has many aspects though. Many focus on teaching the fundamentals of starting a business and providing the appropriate tools, while others on promoting entrepreneurship as a more viable option than traditional career paths (Nesta, 2016). In-house R&D, links with other firms, collaboration and contract research are fundamental for both entrepreneurship and innovation (Smith, 2007). Let’s just not forget that both academic staff and doctoral graduates perform researches that can lead to innovative ideas and high growth startups. Academic entrepreneurship is connected with student entrepreneurship (Davila et al, 2003).

Governments and policymakers worldwide support these university units, with the goal of them being more entrepreneurial and contribute directly to economic development through their business activities, by simplifying procedures and reducing costs, where possible (Nesta, 2016).

Startup ecosystems often evolve around universities, because they function as skill and technology inventories that startups can benefit from. According to Paul Graham, “it’s no coincidence that startups start around universities, because that’s where smart people meet.”

In Greece, units of innovation and entrepreneurship have been created by most universities, especially the technical ones. Their activity includes seminars and events on innovation and entrepreneurship as well as competitions and research labs. They are mainly financed by National and European funds.

3.4.2 Science and technology parks

The International Association of Science Parks and Areas of Innovation (IASP) defines the science park as “an organisation managed by specialized professionals, whose main aim is to increase the wealth of its community by promoting the culture of innovation and the competitiveness of its associated businesses and knowledge-based institutions”. For this reason, a science park controls the flow of knowledge and technology between universities, R&D institutions, companies and markets. It provides space for the creation and growth of innovation- and technology-based companies and provides other value-added services needed.
There are a lot of science and technology parks established as part of local development strategy, but they are not considered entrepreneurship stimulators as they may take even 10 years to be established (Nesta, 2016). They are usually based around universities and their interaction with them is constant. Because their creation is mainly due to collaboration of private organizations, universities and government agencies, their facilities may involve university research centers or other research and development units.

Science and technology parks usually facilitate innovative startups with technological focus. Both innovation and high technology are significant aspects of their function. However, there are differences among the parks, but startups have a competitive advantage developing into them because of the specialized services each of them is provided with.

There are several Science and Technology Parks in Greece. They were introduced back in 1989 as a means to connect research and technology by national initiative. They were created in the cities with universities by using research centers. Today there are about seven parks in Greece that are mainly funded by National and European Funds.

### 3.4.3 Co-working spaces

Co-working spaces are an expanding global phenomenon especially in urban areas. A co-working space is a space where professionals meet to work on their businesses “together”, helping in the entrepreneurial ecosystem development. More specifically, they are collaborative work environments that provide support, shared facilities and access to a wide network for different groups of professionals and entrepreneurs while working ‘alone together’ (Spinuzzi, 2012). Co-working spaces are regarded as "serendipity accelerators", designed to “host creative people and entrepreneurs who endeavor to break isolation and to find a convivial environment that favors meetings and collaboration” (Moriset, 2013).

They are mainly shared workspaces with flexible renting options, designed to allow interaction with other occupants (Nesta, 2016). The occupants are mainly freelancers, entrepreneurs, startups or any other professional who want to take advantage of their flexibility and their services (Spinuzzi, 2012). Amongst other benefits, sharing a common space provides community, a sense of belonging, to those who otherwise would be
working from home, which has been found to be critical in stimulating business development (Spinuzzi, 2012).

For startups is a great option because in their early stages they lack the necessary capital for the regular office establishment and its fixed costs. Also in co-working spaces startups interact with the rest of the space occupants, so ideas and knowledge are freely shared. So apart from the shared space, collaborations may emerge through them.

There were not many co-working spaces in Greece until recently that they have been rapidly increasing. They are mainly private, offering a cheaper alternative to office spaces. Some examples are The Cube, Impact Hub Athens, Stone Soup, Tzaferi 16, Athens Place and CoHo.

3.5 Startup Awards

Awards promote entrepreneurship and innovation by giving entrepreneurs the opportunity to benefit from their participation in the competitions. Their contribution to the funding of the startups is very valuable since the awards are mainly financial support and access to supportive structures. However, their participation and only allows them to create a valuable network of contacts, develop further their skills, have access to mentors and supportive structures and more significantly introduce their ideas in national or international level (Russell, et al., 2008).

Competitions have an important role in Greek startup community. The lack of initial financial support has led many startups to participate in competitions that offer significant awards as well as mentoring and access to other supportive structures. The most popular ones are the Hellenic Entrepreneurship Award, the Innovation and Technology Competition by the National Bank of Greece, the MIT Enterprise Forum Greece Startup Competition and The Squeeze by Orange Grove.
3.6 Financial tools

3.6.1 Bootstrapping

A startup in its initial stage can choose to operate from the founders personal resources instead of turning to external investments. “Bootstrapping” is the term that defines this phenomenon. More specifically, bootstrapping is using all personal means available to fund your business without turning to external funding. It is also referring to all the options that minimize the cost of founding a business. Usually, it includes using personal savings and credit cards of the founder, working from home, renting or borrowing equipment, seeking free support from individuals and using personal networks to gain access to several resources (Gregson, 2014).

Relying on your own means has one main advantage. The founder does not have to give up a share of his business for funding, so he remains the only owner, at least at the beginning. On the other hand, personal resources are usually limited and debt is really easy to build up if not controlled (Gregson, 2014). Also, an important disadvantage is that working alone and having limited access to support often result in very low growth rates (Cassar, 2004; Davila et al., 2003).

This funding approach is usually used when the founders cannot have access to external funding and their only option is to rely on their own means. According to Winborg and Landstrom (2001) there are four types of bootstrapping methods (Ebben and Johnson, 2006):

1. Customer-related methods.
2. Delaying payments.
3. Owner-related financing and resources.
4. Joint-utilization of resources with other firms.

3.6.2 Friends and family

As mentioned before, startup founders have hard time accessing external investment to found their business. Along with bootstrapping, there is another source of funding, that of friends and family. This funding method is in the form of informal loans and can complete
bootstrap in the initial stage of the startup. They are important resources since there is no other financial support. Friends and family are considered to be the most popular financial source among startups (GEM, 2016).

As repayment for these loans, founders can provide to their family members or friends a capital share or some involvement in the management of the business. But there are some things to consider though as this kind of funding can put the founder in a difficult position. Although the motivation behind these loans is to support the founder and close family members may have no expectations, expectations from friends or other family members may differ. Sometimes they may have higher expectations such as quick payback, involvement in all business aspects or a high equity share (Gregson, 2014). In addition, the outcome of failure should be considered as the possibility of not being able to repay the loaners in such case exists.

3.6.3 Venture capital

According to GEM (2000) venture capital is defined as “risk money invested by professionals in small, young companies with the potential to grow rapidly into enterprises that contribute significantly to local, regional and national economies”. Venture capitals have emerged in the USA after World War 2 and in Greece have been developed since 1990’s. They have played a significant role in Silicon Valley’s success and have funded many highly acclaimed companies such as Intel, Google and Facebook.

Venture capital has evolved to an important factor in financial markets, by providing capital to startups that might otherwise have difficulty attracting external investment (Gompers and Lerner, 2001). More specifically, venture capitals are investments in startups and small businesses that are considered to have significant growth potential but are highly risky. They generally come from wealthy individuals, investment banks and other financial institutions.

Investors look for businesses that have the potential of earning them high capital returns that balance the losses of other investments (Gregson, 2014). As mentioned before, they invest in high risk startups. In return for their investment they get equity and so they have a say in the business processes. Venture capitals are invested only in the startups that meet the investor’s criteria, which vary among them and may include specific industries or the
involvement in the management. However, investors devote significant management resources to examine new technologies and markets, to find promising startups and provide them with financial resources and coaching through their early stages (Davila et al., 2003). At the same time, the startup benefits from the relationships and resources of the investor.

In general, the venture capital investment begins with raising a venture fund, moves on to the investment which includes supervising and adding value to the business and concludes with the exit of the firm and the capital return to the investor (Gompers and Lerner, 2001). Ultimately the target is that the return after the exit of the startup, meaning a liquidity event, to be higher than the initial investment and offset the losses of other investments (Gregson, 2014). The investment period varies among businesses but is usually between 5 to 10 years and is a legally established contract. It has to be mentioned though that the venture capitals are different among the stages of the life cycle of the startups. Most investors prefer the growth or maturity stage of the startup rather than investing in the pre-startup stage (IOBE, 2016).

The main advantage of venture capitals is that during the investment the startup is financially stable and doesn’t need to provide any guarantees, meaning that in the case of failure the startup won’t have to pay back the investor. Researches has shown that the presence of venture capitals in the startups speed the commercialization and the growth of startups (Signore, 2016). On the other hand, there is a major disadvantage in venture capital investment for the startups which is the involvement of the investors in the business management.

Generally, venture capitals are considered to have significant role in the growth of businesses since they have funded some rapid growing companies. However, even if they are a popular financial method, their overall contribution is very low (Gregson, 2014).

3.6.4 Business Angels

According to Mason, Botelho and Harrison (2016) business angels are defined as high net worth individuals who invest in unquoted businesses with which they have family connection. They usually invest in the form of equity in the hope of achieving a significant financial return through some form of exit (Macht and Robinson, 2008). Typically, they
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seek involvement in the business processes. Moreover business angels may contribute their business experience, skills and networks and provide credibility and legitimacy to the business (Mason, Botelho and Harrison, 2016; Gregson, 2014).

Business angels invest mainly in early stage startups in contrast with venture capital investors who prefer later stages. Also they prefer local industries and that is why they are considered important by national and regional governments. They are referred as “informal investors” because their investments are private and not public and that is what makes it difficult to gather data of their overall performance. However business angel investments are encouraged in a variety of ways in most countries, such as through taxation and support of business angel networks or other types of intermediary actions that connect angels and startups seeking financial support (Mason, Botelho and Harrison, 2016; OECD, 2011). Lately business angels have been organizing into groups (Business Angel Networks-BANs), which allows collective investments, provides them with more opportunities and makes them more visible to the entrepreneurs who seek investors (Mason, Botelho and Harrison, 2016). Also, angel groups can make higher investments than the individuals alone.

According to several researches the typical business angel is a middle aged male who invests his personal wealth, usually in early stage and technology-oriented startups. Their motivations for investing differ among them and are dependent to their background and their risk assessment, with the main motivator being the financial return. Most business angels have some entrepreneurial and management experience that put into their investments and usually their wealth was a result of a cash-out of their own ventures (Politis, 2008). This previous experience is what drives them in choosing where to invest, so that they will minimize their risk (Mason and Stark, 2004).

For startups business angels are a good source of funding mainly because they demand less control. Their interest in early stage business is what fills the gap between initial funding from family and friends and the later stage funding with venture capitals. They are also important for the startups that cannot access formal funding. As mentioned before their nature is informal and their investment motives originate from their perspectives and not the criteria of the formal funding institutions.
Often there is confusion between business angel investments and venture capitals. Their main similarity is that they are both interested in high return. On the other hand, their main difference is that business angels have more freedom in their investment decisions than venture capital investors who, even though they provide the capital, they don’t have a say in the investment decision (Gregson, 2014).

3.6.5 Crowdfunding

Startups are increasingly turning to alternative forms of funding in order to meet their financial needs. Crowdfunding is one alternative funding method that has seen rapid growth the last few years. There have been a number of definitions for crowdfunding but generally it can be defined as “an open call, essentially through the Internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes” (Lambert and Schwienbacher, 2010; Belleflamme, Lambert, & Schwienbacher, 2014).

Crowdfunding is a new online phenomenon that allows startups to raise capital from a large number of private individuals (Macht and Weatherston, 2014). As mentioned before, while startups are generally funded with larger amounts after their initial stage, initial stage is funded from the founder or family members and friends. Crowdfunding has come to fill this gap. Its development has risen after the financial crisis of 2008 possibly because of the general lack of formal investments (Herve and Schwienbacher, 2019). However, this rise presents new ways of startup investments that can involve less wealthy investors (Nesta, 2016).

More specifically, the entrepreneur introduces his idea in the best way possible through the Internet to the potential funders. Then, by an open call, usually through social media, investors are called to make their donation through a crowdfunding platform. The more appealing the introduction is the more are the investors. Investors can select from numerous projects to invest as much as they want (Macht and Weatherston, 2014). Crowdfunding platforms take a percentage of the funds raised.

There are four types of crowdfunding: reward-based crowdfunding, donation-based crowdfunding, loan-based crowdfunding, and equity crowdfunding (Belleflamme, Lambert, & Schwienbacher, 2014). In reward-based crowdfunding, investors receive non-
monetary rewards that include personal recognition or experience rewards such as invitations to launching events. In donation-based crowdfunding there are no rewards and generally no expectation from the investors. In loan-based crowdfunding, investors are rewarded typically with a refund with an interest or with the final product. In equity crowdfunding funders expect a share in the business. However, equity crowdfunding faces significant legal challenges, but as many countries are increasingly relaxing their legal barriers it is experiencing rapid growth (Drover et al, 2018).

The main advantage of this funding method for the startup is that it allows the founders to examine the interest in the potential market from the very beginning. It also allows feedbacks from potential customers which in turn allow the early changes in the production. Another advantage is that through this way the startup engages committed customers (Belleflamme, Lambert, & Schwienbacher, 2010; Mollick, 2014). According to Lambert and Schwienbacher (2010) most of the investors are motivated by the receiving reward. They also suggested that there are two other non-financial motivators the personal gain of contributing to the success of the business and the social reputation (Macht and Weatherston, 2014).

3.6.6 Bank Loans

Bank loans are a very common method of funding a business and maybe the oldest traditional one for a lot of entrepreneurs. Generally, businesses seek to obtain financial aid from banks for their development. However, for startups bank loans are not an easily accessible option even though it is an important one. Because of lack of credibility and a history in the markets startups cannot be proven loan-worthy. Bank loans are a possible financial method that require collateral or some sort of security and so banks are reluctant in funding them as they are a risky investment (Nesta, 2016). Startups are mainly found of young people that have no personal assets. Therefore, startups are not a qualified candidate for bank loans.

On the other hand, startups do not choose bank loans for funding. According to Brown et al. (2012), startups and especially high-tech startups do not use bank loans and is harder for them to obtain one. The long and complex procedures and the high interests deter startups from even applying for them.
The main advantage of bank loans is that the entrepreneur has full ownership of the firm, without having to give up a share or have anyone involved in the business control (Bettignies and Brander, 2006). A serious disadvantage though is the repayment time that usually starts immediately. Another disadvantage is that in case of failure the startup still has to repay the debt.

3.7 The funding of Greek startups

Funding for the greek startups has proven to be an important matter. Accessibility and availability has been limited since the financial crisis due to the uncertain economic environment and low investment activity. According to GEM (2016) the main financial option used is the founders’ own capital 42,3% in contrast with 22,5% of the European countries average and only 36% receive external funding with the European countries average being 68,1%. Most startups have received funding between 25,000€ and 50,000€ while there is none with more than 150000€ recorded. Bank loans are not preferred by startups due to their complex procedures and the guarantees needed (Hyz, 2011). The main external funding tools greek startups use are venture capitals, business angels, crowdfunding and national and European programmes.

The European programme JEREMIE (Joint European Resources for Micro to Medium Enterprises), initiated by the European Commission and the European Investment Fund (EIF), has been an important contributor to the greek startup financial scene along with National resources during its 2007-2013 programming period (Foundation, 2017). Through JEREMIE national and regional authorities had access to European funds in order to fund SMEs through financial intermediaries that provided them with loans, equity and guarantees, such as commercial banks, venture capital funds or other financial institutions. Its resources were mainly from the public sector with a small contribution of the private sector as well (www.eif.europa.eu).

Venture capitals are considered the most important financial tool for startup growth. JEREMIE made an important contribution to the greek venture capital scene as it provided about €55M to four venture capital investors Openfund, PJ Catalyst Fund, Odyssey Venture Partners and Elikonos-First Athens (Foundation, 2017). Openfund is one of the most active venture capital funds with investments during 2009 and 2016. The
The contribution of JEREMIE funds has played an important role in Openfund’s development which invested about €16M in Greek startups. PJ Catalyst Fund was created by Pireaus Bank and JEREMIE in 2012 investing around €15M in technology startups. Odyssey Venture Partners invested about €27M in Greek information and communication technology (ICT) startups addressing global markets. Elikonos-First Athens has invested around €17M (Foundation, 2017).

Apart from the JEREMIE-backed funds mentioned above there are other Greek venture capital funds. Along with Openfund, Venture Friends is a highly active venture capital fund that has worldwide presence with main investments in consumer services and marketing industry. NBG Business Seeds, created by National Bank of Greece, invests in startups of all stages through the Innovation and Technology Competition and provides them with several benefits such as services, equipment and mentorship. There are also other banks that created venture capital funds such as Attica Ventures by Attica Group and Alpha Ventures by Alpha Bank Group. Generally there are about 20 venture capital funds in Greece.

Business Angels is a recent phenomenon in Greece but not very popular yet. Due to the lack of public grants, bank loans and venture capital investments, business angels have emerged to fill the gap of funding early stage startups (www.hellenicstartups.gr). In 2012 the Hellenic Association of Entrepreneurs created the first network of business angels named Hellenic Angels. The aim of the network is to connect startups seeking funding with potential investors. Also, towards this goal the Business Angels Network was created by the Athens Chamber of Commerce and Industry (www.businessangelsgreece.gr). According to Foundation report (2018), there has been a decrease in angel investments in 2018 relatively with 2017 and an increase in venture capital funding, as shown in the pictures below, possibly because business angels are turning to venture capital participation.
Crowdfunding in Greece is still in early levels. There are legal limitations in investing through crowdfunding especially in equity crowdfunding but there is none in donation crowdfunding which is the form used mainly in Greece. It has appeared around 2011 mostly to cover the gap of the limited business angels investing in the early stage startups. Today there are plenty crowdfunding platforms such as Groopio, OpenCircle Greece, Classfund, Efund.gr, Give&Fund, JumpStart Greece.

National and European funds used to be and still are very important financial tools for the greek startups. The National Strategic Reference Framework has launched supportive
programmes for startups. As mentioned before, JEREMIE has played significant role in boosting greek venture capital funds. As JEREMIE ended in 2016, EquiFund arrived in 2018. EquiFund, which has been described as the “fund-of-funds”, is an investment platform created by the European Investment Fund and the Greek government and aims to promote the greek venture capital market in order to provide funding to all SMEs through all their life cycle stages. Funds will be provided by the European Union and national resources and also by the European Investment Fund (EIF) and the European Fund for Strategic Investments (EFSI). Moreover, additional funds will be provided by organizations such as Onassis Foundation and the National Bank of Greece. Investments will have the form of equity and additional support will be provided apart from financial to the businesses. The investments will be distinguished into three parts (windows), that each will involve investments in the different life cycle stages of the startups: the innovation, the early stage and the growth stage window (www.equifund.gr). There are many financial institutions that have expressed their interest in participating in EquiFund such as Metavallon Fund, Uni.Fund, Marathon VC, Venture Friends and Elikonos.

To sum up, the access to funding resources in Greece is a problematic area. That is why greek startups tend to turn to supportive structures. Incubators, accelerators and co-working spaces are generally confused in Greece because they often undertake activities that do not fall into their category. However, they all provide easier access to financial resources. The following chapters are dedicated to the survey conducted to identify which financial tools the startups use in Greece and how important their access is.
CHAPTER 4 Research Methodology

In this chapter the goals of the research of this dissertation are presented. Also the sampling method is introduced and the methodology of the survey is explained.

4.1 Introduction – Research goals

It is generally accepted that startups have significant impact in a country’s economic growth and prosperity. Factors such as innovation and rapid growth are their main characteristics while funding and supportive structures can affect their creation and growth. The economic contribution of the startups and the limited literature on their creation and development along with the factors that affect their growth requires extensive research in this field. In this dissertation the research that has been conducted aims to identify the financial options of the Greek startups. More specifically, it aims to identify the profile of the greek startups and their founders, the financial resources they use and how important they are in the decision of the startup creation. Moreover, there has been an effort to draw information of the greek startup ecosystem, as its function is substantial for the startup financial access, and recommendations for potential changes.

Given that the startup scene in Greece is a recent evolving phenomenon, there are not enough secondary data in order to draw safe conclusions about the greek startups. Because of the lack of available data and an official database for the startups the research was based on primary data collection. For this reason the research was conducted through an online structured questionnaire (Appendix A). The questionnaire was addressed to startup companies and more specifically to their founders, as they are the primary recipients of the financial resources and can imprint the current situation more accurately.

4.2 Population and Sampling

The population of the research is the greek startups. A parameter considered was the time of their creation. It was set to be no more than five years as that is generally the timeline that determines their course. So the startups approached were founded from May 2014
since May 2019 which is when this research began. Moreover, this period is considered as one of the most challenging ones for Greece. Another parameter was that the base of the startup had to be in Greece.

However, determining the population has been a difficult procedure. As mentioned before, there isn’t any official database for the startup registration in Greece and their number is unknown. So in order for the population to be determined an online research was conducted. The main website that was used was AngelList (https://angel.co/greece). AngelList is a worldwide platform for startups looking for investments and employees and for angel investors looking to invest in startups. Other websites were also used such as startupper.gr, startup.gr, epixeiro.gr and LinkedIn.com.

The search of the startups with the criteria that were mentioned before, being established in Greece and operate for less than five years, ended up in recording about 200 startups. This population was considered satisfactory enough to be approached and draw safe conclusions.

4.3 Research Methodology

The research was conducted online by collecting and analyzing primary data through a structured questionnaire that was created with Google Forms. The questionnaire was structured as simple as possible in a way that the questions would be clear for the participating startups to answer so that the results would be more accurate. The questions were based on previous researches on relative subjects, such as the research of the Ministry of Economy and Development (2016) or the European Startup Monitor reports. There was an effort to keep the duration of the questionnaire as low as possible, ending with taking up to five minutes. It included 20 questions, mainly multiple choice, that were divided in four sections.

The first section was about the demographic characteristics of the startup. It included the years of operation of the startup, the startup base, the legal entity, the sector of the startup activity and the number of its employees. This section aim was to generate a general profile of the greek startups.
The second section was about the founders of the startup. It included the number of the founders, their gender, age and their educational level. This section aim was to identify the general characteristics of the greek startup founders.

The third section which was the most basic of this research was about the financial methods and the supportive structures used by the startups. The questions included were about whether the startup has received external funding or not and whether it has participated in any supportive structures. Depending on the answers there were additional questions about the financial tools and the supportive structures used respectively as well as the amount of funding.

The fourth and final section was about the founders incentives of the startup creation. This section aimed to identify the incentives behind the creation of the startups and how much financial support affects this decision. The last questions were about the founders’ opinion on government support and on what would help the startup development in Greece.

The questionnaire was sent online through emails with the reassurance that the answers of the startups that would participate in the research would remain anonymous. It was directed only to the founders as they are the ones who have full knowledge of the startups activity and the of course their creation incentives.

The collection of the questionnaires lasted more than a month, from 5/5/2019 to 20/6/2019 as the response rate was too slow. The startups that participated were 64 but 3 answers were excluded since the answers did not come directly from the founder but from an employee. The remaining 61 were considered satisfactory as they constitute about 30% of the population. The collected data were processed and analyzed with the use of the SPSS programme and Microsoft Excel.
CHAPTER 5 Data analysis

5.1 Data presentation

In this chapter the results of the research are presented and explained. Before we proceed with the results though, some clarifications about the questions should be made. Out of the 20 questions 4 were optional. Also, the 18 were multiple choices and the two remaining were open questions, meaning that there could be different answers. In most questions the option “other” was added so that the participant could give a different answer in case the options were not satisfactory.

First section

The first section included 5 questions about the startup. The first one was about the name of the startup which was optional and as ensured that the answers will remain anonymous there will be no reference of any name. However, most of the participants preferred to stay anonymous.

The second question was about the position of the participant in the startup. There were 4 predefined options and one with the option “Other”. Out of the 64 participants 61 were Founders/Co-founders. The remaining three were Employees and as the questionnaire was directed only to founders their answers were excluded from the research. There were also the options of CEO and Co-worker but were not chosen.

The third question was about the years the company is active. As mentioned before one of the criteria of the selection of the startups was that the operation years of the company would not exceed 5 years and even though it was given as an option none of the participants chose it. Most of the startups, 52,5% (32 startups), are active between 1 and 3 years. 24,6% (15 startups) are active between 3 to 5 years and the remaining 23% percent (14 startups) are operating for less than a year.
As of their legal form, we can see from the chart below that most of the startups (75.4%) are private limited companies (46 startups) followed by single person enterprises (13.1%). 9.8% of them are general partnerships and there was only one answer of a limited partnership.
The location of the startups is reported to be mainly in Athens. From the 61 responses 46 stated Athens as their location (75,4%), followed by 11 located in Thessaloniki (18%). There were also 2 from Patra, one from Volos and one from Ioannina.

The next question was about the activity sector of the startups. Most startups are activated in IT/ software sector (34,4%) which comes as no surprise since startups are mainly linked with this sector. Consulting services come second (19,7%) followed by Industrial technology and financial services with the same percentage (13,1%) while slightly lower is e-commerce (11,5%).
From the diagram below we can see that 62.3% of the startups have up to 5 employees, followed by 26.2% that have between 5 and 10 employees and 8.2% between 10 and 20. There were also two responses of more than twenty employees while there was no answer of having no employees.

Figure 5.5: The number of employees of the Greek startups
Second section

In this section the founders were asked to identify some of their characteristics. The first question was about the number of the startup founders. This question was open so the answers were different however there were only five different answers. Two founders was the most common answer (44,3%) followed by one founder (29,5%). 18% answered that there are three founders and 6,6% four founders. There was only one answer of five founders.

![Founders](image)

**Figure 5.6: The number of founders of the greek startups**

The second question of the section was about the founders’ gender. The total number of founders of the participating startups was 126. Out of 126 founders 98 were male (77,8%) and only 28 were female (22,2%).

The age of the founders was the next question. As we can see from the diagram below, most of the founders belong to the group of 25-34 (48,4%). 45,2% belong to the group of 35-44 and only 6,3% to the group of 45-54. There was no answer for the groups of 18-24 and above 55 years.
About their educational level most founders have a PhD or a Master’s degree or a Bachelor’s degree. There was no answer below that level. A PhD is owned by 55.6% of the founders, followed by 42.1% owning a Master’s degree and 2.4% a Bachelor’s degree.

5.8: The education level of the founders of the greek startups
Third section

In this section the participants were asked about the financial resources they used as well as the supportive structures.

The first question was about whether the startup was funded by the founder’s own capital or by external funding or both. 32.8% was funded exclusively by own funds and 27.9% received exclusively external funding. It is impressive though that 39.3% used both funding methods.

![Internal and External funding](image)

Figure 5.9: The levels of internal and external funding of the greek startups

The next question concerned only those who answered that they received external funding. They were asked about which financial tools they used. The most common financial tool used is venture capital (29.6%). The second position is occupied by family and friends and business angel that got the same percentage (20.4%). Bank loans and the National Strategic Reference Framework programmes received lower positions. The method of crowdfunding and awards received no answer.
The next question was about the total amount of the funds they received. Most startups received between €10,000 and €25,000 (36.1%), followed by a surprising 27.9% that received less than €10,000 and 23% received between €25,000 and €50,000. Only 13.1% received between €50,000 and €100,000 and there was no answer of more than €100,000.
As of the participation in supportive structures 59% of the startups answered that they have participated while 41% said that they did not. As we can see from the chart below the majority of those who participated were in universities (31%) followed by incubators (28.6%) and co-working spaces (21.4%). Only 14.3% participated in accelerators and 4.8% in science and technology parks.

Supportive structures

![Supportive structures chart]

*Figure 5.12: The supportive structures the greek startups participated*

**Fourth section**

This last section is about the incentives of founding a startup in Greece and the opinion of the founder about government support and which potential measures would benefit startups.

The first question is about the founders incentives to create the startup. As we can see from the chart below 60.7% were opportunity driven. 16.4% wanted their independency and 13.1% founded the startup out of necessity. Financial reasons and self-fulfillment were very low on the list (only 4.9%).
Incentives of founding a startup

![Incentives of founding a startup](image)

Figure 5.13: The founder’s incentives of creating a startup

The next question is about the founder’s opinion of what mostly affects this decision in terms of the general greek ecosystem. The majority answered that lack of financial resources (42,6%) is a very important barrier followed by high taxation (32,8%). Only 14,8% considers limited market is a barrier. Bureaucracy, Lack of supportive structures and unstable political environment are in the lowest positions.

Barriers to entry

![Barriers to entry](image)

Figure 5.14: The barriers to create a startup
The next question was about the opinion of the founders on government support. 91.8% believes that the government does not support startups and only 8.2% believes that it does.

About the founder’s opinion on what may improve the creation of the startups in Greece the majority voted for lower taxation rates (85.2%) followed by easier access to financial resources (63.9%), as we can see from the chart below.

**Suggestions**

![Chart showing suggestions for startup creation improvement]

**Figure 5.15: Suggestion for startup creation improvement**

### 5.2 Data analysis

From the above presentation of the questionnaire results we can draw some basic conclusions by comparing them with previous researches. Further analysis of the results is also conducted in order to reveal more information about the greek startup scene. The target of this analysis is to understand deeper the function of the greek startups by focusing on their financial resources.

In our research 52.5% of the startups are operating between one and three years. This result complies with the results of the European Startup Monitor (2016) where the greek
startups operate on average 1,3 years which is between one and three years (ESM, 2016). This is an indicator that startup creation is increasing through the years.

The legal form of the 75,4% of the startups are Private Limited Companies (IKE) and 13,1% are single person enterprises. A Private Limited Company is a legal form recently introduced in Greece. It offers substantial benefits contrary to the other legal forms with the most important being that a company can be found with almost no initial capital. Also this form protects the personal assets of the members as the company is the only responsible for its debts in contrast to other legal forms. Athens is the location of 75,4% startups in our research followed by Thessaloniki where 18% of them are located. These results comply with the research of the Ministry of Economy and Development (2016) on startups that reports that 39,7% of the startups are Private Limited Companies and 28,6% single person enterprises. It also reports that the majority of them are located in Athens with the next city being Thessaloniki. This comes as no surprise since these two cities are the largest cities in Greece with the most supportive structures located there.

Startups are mainly activated in IT/software development sector with consulting services coming second, followed by Industrial technology and financial services. However, according to the European Startup Monitor (2016) the majority of the greek startups are activated in industrial technology. The Ministry of Economy and Development (2016) reports that technology is the main startup activity sector in Greece and IT and consulting services have also high percentages. What is impressive though is that in the ministry’s research significant percentages of the Retail and Tourism sectors are recorded and in this research there was only one startup of the sector of Tourism.

The majority of the greek startups have less than 10 employees with 62,3% having less than 5 employees. The reports of the European Startup Monitor (2016) and the Ministry of Economy and Development (2016) confirm these results. However, IOBE (2018) records that 18,9% of the startups have no employees. In this research we have no such answer.

As of the founders the majority of the startups have two founders or more and mainly male. The reports of the Ministry of Economy and Development (2016) and the European Startup Monitor (2018) confirm these results. However, Greece has one of the highest percentages in female founders among European countries. An impressing finding though
is that 64% of the startups (39 startups) have no female founder and only 11.5% have no male founder. We can see from the table below that most startups are founded by males.

<table>
<thead>
<tr>
<th>Startups</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><strong>61</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.1: Number of male and female founders of greek startups

The main age of the founders is between 25 and 34 years, with a very high percentage having a Master’s degree or a PhD. The same results are reported in the European Startup Monitor (2018) and IOBE (2018).

The main financial resource of the greek startups is the founders’ own capital even though they may receive additional external financial support. 32.8% have reported that have exclusively used their own saving and 27.9% exclusively external funding. The main source of external funding is venture capitals (37.2%) followed by Bank loans (32.6%). The amount of the received funding is up to €50000. The European Startup Monitor (2016) has reported that 42.3% have used only their own savings with main external financial resource from family and friends (38.5%) and the received funding is reaching up to €50000 (77.7%). According to the Ministry’s report 83.5% used their own capital and only 4.7% has received bank loans. The high percentages of own financial resources confirm that external financing is not easily accessible. On the other hand, the low amounts of funding reflect the reluctance in investments and the unwillingness of the investors to undertake risks as Greece is still in an unstable economic situation.

At this point, it is worth studying the relationship between funding and each activity sector. From the chart below we can see that the sector with the highest external funding percentage is industrial technology (87.5%) and consulting services (83.3%).

Postgraduate Dissertation
Also the amount of external funding received by startups in each sector is an important indicator of the Greek investment trends. As mentioned before, Greek startups receive funding between €10000 and €50000. The following diagram confirms this. However, funding above €50000 is received mainly by the sector of industrial technology. This comes as no surprise as it is the sector that needs the highest investments for its development.
Most startups have participated in a supportive structure. Universities are the main support structure (31%) followed by incubators (28.6%) and co-working spaces (21.4%). More specifically, the diagram below shows in which supportive structures startups participate in each sector. The startups participating in universities are mainly from the industrial technology sector, while incubators have participants of almost every sector.
The Ministry reports that 38.3% have participated in a supportive structure, mainly in an incubator with universities being in the lowest positions.

The connection of the supportive structures and financial resources is also worth examining. As we can see in the diagram below from the startups that received external funding 65.9% participated in a supportive structure. On the other hand, from the startups that used their own savings only 45% participated in a supportive structure. This is an indicator that supportive structures do promote easier access to financial resources for startups.

![Diagram showing the relationship between funding and supportive structures.](image)

**Figure 5.19 : The relationship between funding and supportive structures**

The table below show the percentage of the startups that participated in a supportive structure and received external funding in each sector. An important finding is that the startups of the sector of industrial technology have all participated in a supportive structure and received external funding.

<table>
<thead>
<tr>
<th>Sector</th>
<th>External Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT/software development</td>
<td>61.5%</td>
</tr>
<tr>
<td>Consulting services</td>
<td>83.3%</td>
</tr>
<tr>
<td>Industrial technology</td>
<td>100.0%</td>
</tr>
<tr>
<td>Financial Services</td>
<td>50.0%</td>
</tr>
<tr>
<td>E-commerce</td>
<td>75.0%</td>
</tr>
</tbody>
</table>

**Table 5.2 : The startups participated in a supportive structure and received external funding in each sector**
About the founders’ incentives to create a startup 60.7% are opportunity driven, 16.4% wanted their independence and 13% were necessity driven. Most founders believe that lack of financial resources and high taxation work as barriers in startup creation. The European Startup Monitor (2016) reports the same situation. Also 92% of the founders believe that there is no governmental support of startups. In their opinion the main measures to be taken in order to support startups is lower taxation and easier access to financial resources. Generally the greek ecosystem does not seem attractive for startups at the moment. This comes as no surprise since most startups are created abroad in countries with lower tax rates. The lack of funding resources is considered to be an important factor for most startups and seems that alternative funding methods are still not popular in Greece.

Summing up, the results of this research comply with the reports of the European Startup Monitor (2016) and the Ministry of Economy and Development (2016) with no significant deviations. Due to no more recent data on startups the only comparison was with those from these reports. Even so, this comparison is reflecting a diachronic situation in which startups are called to operate in. The unstable political and economical situation does not help. According to the results startups participate in supportive structures and financial support is a vital factor. Unless measures are taken to improve startup creation, the greek startup ecosystem will remain unattractive.
CHAPTER 6 Conclusions, research limitations and future suggestions

6.1 Conclusions

Startups in Greece are a new phenomenon emerged after the economic crisis and are still in early stage. There is limited literature and official data about greek startups and therefore any research on startups is important in order to provide a full image of their aspects and needs. This research aimed towards this goal. The target was to imprint the greek startups current profile and describe their ecosystem with main focus on the financial resources. It also aimed to define the startup creation incentives and the role of funding in the creation decision.

In the first chapter of the literature review entrepreneurship, innovation and startups were defined along with their characteristics in order to give as a general picture. In the next chapter the startup ecosystem and the startup financial tools were presented concluding with the greek startup funding scene. Then the research was presented.

From the present dissertation interesting conclusions are drawn. First of all, greek startups are increasing both in number and dynamic. They currently operate between one to three years and are mainly activated in the information and technology sector, which complies with rapid growth. The legal form most startups choose to operate under is Private Limited Company (IKE), which doesn’t need initial capital and the members’ assets are protected in case of failure. Startups are generally characterized of uncertainty and risk and that is why the majority of them fail.

Most startups are located in Athens, since most supportive structures are located there. This fact can enhance the development of the Athens startup ecosystem, which is still in very early stages. The EDCi ranks Athens in the lowest positions among the other European countries (https://digitalcityindex.eu). This is an indicator that Athens still has potential of improvement.

Founders are generally young people between 25 and 35 years with higher education. Government agencies should work towards their support through legislation and other measures in order to reverse the “brain drain” that emerged during the crisis. Too many
young people with higher education left Greece for work. Supporting startups can create more jobs that need higher skills.

The financial support of the startups has proven to be very important for their development. However the access to financial sources is difficult. Most startups use their own capital to support their development and external funding comes mainly from venture capitals. Alternative funding methods, such as crowdfunding, are still new and unpopular. The funding amounts are mainly up to €50000, which reflects the reluctance of the investors in undertaking risks. After all, the financial crisis has dried up investors.

Another important development factor for startups is that of supportive structures. Most startups participate in them, mainly in university units and incubators. Their participation in them provides startups with a lot of benefits. Through supporting structures financial access is easier. Also the additional benefits, such as mentoring, coaching and access in several entrepreneurial networks, provide them with more stability and an easier route to success.

According to this research, most startups are created due to opportunity. Still the lack of financial resources and high taxation are considered important creation barriers. Governmental support is non-existent and measures such as lower taxation rates and easier financial access would help startup creation in the country.

To sum up, greek startups are increasing under a challenging environment. This proves their dynamic nature since overcoming all these challenges such as high taxes, lack of financial resources and high bureaucracy is not easy. Because of their nature startups can be significant for the country’s economic growth. To that end the government should take measures in order to promote their creation and growth potentials. Such measures can be lower taxation, less bureaucracy and structures that will make financial access easier. Also, the promotion and cooperation of the existing supportive structures should be strengthened. Moreover, an official startup database should be created in which registration should be necessary for the startup establishment. This way the exact needs and problematic areas would be easier defined and the measures to be taken would be more appropriate.
6.2 Research Limitations

The main limitation of this research was that there is not an official startup database. Startups were searched through several websites. For this reason the number of the startup population cannot be considered accurate. This process was challenging since there were registered startups that didn’t exist anymore and mistakes in their founding years which was one of the criteria for the participation in the research.

Another limitation is that of the little existing official data. As mentioned before startups are a new phenomenon in Greece and the available literature limited. So any comparison of the results of this research was performed with the most recent available ones.

6.3 Future research proposals

This research is an initial introduction to the greek startup scene. More specifically, the main aspects of the greek startups were presented with focus on the financial resources and their importance in the decision of the startup creation. For a deeper understanding, a future research of each financial resource in accordance with the success or failure rates of the startups is suggested. This way the evaluation of their effectiveness in the performance of the startups would be defined.

An interesting subject would be the evaluation of each supportive structure of the startup ecosystem in accordance with the available financial methods. Supportive structures provide easier financial access to startups and their examination could be a valuable source.

Finally, another interesting research would be a comparison of the performance between the greek and foreign financial methods. This would provide essential information on the improvement of the greek financial resources.
References


Evgenia Deliandreadou, Greek entrepreneurship: The case of Greek startup companies


Appendix A: Questionnaire

Dissertation questionnaire

This questionnaire is part of my dissertation for my Master in Business Administration in Hellenic Open University. The research aims to define the funding methods Greek startups use and their role in the creation of startups. For this reason this questionnaire is directed to startup founders who own/run a startup in Greece for less than five years. It takes only 5 minutes. Your answers will remain anonymous.

Thank you in advance

Deliandreadou Evgenia

*Required

1. 1. What is the name of your startup company?

2. 2. What is your position in the company *
   Mark only one oval.
   [ ] Founder/Co-founder
   [ ] CEO
   [ ] Employee
   [ ] Co-worker
   [ ] Other:

3. 3. How many years is your company active *
   Mark only one oval.
   [ ] 0-1 years
   [ ] 1-3 years
   [ ] 3-5 years
   [ ] more than 5 years

4. 4. What is the legal form of the company? *
   Mark only one oval.
   [ ] Single person enterprise
   [ ] Private Limited Company (IKE)
   [ ] General partnership (OE)
   [ ] Limited Partnership (EE)
   [ ] Limited Liability Company (EΠΕ)
   [ ] Societe Anonyme (AE)
   [ ] Social Cooperative Enterprise (ΚΟΙΝΩΝΙΑ)
   [ ] Other:

5. 5. Where is your business located? *
   Mark only one oval.
   [ ] Athens
   [ ] Thessaloniki
   [ ] Abroad
   [ ] Other:
6. Which is your company's sector of activity? *  
Mark only one oval.
- IT/software development
- Industrial technology
- Financial Services
- Consulting services
- Health services
- E-commerce
- Tourism
- Education
- Media
- Agriculture
- Construction
- Logistics
- Wholesale/Retail
- Food and Drinks
- Other:

7. What is the number of the company's employees (founders excluded)? *  
Mark only one oval.
- 1-5
- 5-10
- 11-20
- >20
- No employee

### Founders

8. How many founders are in the company? *

9. What is the gender of the founders? Please answer only according to the number of the founders.  
Mark only one oval per row.

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Founder 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Founder 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Founder 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Founder 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Founder 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. What is the age of the founders? Please answer only according to the number of the founders.  
Mark only one oval per row.

<table>
<thead>
<tr>
<th></th>
<th>18-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>Over 55</th>
</tr>
</thead>
<tbody>
<tr>
<td>Founder 1</td>
<td></td>
<td></td>
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<tr>
<td>Founder 2</td>
<td></td>
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<tr>
<td>Founder 3</td>
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<tr>
<td>Founder 4</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Founder 5</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
11. 11. What is the educational level of the founders? Please answer only according to the number of the founders.  
Mark only one oval per row.

<table>
<thead>
<tr>
<th></th>
<th>PhD</th>
<th>Master's degree</th>
<th>Bachelor's degree</th>
<th>High school degree</th>
<th>Elementary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Founder 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Founder 2</td>
<td></td>
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<tr>
<td>Founder 3</td>
<td></td>
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<tr>
<td>Founder 4</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Founder 5</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**Funding**

12. 12. How is your business funded?  
Mark only one oval.

- [ ] Own funds
- [ ] External Funding
- [ ] Both

13. 13. If you received external funding, which funding methods did you use?  
Tick all that apply.

- [ ] Family and friends
- [ ] Venture capital
- [ ] Business Angel
- [ ] Crowdfunding
- [ ] Bank loan
- [ ] National Strategic Reference Framework programmes
- [ ] Award
- [ ] Other:

14. 14. What was the total amount of funding?  
Mark only one oval.

- [ ] 0-10,000
- [ ] 10,000-25000
- [ ] 25,000-50,000
- [ ] 50,000-100,000
- [ ] >100,000

15. 15. Did you participate in any supportive structure?  
Mark only one oval.

- [ ] Yes
- [ ] No

16. 16. If yes, in which one?  
Mark only one oval.

- [ ] Incubator
- [ ] Accelerator
- [ ] Co-working space
- [ ] Science and Technology Parks
- [ ] Universities
- [ ] Other: 
Incentives and suggestions

17. 17. What was your incentives to found your company? *

   Mark only one oval.

   ☐ Opportunity
   ☐ Necessity
   ☐ Independence
   ☐ Financial reasons
   ☐ Self-fulfillment
   ☐ Other:

18. 18. Which of the following do you think affects mostly the decision for creating a startup? *

   Mark only one oval.

   ☐ Lack of funding resources
   ☐ High taxation
   ☐ Limited market
   ☐ Bureaucracy
   ☐ Unstable political environment
   ☐ Lack of supportive structures
   ☐ Other:

19. 19. Do you think the Greek government supports startups? *

   Mark only one oval.

   ☐ Yes
   ☐ No

20. 20. Which of the following do you think would benefit the greek startups? Please choose up to three answers *

   Tick all that apply.

   ☐ Lower taxation rates
   ☐ Limited bureaucracy
   ☐ Easier access to funding
   ☐ Higher funding
   ☐ Better supporting structures

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