ISCTE Business School
Instituto Universitário de Lisboa

FINANCING POTENTIAL IN PORTUGUESE SMALL AND MEDIUM-SIZED ENTERPRISES

Ana Vitória Gomes Morgado

Dissertation submitted as partial requirement for the conferral of

Master in Management

Supervisor:
Prof. Mónica Alexandra Vilar Ribeiro de Meireles, Assistant Professor, ISCTE Business School, Department of Economics

October 2018

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Abstract

The main purpose of this dissertation is to show the main sources of financing that SMEs have access to, given that these companies represent most of the Portuguese business community.

Secondly, it is intended to verify what types of financing and financial instruments companies use to obtain the desired financing and what is the purpose of the company in obtaining such financing. For that purpose a questionnaire is applied to companies, Finally, the study intends to understand if SMEs use or are aware of the help provided by public institutions, such as IAPMEI.

With both the literature review and the application of the questionnaires the study concludes that the companies do not use nor exploit all the market hypotheses available for their financing. Despite the wide range of opportunities given by banks and other financial institutions, companies stick to the method they know, which is also the most common, the bank financing.

Keywords: Small and Medium-Sized Enterprises in Portugal, Capital Structure, Internal Financing, External Financing

JEL Classification System: G20, G32, D25

Resumo

A presente dissertação tem como principal objetivo mostrar quais as principais fontes de financiamento a que as PMEs têm acesso, dado que estas empresas representam a maioria do tecido empresarial português.

Em segundo lugar, pretende-se verificar, através de um inquérito efetuado a empresas, quais são os tipos de financiamento e instrumentos financeiros que as empresas utilizam por forma a obterem o financiamento desejado e qual a finalidade da empresa ao obter esse financiamento. Por fim, pretende-se perceber se as PMEs utilizam ou conhecem a ajuda prestada por instituições públicas, como o IAPMEI.

Através da revisão da literatura e da aplicação dos questionários conclui-se com o estudo que as empresas não utilizam nem exploram todas as hipóteses de mercado disponíveis para o seu financiamento. As empresas, apesar da vasta gama de oportunidades dadas quer pela banca quer por outras instituições financeiras cingem-se ao método que conhecem, que é o financiamento mais comum, o financiamento bancário.

Palavras Chave: Pequenas e Médias Empresas (PMEs) em Portugal, Estrutura de Capital, Financiamento Interno, Financiamento Externo

JEL Classification System: G20, G32, D25

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1. Introduction

In Portugal, the business community is mainly characterized by Micro, Small and Medium Sized Enterprises that assume a high weight, either in the number of companies either in the number of workers employed at the national level (INE, 2015).

At some point in the life of a company it is necessary to check and choose a direction for the capital structure of the company. To clarify this problem, it is important to present different capital structure theories to show how and when companies should invest on third party capital or equity.

One of the major problems of SMEs is to choose their capital structure and then the way and what financial instruments they should use to obtain better results. This study presents several forms of internal financing as well as external financing. Regarding external financing, bank financing is the most usual form of financing for companies. However, there are other forms of financing, such as IAPMEI support projects, which will be detailed in the respective section of this dissertation.

In order to better understand what the financial structure is and the conducts of the companies, it was carried out an inquiry. The survey was sent to 300 companies "PME Excelência 2016" of all districts of Portugal.

The importance of SMEs in Portugal and the challenge of gathering the various forms of business financing were the main motivation for the choice of the theme for this dissertation.

The objective of this dissertation is to show that there are many options to SMEs to obtain funding, as well as public institutions that can help companies obtaining financing in other financing institutions using their own financing incentives.

This dissertation is organized by chapters. Chapter 2 addresses an overview about SMEs in Portugal, chapter 3 presents the literature review about four different capital structure theories, Modigliani and Miller theory, Trade-off theory, Pecking Order theory and Agency theory. Chapter 4 presents information about the financing of Portuguese SMEs. Chapters 5 and 6 present the methodology and the analysis of the results, respectively. Lastly, chapter 7 addresses the conclusion.

2. Characterization of the SMEs in Portugal

2.1 Definition of SMEs

For the European Commission – EC – (2003) “An enterprise is considered to be any entity engaged in an economic activity, irrespective of its legal form. This includes, in particular, self-employed persons and family businesses engaged in craft or other activities, and partnerships or associations regularly engaged in an economic activity.”

In the same recommendation (2003/361/EC), the EC also differentiates between micro, small and medium sized enterprises:

- Micro Enterprise: employs fewer than 10 persons and the annual turnover and/or the total annual balance sheet does not exceed EUR 2 million;
- Small Enterprise: employs fewer than 50 persons and the annual turnover and/or the total annual balance sheet does not exceed EUR 10 million;
- Medium Enterprise: employs fewer than 250 persons, the annual turnover does not exceed EUR 50 million and/or the total annual balance sheet does not exceed EUR 43 million.

Table 1 - Enterprises Characterization

Enterprise category	Employees number	Annual Turnover and/or Total Annual Balance Sheet
Micro Enterprise	< 10	< EUR 2 million
Small Enterprise	< 50	< EUR 10 million
Medium Enterprise	< 250	Annual turnover < EUR 50 million Annual balance sheet total < EUR 43 million
Large Enterprises	≥ 250	Annual turnover ≥ EUR 50 million Annual balance sheet total ≥ EUR 43 million

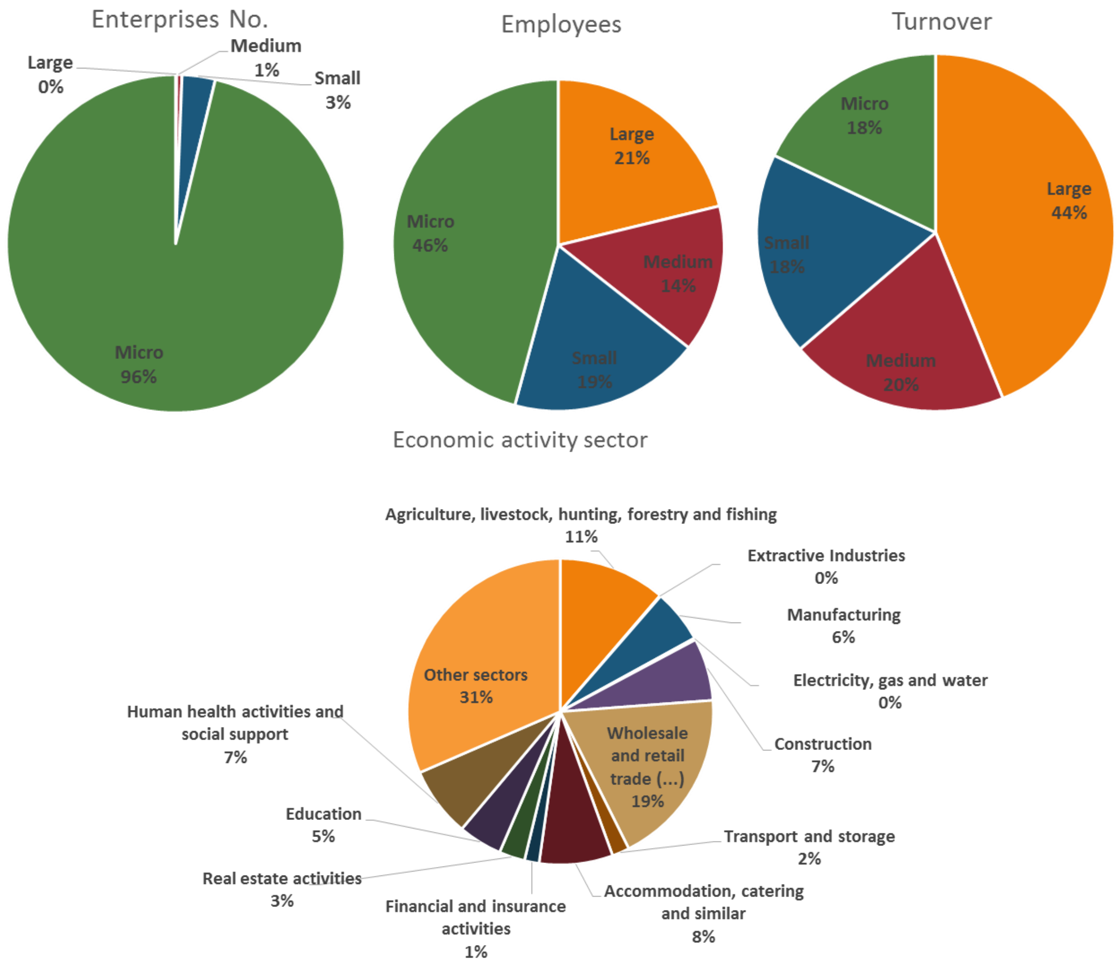
Source: Adapted from Official Journal of the European Union (2003/361/EC)

In Portugal, this recommendation was published on November 6, through Decreto-Lei n.º 372/2007 and adopted by Instituto de Apoio às Pequenas e Médias Empresas e à Inovação, I. P. - IAPMEI[1].

2.2 SMEs Universe

According to Instituto Nacional de Estatística – INE (2015) – databases, SMEs have a very important weight in the Portuguese society.

Figure 1 - SMEs in Portugal (2015)



Source: Adapted from INE databases (2015)

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[1] IAPMEI – Instituto de Apoio às Pequenas e Médias Empresas e à Inovação is a public organization to support micro, small and medium enterprises in the industrial, commercial, service and construction sectors. It promotes competitiveness and business growth, assists in the design, implementation and evaluation of policies directed at industrial activity, aimed at strengthening innovation, entrepreneurship and business investment (IAPMEI).

In 2015, there were a total of 1.147.154 companies in Portugal, of which 1.104.490 were microenterprises (96%), 35.870 were small enterprises (3%), 5.759 were medium enterprises (1%) and 1.035 were large enterprises (see figure 1).

Furthermore, Figure 1, shows that SMEs contribute significantly to the employability and creation of national turnover. Indeed, SME employs a total of 2.897.135 workers (79%) while large enterprises employ only 779.329 persons (21%). With regard to turnover, large enterprises generated a turnover of EUR 157.742 (44%) while SME generated a turnover of EUR 201.762 (56%).

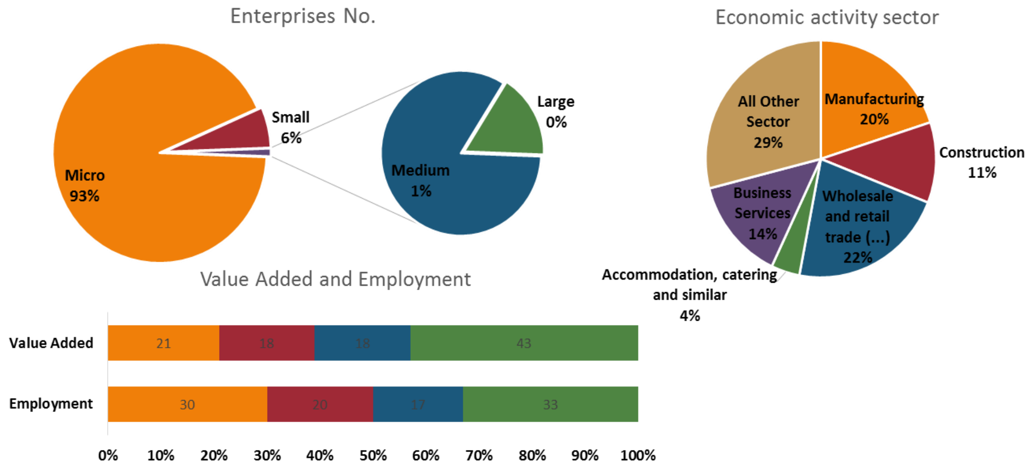
Concerning the business structure, excluding financial companies, service sector plays a very important role in different economic variables (number of enterprises, employment, turnover and GVAmp[2]). Focusing on the number of companies, the three most important economic activity sectors are the wholesale and retail trade, the agriculture, forestry and fishery and the construction (INE, 2017).

It is also observable, from figure 1 that in the Portuguese SMEs, the wholesale and retail trade as well as the agriculture, livestock, hunting, forestry and fishing are the two sectors with the higher number of companies, followed by the accommodation, catering and similar sector.

The importance of the SMEs is not specific to the Portuguese context. At the European level the SMEs have also a very strong presence, as can be observed in Figure 2.

[2] GVAmp - Value created by the productive process during the reference period corresponding to the difference between production and intermediate consumption (INE, 1994).

Figure 2 - SMEs in Europe (2015)



Source: Adapted from Muller et al. (2016)

Indeed, in 2015, SMEs represented 99.8% of the total European companies, contributing to the highest added value (57%) and employing more workers (67%) than the remaining companies. However, regarding the economic activity sector of the SMEs there is a bit difference between Portugal and Europe. In Portugal, the agriculture, livestock, hunting, forestry and fishing sector has a huge importance in the economic activity. By contrast, in Europe, the three most influential sectors are the wholesale and retail trade, the manufacturing and the business services.

In terms of time, it can be seen from Figure 3 that since 2008 the number of SMEs in the EU-28 has increased by 11% and has maintained an ever-increasing trend. Additionally, it is verified that employees have increased by 10% and valued added also 11%; employment only recovered to values above 2008 in 2016 and valued added in 2013, this slow recovery was due to the financial crisis of 2008/2009 (Muller, et al., 2017).

Figure 3 - Number of EU-28 SME enterprises, employment and value added, from 2008 to 2016 (2008=100)

Source: Muller et al. (2017)

3. Capital Structure: Theories

Capital structure is the way companies finance themselves, either by equity or debt capital. The big challenge is to find an optimal capital structure when the objective is to minimize the total cost of financing and to maximize shareholder / partner value (Dias, 2012).

According to Oliveira (2012) the study about capital structure in SMEs has been relevant because in this kind of companies the financing has been characterized by asymmetric information, high transaction and agency costs, reduced capacity to offer guarantees, risk of exploitation due to the weak diversification of its activities and many obstacles to market access.

How companies determine their financing structure? This issue has been studied over the years. However, there is no specific methodology for determining the optimal capital structure (Gitman, 2004).

The most important and well-known capital structures theories are the Modigliani and Miller Theory, the Trade-off Theory, the Pecking Order Theory and the Agency Theory, being these the theories, more approached during my academic course. There are also other capital structure theories that will not be addressed in this study because it goes beyond the objective of this dissertation.

3.1 Modigliani and Miller Theory

Modigliani and Miller (1958) pointed out that two similar companies will have the same market value regardless of their capital structure, i.e., irrespective of their funding being supported by equity or debt. They also showed that capital structure was irrelevant to determine company market value and that investment decision was independent of the source of financing funds. However, their study assumes a perfect market and a set of assumptions, including: lack of information asymmetry; inexistence of transaction costs, no financial insolvency and no agency costs and taxes; similar conditions of indebtedness for companies and investors; and all companies are grouped into equivalent profitability and risk classes.

In order to validate their theory Modigliani and Miller (1958) established two propositions that were latter analysed by Oliveira (2012).

Proposition I:

$$V = E + D = \frac{X}{r_O} \Leftrightarrow r_O = \frac{X}{V}$$

X is the expected outcome before interest and taxes deduction, assumed to be in perpetuity; E is the value of market shares; D is the value of market debt; r_O is the weighted average cost of capital; $V = E + D$ means that the company market value is equal to the sum of the market value of the savings issued by the company.

The creation of value by each company relied solely on income generated by its assets and the average cost of the shares would be similar for companies with similar risk. The weighted average cost of capital and the value of the company would be independent of its capital outlay, and the value of an investee would be equal to that of a non-indebted company (Dias, 2012).

Proposition II:

$$r_E = \frac{X - r_D D}{E} \Leftrightarrow r_E = r_U + (r_U - r_D)\frac{D}{E}$$

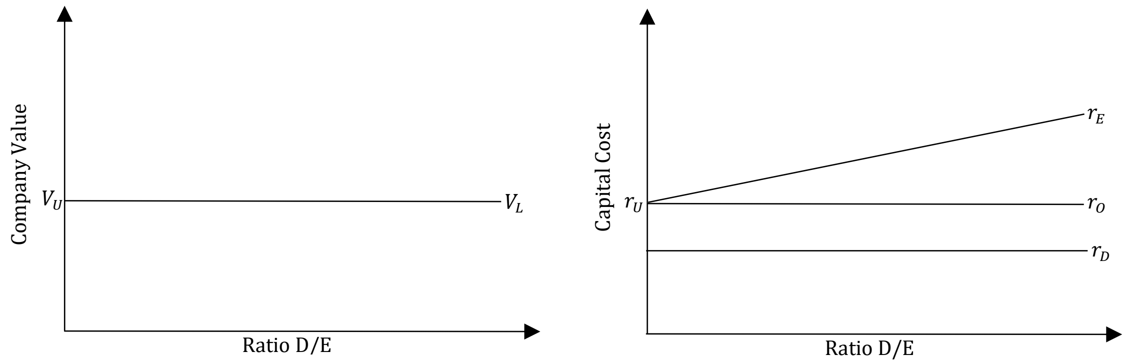
r_E is the rate of return share; r_D is the rate of return share of an indebted company; r_U is the rate of return share of a non-indebted company.

The proposition shows that the expected profitability grows linearly with its debt ratio. In other words, the cost of equity of an indebted company would be similar to the cost of equity of a non-indebted company plus a financial risk premium (Dias, 2012).

The resulting profit from the substitution of equity by debt capital is completely nullified by the increase in the financial risk, whereby the weighted average cost of the company's capital remains constant and insensitive to the level of indebtedness given by the ratio D/E (Oliveira, 2012).

Relation between propositions:

Figure 4 - Relation between Modigliani & Miller propositions



Source: Oliveira (2012)

In Figure 4, $\frac{D}{E}$ is the debt / equity ratio; V_U is the company value without debt; V_L is the company value with debt; r_U is the capital cost without debt; r_E is the equity cost with debt; r_o is the weighted average cost of capital; r_D is the debt cost.

These prepositions are valid in a perfect market. However, in a real world the market is not perfect, there is a set of factors that can affect companies' capital structure and their value. Therefore, Modigliani and Miller reformulated their theory in 1963.

Modigliani and Miller (1963) include in their theory the consideration of income taxes. Nevertheless, with income taxes it is more advantageous to use debt capital rather than equity.

Proposition I Reformulated:

$$V_L = V_U + t_c D$$

t_c is the marginal rate of profit tax; $t_c D$ is the current value of the tax benefits arising from the indebtedness.

With the same previous model assumptions and the assessment of the interest tax effect Modigliani and Miller (1963) concluded that company's value is positively related with its debt level.

Proposition II Reformulated:

$$r_E = r_U + (r_U - r_D)\,(1 - t_c)\frac{D}{E}$$

In comparison to Proposition I, the shareholders of the indebted company will require a risk premium inherent to the financial risk incurred, which shall be less than the amount corresponding to the marginal rate of profit tax (Oliveira, 2012).

According to Modigliani and Miller (1963) the company’s value would reach the maximum when his assets were fully funded by debt. Nevertheless, if debt structure was already high, it would result in a higher financial risk and higher costs.

3.2 Trade-off Theory

In the Trade-off Theory companies search to achieve optimal levels of the indebtedness ratio taking into account debt costs – bankruptcy costs and agency conflicts between shareholders and creditors – and benefits – tax saving and mitigation of agency costs between shareholders and managers (Barbosa & Pinho, 2016).

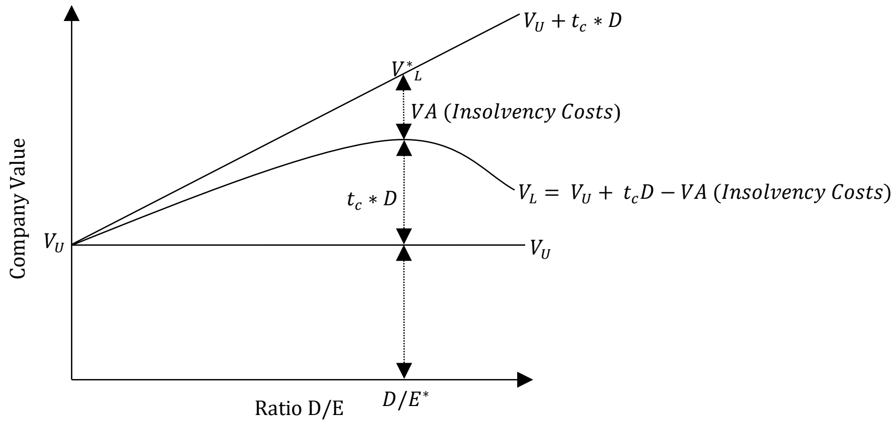
Myers (1977) developed the trade-off theory, where there is an optimal capital structure. He introduces in his theory companies and investors taxation. Additionally, he introduces a set of assumptions, like progressive tax rates for individuals’ income and constant and identical rates for corporate income, different interest rates for shareholders and bondholders, debt securities issued by the company with no risk, results are fully distributed and the total costs are the interests.

According to Oliveira (2012), when there is a reduced indebtedness level, the marginal net profit of the debt is positive and high. However, for higher levels of indebtedness the marginal net benefit may be negative.

$$V_L = V_U + t_c D - VA\ (Insolvency\ Costs)$$

The trade-off between benefits and costs can have important implications for the level of indebtedness, the rate of investments growth and the company's profitability.

Figure 5 - Static Trade-off Theory



Source: Oliveira (2012)

The break-even point is verified when marginally the cost of insolvency equals the value of the tax savings associated to indebtedness.

Serrasqueiro and Caetano (2011) formulated nine hypotheses related to this capital structure theory. The hypotheses are the following:

- There is a positive relationship between the effective tax rate and debt in SMEs
- There is a negative relationship between other non-debt tax shields and debt in SMEs
- There is a positive relationship between profitability and debt in SMEs
- There is a negative relationship between growth opportunities and debt in SMEs
- There is a positive relationship between tangibility of assets and debt in SMEs
- There is a positive relationship between size and debt in SMEs
- There is a positive relationship between age and debt in SMEs
- There is a negative relationship between risk and debt in SMEs
- SMEs adjust their level of debt towards the optimal debt ratio

The static Trade-off Theory proposed by Myers (1984) had two main ideas. The first is that debt brings benefits to the company through tax benefits. The second is that debt brings costs to the company related to the companies’ bankruptcy. Thus, the higher the degree of indebtedness, the higher the probability of the company bankruptcy.

3.3 Pecking Order Theory

Pecking Order Theory states that company's capital structure is chosen according to the hierarchy concept of funding sources.

Myers (1984) notes that the most profitable companies are those that use less debt and that the greater the profitability of a company, the lower its level of indebtedness. In general, companies prefer internal to external financing and debt to issuance of shares. Therefore, firstly companies choose to self-financing – internally generated funds – then they use external financing – debt issue and hybrid self-assurances – and lastly they opt for issuance of new shares.

Myers and Majluf (1984) argued that in order to prioritize the different sources of financing, companies tend to prefer to finance their growth through internally generated resources, thus avoiding any adverse selection process. Subsequently, the company will seek out external financing – financial debt and capital issue – both with an adverse selection problem (in different magnitudes), but only if companies do not have self-financing at their disposal.

Serrasqueiro and Caetano (2011) formulated five hypotheses related to this capital structure theory. The hypotheses are:

- There is a negative relationship between profitability and debt in SMEs
- There is a positive relationship between growth opportunities and debt in SMEs
- There is a positive relationship between asset tangibility and level of debt in SMEs
- There is a positive/negative relationship between size and debt in SMEs
- There is a negative relationship between age and debt in SMEs

According to Barbosa and Pinho (2016), the Trade-off Theory and the Pecking Order Theory are not able to explain the heterogeneity of capital structures of firms. Additionally, while the Trade-off Theory suggests an optimal level of indebtedness that will be achieved by the balance between tax benefits, associated with the use of debt, and the costs of bankruptcy; the Pecking Order Theory does not condone with an optimal capital structure but rather with a hierarchy of funding sources, given their cost (Augusto, 2014).

3.4 Agency Theory

Jensen and Meckling (1976) were the drivers of the agency theory, which analyses the conflicts that arise within companies caused by the divergence of interests of the various agents. They define the theory as a contract where one or more persons (the principal) hire another person (the agent) to perform duties or carry out certain services in his name (the principal) by way of transfer of powers (to the agent), by delegation.

Figure 6 - Agency Theory Diagram

Source: Islam (2014)

The interests between shareholders and managers do not always follow the same direction. Sometimes interest conflicts arise and reflect different interests and expectations. Two types of conflicts are identified: risk level and management level. The first refers to shareholders, bondholders and other creditors, while the second refers to conflicts between managers and shareholders (Jensen & Meckling, 1976).

At the risk level, there is a potential “moral hazard” problem because the residual profit is owned by the shareholders after fixed costs of debt are paid and their responsibility is limited to the capital invested, hence their preference for risk capital especially when the company faces financial difficulties. In the management level, managers can use their advantage to use company's resources for its own benefit and may adversely affect shareholders' assets (Luzio, 2015).

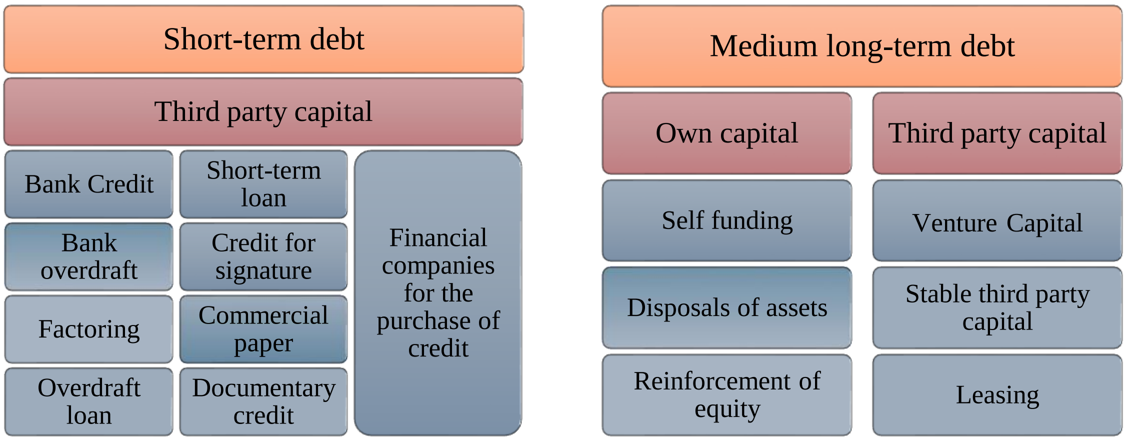
In order to analyse the conflicts, Jensen and Meckling (1976) introduced the agency costs variable to analyse its impact on the capital structure of companies. Agency costs consist of three elements, the opportunity cost reflecting the reduction of wealth when there are divergences between shareholders and managers, costs of controlling the activities of managers, such as auditing and other controls, and bankruptcy costs and company restructuring.

In the case of SMEs, managers are often also shareholders of the company, so the conflict of interests between managers and shareholders is not of much concern. In contrast, the agency conflicts between shareholders and financial creditors may represent a serious problem (Oliveira, 2012).

4. The Portuguese SMEs Financing

As mentioned previously, companies can be financed through equity or capital. In pmelink.pt[3] it is shown a set of options that SMEs can use to obtain financing that will be present in chapter 4.2.

Table 2 - SME financing



Source: Adapted from Executivo (2017)

According to Silva (2007) capital sources can be divided into three points: own resources, funds from family and friends and debt capital. About own resources the author argues that they come from personal savings and mortgages, they may not have associated costs, they can stay in the company for a long time and that they are essential to obtain external financing. With regard to funds from family and friends the author mentions that they are a frequent source of funding, they may not have associated costs, they can stay in the company for a long time and they should be treated with the same professionalism as any other financing, where all clauses and fundamental elements (amount, conditions, rights and responsibilities of the investor) must be written. The debt capital is mostly provided by banks.

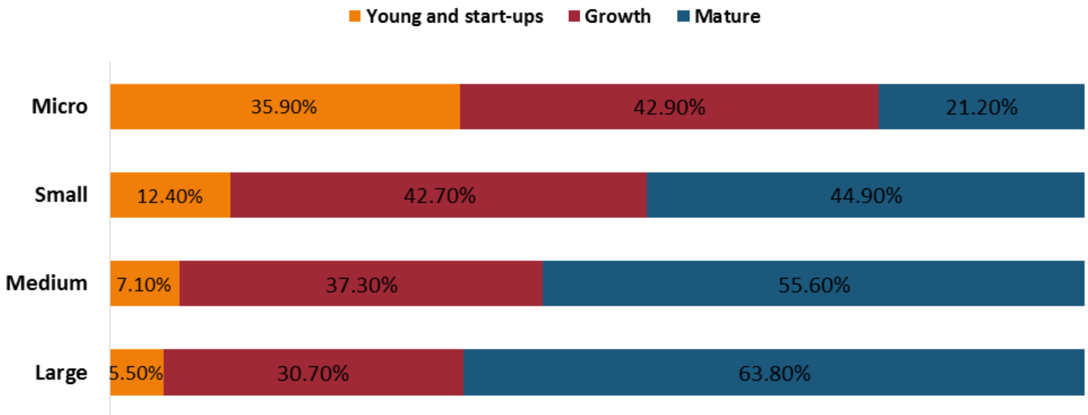
4.1 Business Life Cycle

The definition of Business Life Cycle is “The movement of an enterprise as it evolves through typical stages of corporate existence. The business life cycle usually includes its birth or incorporation stage, its initial growth stage, its expansion stage as it moves into

[3] The pmelink.pt is the first Online Business Center in the Portuguese market, designed to support Small and Medium Portuguese Enterprises (SMEs) in all areas of the business.

new markets, its mature operation stage, and its eventual decline as consumer interest in its products wane and key employees depart.” (Business Dictionary, 2017)

Figure 7 - Percentage of young, growth and mature enterprises in each size and in the business community (2015)

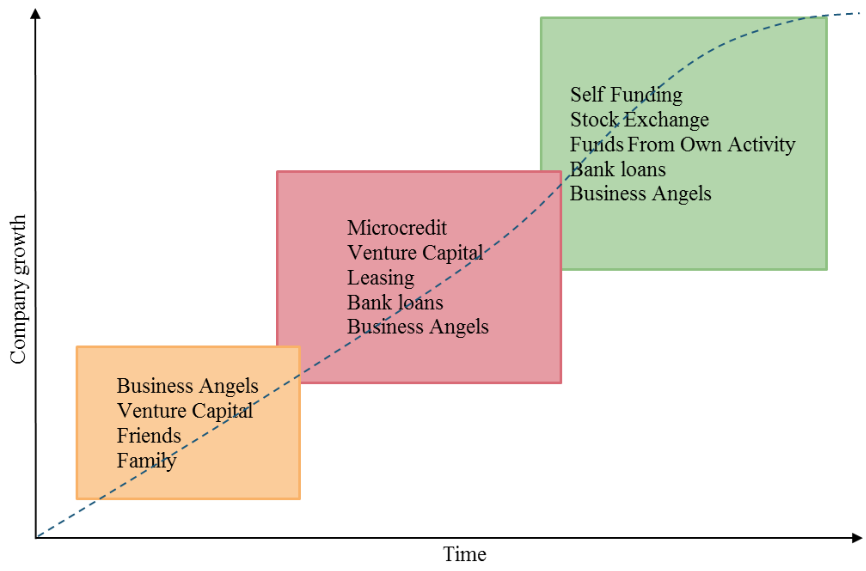


Source: Own elaboration – (Informa, 2016)

It is possible to observe, in Figure 7, that there is a direct relationship between size and longevity of enterprises, in particular the smaller the company size the less likely it is to have a long life.

Generally, the funds that companies have are always scarce in relation to the purposes for which they are intended to be allocated (in fact, the purpose of the economy is to solve this dilemma in the optimum way). Thus, according to the growth phase in which the company is, there are different forms and sources of financing (Silva, 2007).

Figure 8 - Sources of financing according to the company's growth phase



Source: Silva (2007)

4.2 Sources of financing

Different forms and sources, like it is possible to see in Table 2 and Figure 8 can finance SMEs. Below, ten possible financing sources for Portuguese SMEs will be described.

4.2.1 Friends, family and fools (FFF)

According to Saldo Positivo (2014) entrepreneurs and businessmen resort to friends and family to obtain financing in an early stage of the business. Although it seems faster and easier to ask family members for money, this kind of informal loans must also comply with rules.

The author sets out eight rules such as:

- The owner invests his money first, he shows to family and friends that he is responsible and has spared to invest in something he believes and that is to move forward;
- Do not be ashamed to ask for money to family or friends. If the first step is not taken and the request is not verbalized, family or friends will probably not take the initiative to provide the necessary amount to start the business;
- Be positive and respect the family investors. When a friend or family member invests his own money in the business, it is most likely that they will get involved in the growth of the company, give their opinion and discuss ideas. In this way,

the investors' opinion should not be devalued and a positive attitude towards the business should be maintained;

- Being in love with the idea is important to demonstrate the level of sincerity and commitment in the business idea that is under development;
- Ask for the minimum investment and never the maximum. Although there is trust with potential familiar investors, it does not mean that there should be an abuse of the amount requested to fund the business;
- Communicate the risks and sign a written agreement. It is important to be honest and explain in detail the risks that involve the investment in the business. Additionally, to protect both parties, there shall be drawn up a document with the rules of the loan (it should be signed);
- Do not count solely on family financing. After benefiting from an injection of family and friends to make the idea of business a reality, the entrepreneur has to get down to work to have more chances of capturing the interest of professional investors;
- Share the profits with the family, in case of success it is important to share the joys and victories of the company with the people who have helped, thus, the distribution of profits for them will make it easier to reapply for funding, if necessary.

This kind of funding has positive and negative aspects. For the positive aspects it can be highlighted the ease of friends and family in lending the amount that is required, better financing conditions and faster access to cash. Regarding the negative aspects it can be highlighted the fact that family and friends may want to interfere in the business and in case of business failure it might give risen to bad family relations or to the end of friendship, as well as to the creation of bad reputation (Saldo Positivo, 2014).

4.2.2 Business Angels

According to Berger and Udell (1998) business angels (BA) are entrepreneurs with disposable capital and know-how based on their long-standing small business management experience, willing to concede capital to emerging companies whose size is still too small to attract venture capital. It is an entry in the company's capital, bounded in time with the objective of medium-term appreciation, through the subsequent sale of shares to other interested parties (IAPMEI, 2017).

These investors are traditionally involved in the technology-based management, in small companies, in the Pre-seed, Seed and Early Stage phase, focusing in helping SMEs to develop innovation strategies, growth and internationalization (FNABA[4], 2017).

According to FNABA (2017), in addition to the capital needed for the initial development of the project, its promoter can count on his knowledge of the business world and his valuable advice and points of view. This contribution is often fundamental in a start-up, which is experiencing a high technological product and market risk. Also, in the internationalization of the project BA's experience can be of great value.

According to Caldeira (2013) it is possible to divide Business Angels into four different groups:

- BA with professional experience (former executives of large companies);
- Guardian angels (industry veterans);
- Financial income angels (individuals with large fortunes);
- Entrepreneurial angels (entrepreneurs who have triumphed in their business).

Funding through Business Angels (BA) has advantages and disadvantages. As an advantage the author refers to the fact that BA stand out the speed of the decision because it depends exclusively on the investor and the provision of a network of contacts and business experience that will be an asset in the future. As a disadvantage it is highlighted the fact that BA defines investment values for each project, thus if the entrepreneur needs more investment the investor may not be interested to re-finance the same project (Carvalho, 2009).

On the IAPMEI website there is a lot of information to companies that need financing through BA, including Portuguese and European links to associations where it is possible to find the list of available Business Angels.

Regardless of the difficulties that may result from the relationship between an outside investor and a developer, business angels are, above all, Business Partners (FNABA, 2017).

[4] Federação Nacional de Associações de Business Angels is a federated structure of Business Angels Associations, non-profit and nationwide (FNABA).

4.2.3 Venture Capital

For APCRI[5] (2017), Venture Capital is the name for the investment activity in an enterprise through the temporary and minority interest in its capital, by a Venture Capital Company or other investment vehicle – venture capital funds and direct investment of individuals or companies or management companies of shareholdings. Additionally, it is a form of financing with recourse to equity, in a medium / long-term horizon in order to support companies in their development and growth, with a strong influence in management. It is also one of the main sources of financing for young companies, start-up's, and risky investments with high potential for profitability (Portal das PME, 2017).

There are different forms of risk capital inflows, According to IAPMEI and APCRI (2006) the various types of investment can be distinguised in:

- **Seed Capital – Used to** finance business projects in the process of developing a business idea, even before the starting of the business, often involving the support of market studies to determine the feasibility of a product or service, but also to develop a product from projects or studies;
- **Start-Up –** It implies the investment in the capital of companies that already exist and are operating, or in the final process of installation, with a developed project, but that have not yet begun to commercialize the products or services;
- **Other early stage –** This investment is aimed at newly installed companies that have completed the product development phase and may already have started sales, but still without profits, and is devoted to the improvement of manufacturing and sale processes, as well as marketing;
- **Expansion Capital –** This investment is aimed at companies that have reached maturity but do not have the capacity to expand their business, increase their production capacity or develop marketing and promotion techniques;
- **Management Buy-Out (MBO) –** This risk investment is intended to support the acquisition of the control of the company by management or by minority partners. The types of MBOs can vary, and may arise following privatization processes or when there are problems of succession in family businesses. It results from the

[5] Associação Portuguesa de Capital de Risco e Desenvolvimento is the organizational structure representative of the venture capital industry in Portugal (APCRI).

assumption that the company will be managed much more efficiently with the new shareholder situation;

- **Management Buy-In (MBI)** – This funding is intended to support the management acquisition of the company's control by a team of external managers. It also assumes an improvement in results;
- **Buy-In Management Buy-Out (BIMBO)** – Financing to allow the acquisition of the company's control by management, aided by the entry of a team of external managers (merges MBO and MBI);
- **Institutional Buy-Out (IBO)** – This type of venture capital investment embraces an extraordinary investor's involvement, aimed at enabling the venture capital company or the risk investor to control the company and it is usually the precursor of an MBO;
- **Replacement equity** – Also known as Replacement Capital, allows a traditional investor of the company (not related to Venture Capital, e.g. another shareholder) to acquire the participation of another investor;
- **Bridge Financing** – Investment to support a company's transition to be part in the stock market. The balance sheet is structured so that the company is presented to the public as attractive as possible;
- **Rescue/Turnaround** – It is intended for businesses crossing an extremely difficult financial situation, financing projects of economic restructuring and financial recovery; these operations are unattractive when it comes to the risk/return ratio;
- **PtoP (Public to Private)** – It is a risk investment modality also known as Exclusion Tender Offer, and without any visibility in the Portuguese market, aiming to acquire the total capital of a listed company to withdraw from that market.

For the same authors this type of funding has a lot of advantages where the objective is financing the small companies in the beginning of their activity or transformation and expansion. They highlight the medium and long-term perspective, the full commitment until divestment, the provision of financing with the objective of growth and business valuation and the payment of dividends and repayment of capital dependent on the company's results. Additionally, the profitability of the venture capital depends on the results of the business. If the business is not viable, venture capital is in the same position as any other partner in the company – it has no special guarantees and its remuneration is dependent on the company's success. Lastly, they also refer to the fact that risk capital always has the objective of valuing the business – if something goes wrong venture capital will work together with the partner to look for better solutions – and venture capital is a partner of the company, which shares the risks of the business and contributes to its management and valuation.

IAPMEI is the main public financier of Venture Capital funds and promotes the constitution of these instruments in partnership with the majority of private operators to develop this activity. It is also important to say that the access to this financial instrument should be done directly with Venture Capital Companies, through the presentation of a Business Plan, whose analysis and selection process is based on the credibility of the promoters (entrepreneurs/management teams) and the projects, taking into account the potential of SMEs valuation (IAPMEI, 2017).

This type of financing is, by its nature, a temporary investment. Since the remuneration for venture capital is dependent on the realized capital gains, it is important to mention the disinvestment mechanisms (Augusto, 2014):

- **Trade sale –** Divestment through the sale of the holding to another company, usually a strategic buyer;
- **Sale in stock exchange (IPO – Initial Public Offering) –** When venture capital assumes the nature of bridge financing. This is one of the most profitable forms of exiting the business because it allows the entrepreneur to recover his lost position with the entry of venture capital;
- **Sale to former owners –** Sale of the stake held by the venture capitalist to their former owners. This can be done spontaneously or previously negotiated;
- **Sale to a financial institution –** Sale of the company shares to banks, insurance companies, pension funds, endowments, foundations and other asset managers other than private equity firms;
- **Sale to another venture capital –** Sale of the company shares to another direct private equity firm;
- **Write-off –** When the total investment loss is declared;
- **Loan repayment –** When the venture capitalist's exit occurs through repayment of loans made by itself to the company.

4.2.4 Microcredit

According to ANDC[6] (2017) microcredit is a small loan designed to support people who, having no access to normal bank credit, have a good business idea that they want to achieve and for which they have personal conditions and capabilities. Microcredit is aimed at unemployed young people seeking their first job and workers in precarious regime, fostering entrepreneurship and individual autonomy, allowing social insertion, through economic initiative and based on trust and responsibility.

To request a microcredit, ANDC (2017) admits the following situations:

- Lack of access to normal bank credit (shortage of collateral);
- No active banking incidents (benefits in debt, checks returned, inhibition by the Bank of Portugal);
- Being unemployed or at risk of becoming unemployed;
- To have a good business idea with prospects of success;
- Pretend to create his/her own job, for which they have the appropriate training and skills;
- To have a strong will and ability to fight for the success of the business and to overcome the obstacles that might arise in the meantime;
- To have sufficient flexibility and openness to adapt to changes.

With regard to guarantees it is not necessary a real guarantee (assets) but when financing process starts, there must be the provision of a personal guarantee (given by a guarantor). The amount of the credit can be used in investment expenses and others considered indispensable from the constitution and start-up of the business, provided that the business is admissible and that it can be successful with the available financing (ANDC, 2017).

In Portugal the credit is not given by ANDC. This association has protocols with four different banking institutions: Millennium BCP, Caixa Geral de Depósitos, Novo Banco and Crédito Agrícola. Additionally, there are more partners such as Instituto do Emprego e Formação Profissional (IEFP), companies designed to help current activity (Abreu

[6] Associação Nacional de Direito ao Crédito is a pioneer of microcredit in Portugal and it is a private non-profit association. As a result of its activity, ANDC was recognized as a "public utility institution" (ANDC, 2017).

Advogados, Everis, Microsoft), city councils, Social Solidarity Institutions, among others.

4.2.5 Leasing

Leasing is a financing instrument that the company can use when it does not want to allocate large amounts of capital to gain access to a particular asset (usually goods). In a leasing contract, the equipment owner (the lessor) allows the user (the lessee) to dispose of the equipment in exchange for periodic payments, including capital repayments and interest (Portal das PMEs, 2017).

The leasing is addressed to companies or comparable entities, self-employed businessmen, liberal professionals, public administration and consumers. There are two kinds of leasing, fixed assets (equipment) and real state. In the first one is included light and heavy vehicles, both passenger and commercial, industrial machinery and construction equipment. In the second one is included stores and commercial establishments and industrial installations (ALF[7], 2017)

Leasing has advantages and disadvantages. According to Augusto (2014) and ALF (2017), some of the advantages are: better liquidity by deferring payments, speed of response and simple administrative procedure, the lessee can choose the equipment and the supplier and there is a purchase option of equipment/fixture in the end of the contract upon payment of the agreed residual value at the beginning of the contract. Some disadvantages referred by the authors are compensation to the leasing company in case of an accident with the equipment and significant penalties in case of violation of the contract or early dissolution of the contract.

ALF (2017) gives a lot of important information to entrepreneurs who are interested in this financing procedure, including their partners. Figure 9 presents the association's partners, even though there are other companies where it is possible to obtain leasing, e.g. LeasePlan.

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[7] Associação Portuguesa de Leasing, Factoring e Renting main objective is to defend and represent the legitimate common interests of its members, in particular with any public or private entities, national or foreign, contributing to the technical, economic and social development of the activity of its associates (ALF, 2017).

Figure 9 - ALF leasing partners

Source: ALF (2017)

4.2.6 Factoring

Factoring is a treasury management tool, that is, it is a short-term needs coverage. The factoring contract consists on the transfer of the company's credits to a specialized company that will be responsible for the collection of this credit. Factoring advances a portion of the value of this credit to the company, receiving a commission in return (Portal das PME, 2017).

According to ALF (2017) factoring financing method is indicated to all companies, SMEs and large companies. In factoring method there are three involved parties: the factor – factoring company; the client – the company, which is the Factor’s client; and the debtor – who has a debt to the Client (and who is his client). In addition to the main factoring service there are also associated services like for instance financing, advancement over invoices related with the transaction of commercial credits, legal assistance (litigation, etc.) and credit risk studies.

There are different options of factoring. ALF (2017) highlights four different methods:

- **Recourse Factoring** – the Client benefits from the collection and credit management services and may also choose to use the financing of the assigned invoices. The Factor has the right of return over Clients for invoices, which are not paid within the payment deadline (reassignment);
- **Non-Recourse Factoring** – the Factor’s Client benefits from the credit management and collection services, as well as risk coverage in the event of the debtor’s insolvency and/or credit default. The client can also choose to have the funds anticipated. This type of Factoring confers an added security to credit sales;

- **Full Service Factoring –** this is the more complete Factoring product design, meaning the client assembles the three essential factoring components in the same product: management and collection services, coverage of commercial risks of insolvency and/or default of the debtors, and anticipation of funds (advances) over the receivables portfolio;
- **"Confirming" or "Reverse Factoring" –** the Factor pays to the supplier of its Client. This payment may also assume the form of an advance, where the supplier becomes the Client of a factoring contract.

For Augusto (2014) and ALF (2017), factoring has advantages and disavantages. Regarding the advantages, the authors highlight the fact that the company can realize its credits without being dependent on the payment of the clients; the security in credit sales; and the reduction of the administrative costs in human resources and communications. For the disadvantages, they highlight the possibility of the factor to suspend the credit due to persistent default of the debtors and to the fact that the factoring company can accept only some of the total credits proposed by the client whose associated cost reduces the profitability of the sales.

As in leasing, ALF has some partners.

Figure 10 - ALF factoring partners

Source: ALF (2017)

4.2.7 Bank Loans

According to Myers (1984) bank financing is the main source of financing by debt capital in small firms. However, it is only when the company holds an acceptable amount of accumulated funds and tangible assets that funding from this system actually becomes an option.

A financial debt consists in obtaining a loan from a lender, usually a bank, for a predetermined period of time. When it contracts a debt, the company is obliged not only to repay the loan capital, but also to pay interests, based on a rate applied to the value of the loan. Bank loans can be of short-term (which involves repayment of debt up to one year after borrowing) or long-term (loans for a period longer than one year). Banking institutions tend to prefer companies with business experience whose management teams maintain good relations with the institution and have business plans that demonstrate ability to service debt (Portal das PME, 2017).

Usually, bank credit is a form of adequate funding if the company is moderately indebted and with good ability to generate cash flows. Entrepreneurs with businesses in these conditions can obtain bank loans to finance its operations and expansion programs with very advantageous conditions without yielding part of the company's control. Naturally, banks are more receptive in lending money to solid companies already established in the market than to emerging companies (Portal das PME, 2017).

Additionally, for Augusto (2014), this kind of financing may be advisable under the following conditions: expansion of a profitable business; financing of a major acquisition (equipment, facilities, etc.); and if the company has great ability to generate cash flows. On the contrary, recourse to bank financing is not advisable when the company is too young or unprofitable. In these cases, there are many difficulties to obtain financing because the risk versus ratio return is uninteresting from the bank's point of view. Moreover, even if the loan can be obtained because of the positive credit history, personal guarantees may be required as well as too high interest rates, which may be unbearable (Portal das PME, 2017).

According to Moura (2014b) and Machado (2009) bank loans have some advantages. They are the easiest way for companies to make money because it is the most available option; they allow immediately access to cash – helping in an urgent situation; they stimulate consumption and production; they provide different payment choices – different amounts of payment and payment periods can be stipulated; and the long-term relationship with the bank can also guarantee companies easier access to funds in the future.

Moura (2014a) and Machado (2009) also highlight a set of disadvantages. Indeed, banks may not give more funds to companies already have a strong indebtedness in this bank; high associated costs – in addition to the interest rate there are commissions associated to the loan and costs with early repayment of the loan; bureaucracy – one of the major disadvantages of bank lending is its difficulty in obtaining it, unless you have a good track record or guarantee; and payment term – the term of repayment of a loan is usually short, which requires a strict financial gymnastic.

4.2.8 Credit Line

The possibilities of financing through financial loans are not limited to the traditional bank loan, previously referred. There is a possibility for companies to agree with banks credit lines as Collateralized Current Account.

According to Portal das PME (2017), credit line is a short-term form of flexible bank loan in which the creditor institution gives the company the right to withdraw funds according to its cash requirements within a previously agreed ceiling. They are particularly suited to address temporary cash shortages or to prevent unexpected break-ups.

According to Millennium BCP (2017) there are four important advantages for this type of financing:

- **Flexibility in terms of time, credit amount and interest rate –** A solution that enables to negotiate the amount and term that better fits the company treasury needs, usually associated with indexed rates;
- **Cost proportional to the use of limits –** The interest payment is calculated accordingly to the balances used;
- **Ease of use of credit –** Once the credit line limit is contracted, the credit line is used freely according to short-term cash requirements, without being subject to a predefined depreciation plan;
- **Possibility to carry out operations in foreign currency –** A credit line may be contracted in a foreign currency, provided that it is quoted by the Bank of Portugal.

The main drawbacks of the credit line related with the high interest rates and the several commissions associated with this type of financing (Rodrigues, 2016).

To help SMEs obtaining funding, IAPMEI has several financing programs[8], in order to improve financing conditions and facilitate SMEs' access to bank credit:

- Linha de Crédito Capitalizar
- INVESTE QREN - Linha de Financiamento ao Investimento Empresarial no QREN[9]
- Linha de Crédito Comércio Investe
- PME Crescimento 2015
- Linha de Crédito para Empresas Portuguesas com Processo de Internacionalização em Angola
- Linha de Crédito Mezzanine Financing IFD 2015

According to Banco de Portugal (2017), in Portugal there are several banks with service counters, branches or offices that give the enterprises the possibility to be funded by these programs. The main banks are displayed in figure 11.

Figure 11 - Banks in Portugal

Source: Banco de Portugal (2017)

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[8] More information about financing programs can be found in the IAPMEI website: https://www.iapmei.pt/PRODUTOS-E-SERVICOS/Incentivos-Financiamento/Financiamento-para-PME/Linhas-de-credito-para-PME.aspx

[9] QREN – Quadro de Referência Estratégico Nacional, constitutes the framework for the implementation of community policy on economic and social cohesion in Portugal (QREN, 2017).

4.2.9 Self-Funding

Self-funding and funds from own activity are two similar options to finance the company. As its name indicates, it corresponds to a source of financing that is generated within an entity, with the particularity of deriving directly from the normal activity of exploitation of that same entity (Porto Editora, 2003-2017).

Self-financing, in the perspective of corporate financial management, represents a set of elements (amortizations, provisions and net results) that are translated into a greater or lesser degree of liquidity and into a positive contribution to the treasury of a company.

According to Nota Positiva (2006) self-funding corresponds to the funds released by the company's activity and which are available to finance the realization of investments. Therefore, self-funding can be expressed through the following formula:

$$SF_t = NR_{t-1} + Amort_{t-1} + Prov_{t-1}$$

SF stands for self-funding, *NR* is net result, *Amort* is amortization, *Prov* is provision, *t* is the current year and *t-1* is the previous year.

An obvious advantage of this type of financing is the fact that there are no associated financial costs, in contrast, for example to the bank financing.

4.2.10 Stock Exchange

In the Portuguese capital market there are three segments that were created specifically for SMEs: Euronext ACCESS^{TM}, Euronext GROWTH^{TM} and Euronext ACCESS+^{TM}.

Figure 12 - Euronext Markets for SMEs

Source: Euronext (2017b)

The first one was created in 1991, whose former name was “Mercado Sem Cotações”. Later, in 2009, its name changed to EasyNext and recently it is called Euronext ACCESS^{TM}. It is a market segment that has simple and flexible admission requirements with a multilateral trading system, both of shares and bonds. This market only requires the reporting of national accounts as well as legal certification of reports and accounts for the last two financial years. Thus, Euronext ACCESS^{TM} is considered to be the first approach to capital markets by SMEs, serving to prepare them to explore other segments (Almeida, 2014).

According to the same author Euronext GROWTH™, whose former name was NYSE Alternext, was created in 2005, in order to meet the needs of the SMEs that intended to resort to financing through the capital market. It is present in four European Union countries: Portugal, Netherlands, France and Belgium. Euronext GROWTH™ is a specifically tailor-made market for SMEs as it offers not only simplified and low-cost access to financial markets, with adequate information obligations tailored to the size of these companies, but also responds to investors' expectations regarding financial transparency (Almeida, 2014). Figure 13 illustrates the Portuguese companies in the Euronext Markets.

Figure 13 - Portuguese Companies in Euronext GROWTH™

Source: Euronext (2017a)

In 2017 it was created a third segment, the Euronext ACCESS+™. According to Euronext (2017b) this segment was designed to help companies making a smooth transition to the market and adapting to their operations to form a stepping stone to other Euronext markets. Companies have thatadmitted to trade under Euronext ACCESS+™ receive additional assistance and their actions benefit from greater visibility.

Table 3 - Summary of markets

Euronext ACCESS+™	Euronext ACCESS™	Euronext GROWTH™
• Springboard to listing for start-ups and fast-growing SMEs	• Stands as the gateway for companies seeking simple access to listing	• A market dedicated to mid-caps with listing requirements adapted to their specific needs

Source: Adapted from Euronext (2017b)

According to Machado (2009) capital markets have advantages such as exposure to international investors for future funding and internal discipline. On the other hand, the disadvantages are the administration costs and the third party entry, often unknown, in the company's capital.

4.3 Mutual Guarantee

According to IAPMEI (2008), mutual guarantee is a private system and a mutual nature of support to SMEs, which is reflected primarily in providing financial guarantees to facilitate obtaining credit, in price and term conditions, appropriate to their investment and business cycles. The Portuguese Mutual Guarantee System operates on a mutualism logic, which requires that the beneficiary companies of their guarantees to become shareholders of the Society of Mutual Guarantee. This quality of mutual shareholder is mandatory during the phase in which the guarantee operation is in force and can be abandoned at the end, through the sale of the shares of the Mutual Guarantee company held by PME. (Garantia Mútua, 2017).

In order to boost investment, development, modernization and internationalization of SMEs, MGS also provide all the other necessary guarantees for the development of their activity in the sectors of industry, commerce, services, construction, tourism and transport (IAPMEI, 2008).

According to the same institution, the MGS have protocols with the main credit institutions operating in Portugal that allow SMEs to ensure overall financial costs lower than those offered by banks for the same type of operations, already considering the bank interest rate and the guarantee fee payable to MGS. Additionally, it is possible to see in Garantia Mútua website the partners of this system, such as IAPMEI, Turismo de Portugal, QREN and IEFP.

Figure 14 - Garantia Mútua partners

Source: Garantia Mútua website (2017)

The guarantees and services provided can be divided into three (IAPMEI, 2008):

- **Guarantees for financial institutions**, intervening as guarantors or warrantors in most of the financing operations:
  - **Guarantees for** short, medium and long-term **loans**;
  - **Financial Guarantees**, in particular in leasing, factoring and similar contracts;
  - **Guarantees to Special Credit Operations**, namely bond loans and commercial paper operations.
- **Guarantees for non-financial institutions**, ensuring compliance with obligations assumed by companies in the course of their business:
  - **Technical Guarantees** in the scope of compliance and good execution of contracts;
  - **Guarantees of Good Payment**, in particular to suppliers;
  - **Guarantees to the State**, required by the Central and Local Public Administration;
  - **Guarantees to Incentive Schemes**, in the context of programs receiving EU aid, such as the QREN.
- **Financial consulting**:
  - Financial advice in defining the most appropriate structure and form of financing and the best approach to financial institutions;
  - The MGS may also carry out, on behalf of the client, the negotiation of all financing and the respective contracting with the bank, if requested to do so.

In Portugal there are four Mutual Guarantee Societies, Agrogarante, Garval, Lisgarante, with their headquarters in Porto, Lisbon and Santarém respectively, and Agrogarante, with its headquarters in Coimbra specialized in the agricultural and agro-forestry sectors. The share capital of the MGS is held by companies, business associations, credit institutions, IAPMEI, Turismo de Portugal and SPGM[10] (IAPMEI, 2008).

[10] SPGM – Sistema de Garantia Mútua was created with the aim of creating conditions for reducing the financing costs of enterprises, especially SMEs, and a better balance of their financing structure, in particular by securing guarantees that allow access to loans with timelines appropriate to business cycles and to the realization of the investments necessary for their development (SPGM, 2017).

Figure 15 - Portuguese Mutual Guarantee Societies

Source: Garantia Mútua website (2017)

The same source highlight five advantages to companies using Mutual Guarantees, such as:

- Provides the necessary guarantees in the context of the current commercial relations of companies;
- Facilitates the choice of the best financing solutions, obtaining the credit in less time;
- Reduces the risk that usually the recourse to banking implies, thereby reducing its cost, obtaining more adequate deadlines and releasing additional credit ceilings;
- Eliminates or reduces the need for real or personal guarantees of partners, with the corresponding, for example in deeds and mortgage records;
- Supports companies in the analysis of their economic and financial situation and in setting up financing operations using more sophisticated products, such as the issuance of bonds.

5. Methodology

5.1 Sample Description

In order to answer the research questions “What are the potentialities of SME financing in Portugal?” and “What are the financing approaches in Portugal?”, a questionnaire with 18 mandatory multiple-choice and open-ended questions was elaborated (Annex I - Questionnaire).

The questionnaire is divided into two types of questions: the first 11 questions refer to information about the company and the remaining 7 questions relate to the company’s funding.

The questionnaire begins with a small text where the author is referenced and where both the purpose and scope of the questionnaire are explained. The format of the questionnaire (Microsoft Forms) ensures that all responses are anonymous and confidential.

The questionnaire was sent by e-mail, with an access to a link, in two phases. Initially, it was sent randomly to 300 companies from the 18 districts of Mainland Portugal and to the Autonomous regions of Madeira and Azores. All these 300 companies were in 2016 classified as “PME Excelência 2016” (IAPMEI, 2017).

Of the 300 e-mails we only got a reply from 4 companies. In this way, after two weeks, we sent the same e-mail to the same companies in order to obtain more answers, and a reply was received from another 8 companies, totalling the amount of 12 responses.

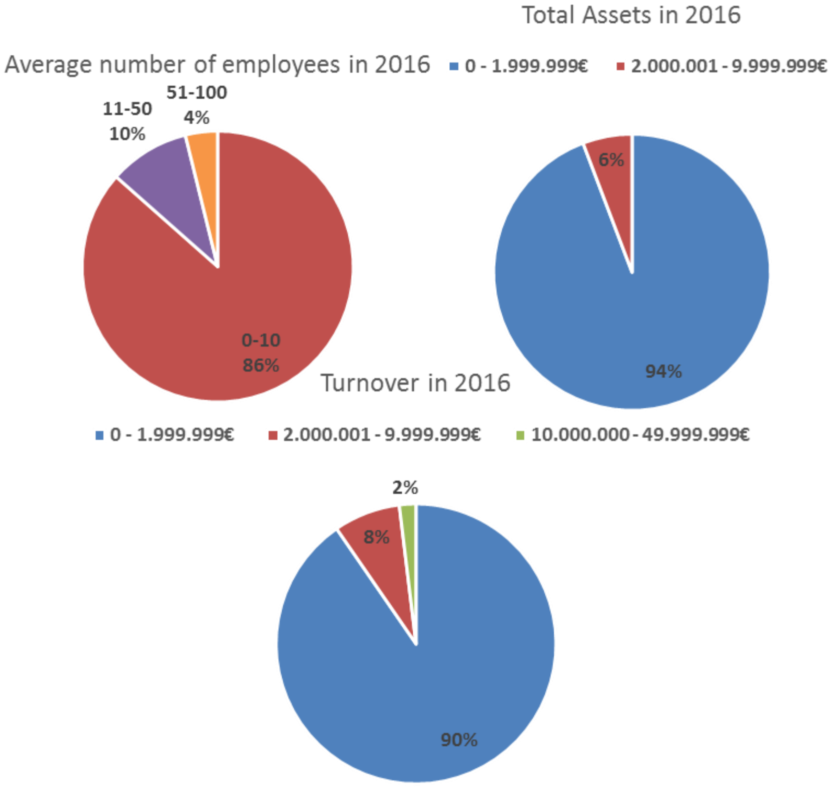
Due to the small number of responses obtained it was decided that the link would be sent to the companies of relatives and acquaintances in order to increase the sample. In this way, the link was sent to other 40 companies, from which the responses of all the companies were obtained. These 40 companies were not classified as “PME Excelência 2016”.

Therefor, 52 validated answers were obtained. These responses were from 6 districts from which only 12 companies were distinguished in 2016 as “PME Excelência 2016”. The sectors most represented in the sample are transport, construction and retail trade.

About 90% of companies are classified as micro-enterprises and the other 10% are small or medium enterprises. Nearly 8% of companies started out as non-family businesses and, today, the management of these companies remains as non-family businesses.

Figure 16 depicts the size of the companies in the study, regarding the average number of employees, turnover and total assets in 2016.

Figure 16 – Companies information



Source: Own elaboration

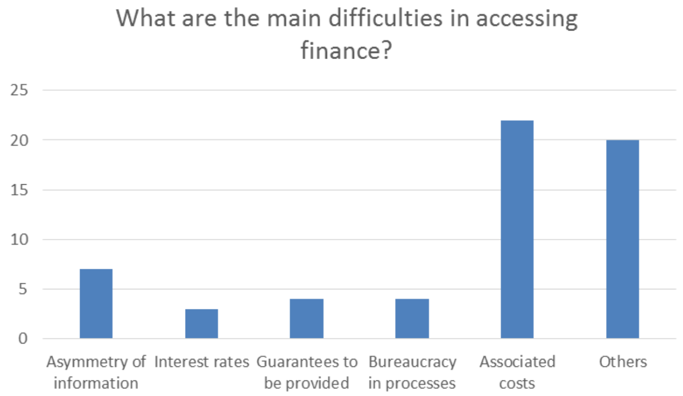
It can be observed that 86% of the companies have less than 10 employees, 94% have a total assets below €1.999.999 and 90% have a turnover below €1.999.999.

6. Analysis of the Results

In this chapter, the responses concerning the financing of the companies, which replied to the questionnaire, will be analysed.

The first question concerns the difficulties experienced by the company regarding the access to financing. The respondents had the possibility to choose more than one option, so we got more than 52 answers.

Figure 17 – What are the main difficulties in accessing finance?

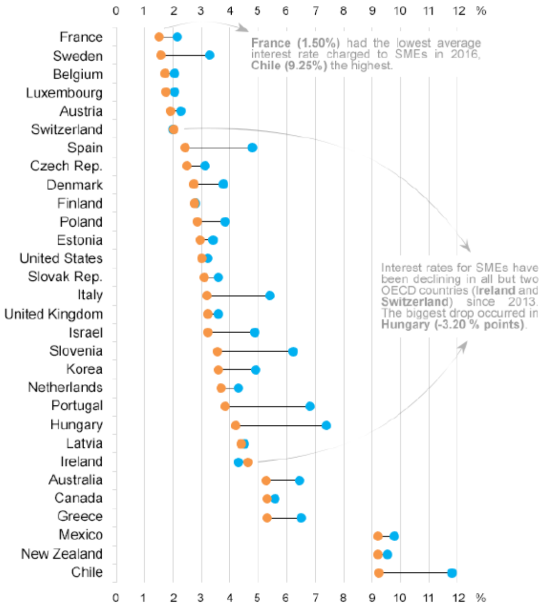


Source: Own elaboration

The main difficulties pointed out by the companies in accessing finance were associated to costs (37%), others (33%) and asymmetry of information (12%).

According to OECD (2018), In Portugal financial institutions are more risk averse in lending to SMEs. Furthermore the loan level, considered to be non-productive, has a significant weight in the offered loan, especially because SMEs are considered a risk population.

Figure 18- Average interest rate charged to SMEs – 2013 and 2016 levels



Source: OECD (2018)

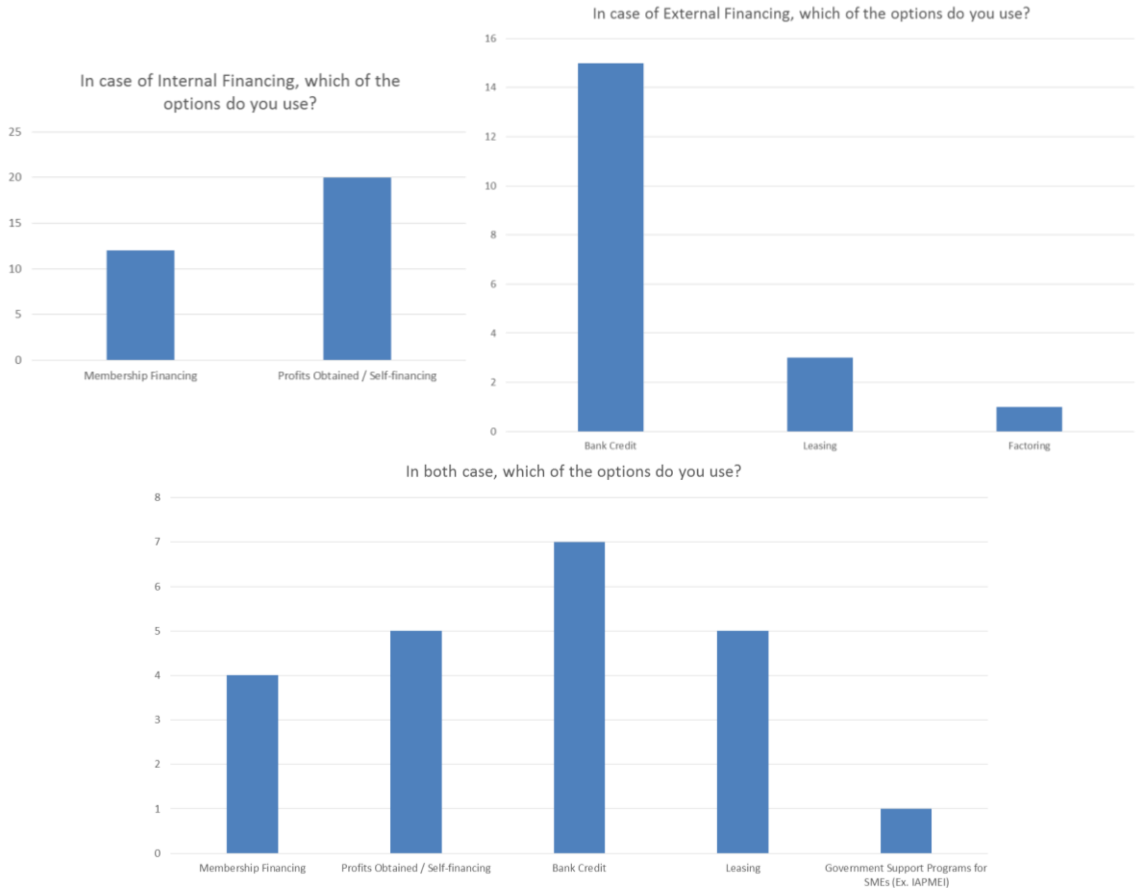
According to OECD (2018) access to credit is very much conditioned by the increase in the interest rate applied to financing. In figure 18 it is possible to observe that Portugal is the country where the interest rate has inscreased the most between 2013 and 2016.

The following three questions asked the company about the type of financing they used (internal, external, or both). It is verified that 58% of the respondents use essentially internal financing, 29% external financing and 13% both types of financing.

According to Lopes (2014), in 2014, 19% of the portuguese companies said that they used internal financing, 26% external financing and 55% both. This difference between the resutls of Lopes (2014) and our results can be justified because, generally the higher the company the lower is the risk averse to obtain credit. In the study of Lopes (2014), 77% of the companies were small or medium, whereas in our sampling only 10% of the companies were small and medium sized, being the remaining micro enterprises.

Questions 14 and 15 have several choices of answers, so figure 19 illustrates more than 52 answers.

Figure 19 - Financing options used by the respondent companies



Source: Own elaboration

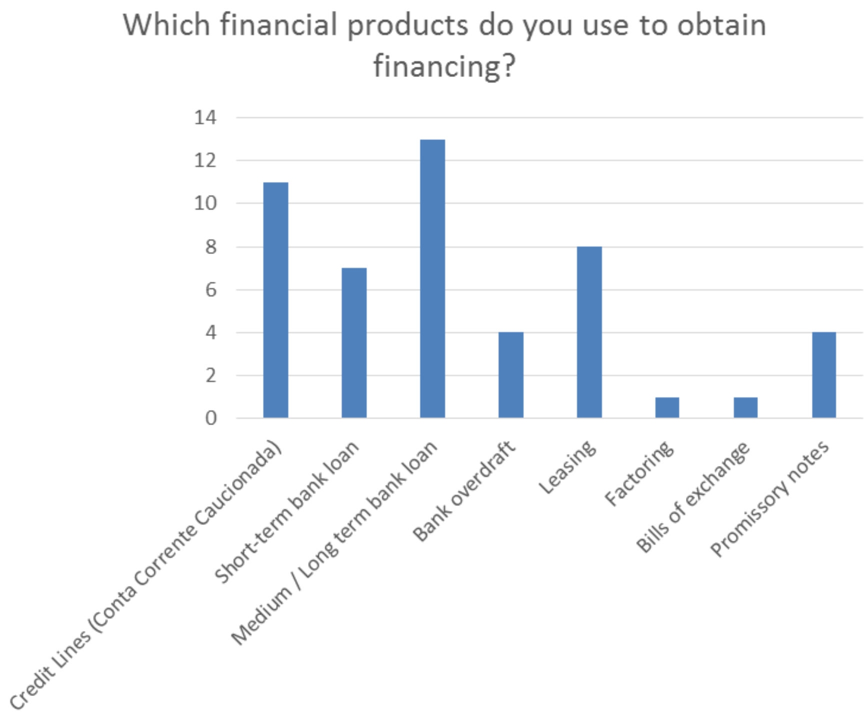
From figure 19 we conclude that companies internal financing prefer to choose obtaining funding using profits obtained / self-financing, whereas those that opt for external financing, choose the bank credit as the most popular way to obtain funding. Some companies also use membership financing for internal financing, while for external financing they use leasing, factoring and government support programs for SMEs.

With the previous results and according to Berger & Udell (1998), it is possible to conclude that the interviewed companies have two characteristics. Regarding internal financing, companies are mature and solid because they finance themselves through their own results. About external financing, the options as business angels or risk capital and venture capital, were not chosen, which may indicate that the companies are not in the beginning of their activity.

To detail the type of external financing used by companies it was questioned what financial products they use. The answer is not a single option, and several answers could be given per company.

In figure 20 it is possible to observe that the most common financial products used by the companies are short and medium / long term bank loan, credit lines and leasing. Some companies also identified financial products, like bank overdraft, factoring, bills of exchange and promissory notes.

Figure 20 – Which financial products do you use to obtain financing?



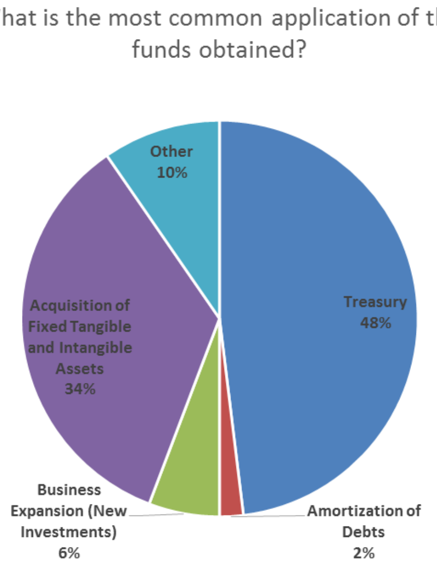
Source: Own elaboration

Comparing the results, it is possible to observe that the trends in the use of financial products remains the same in Lopes (2014), whose the four most popular financial products in his study was short and medium / long term bank loan, credit lines and leasing.

The next question was about the application of the funds obtained. Figure 20 allows observing that the two most common applications are treasury (48%) and acquisition of fixed tangible and intangible assets (34%). Other options mentioned by the companies are business expansion (new investments) (6%), amortization of debts (2%) and others (10%).

This question confirms that the companies in our questionnaire are more risk-averse than in the Lopes (2014) questionnaire, where business expansion was the most popular option with 41%, followed by acquisition of fixes tangible and intagible assets 35% and treasury 22%. The fact that firms opt for business expansion rather than cash flow shows that firms are more willing to risk in a future perspective and investment while the other in current liquidity.

Figure 21 – Whats is the most common application of the funds obtained?



Source: Own elaboration

It is possible to observe that, although there are several supports given to companies to obtain financing, only three companies (6%) acknowledge that there has been a reinforcement in the aids by public institutions.

In Lopes (2014), the studied companies were all “PME Excelência 2013”. In her study she also asked about the strengthening of financing measures taken by public institutions with the crisis, and 43% of the companies answered that they noticed more programs available to SMEs. The fact that they are considered “PME Excelência 2013” and have more visibility and access could be a factor for almost half of the companies to recognize this effort.

Analysing and comparing some questions it is possible to find that the companies that notice some reinforcement in financing provided by public institutions are all distinguished as “PME Excelência 2016”. Therefore, it can be concluded that these companies are more aware of the support that these institutions can provide.

7. Conclusions

The objective of this dissertation was to understand the main sources of financing available to SMEs and to understand the knowledge and use that SMEs have about the topic. In this way, the dissertation structure begins with a literature review with the four main theories of capital structure of the companies, proceeding for the types of financing and finally the analysis of the surveys.

This study has concluded that there are several options of financing with diverse applications that are not well explored by the companies, as confirmed by the questionnaires. The 10 most popular forms of business financing were explored where there was found to be a lot of information about them.

The fact that the companies surveyed are 90% microenterprises makes the results more influenced by one of them, that is, the more accentuated use of internal financing. However, for those who opt essentially for external financing, the main choices are bank financing, credit lines and short, medium and long-term financing, as expected.

Despite the importance of the results obtained, this study presents some limitations, namely in the number of responses obtained to the questionnaire. The method used to obtain answers, by sending e-mails to companies, was not an effective method, being residual the number of responses for the universe of SMEs in Portugal. It would be interesting, as future investigation, to widen the sample, using for instance phone calls as a way to complement the other method.

Another limitation of this study was the impossibility to present all possible financing options and all the support that companies can find for their financing structure because we decided to deepen the 10 most common options that bring more advantages to SMEs. It would also be interesting to study the correlation between the companies business life cycle and their capital structure.

Furthermore, Banco de Portugal conducts regular inquiries regarding the financing of companies in Portugal. Therefore, it has databases with information that could be relevant to this subject. However, these databases are only provided in Stata format, in a Linux environment, which made it impossible to process the data. As future research, it would be interesting to use this data.

References

Almeida, P. F. (2014). NYSE ALTERNEXT: FINANCIAMENTO DE PME ATRAVÉS DO MERCADO DE CAPITAIS. *Mestrado em Gestão - Finanças Empresariais*. Universidade de Aveiro.

Augusto, M. R. (2014). O Financiamento das PME Através do Capital de Risco. *Mestrado em Ciências Empresariais*. Lisboa: Lisboa School of Economics & Management.

Barbosa, L., & Pinho, P. S. (2016). Estrutura de financiamento das empresas. L. B. Portugal & P. S. SBE, Eds., Lisboa.

Berger, A. N., & Udell, G. F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking and Finance, 22*, pp. 613-673.

Business Dictionary. (2017). *Business Life Cycle*. Retrieved May 31, 2017, from Business Dictionary: http://www.businessdictionary.com/definition/business-life-cycle.html

Caldeira, R. (2013). O contributo das sociedades de Capital de Risco para o empreendedor. *Management Master Thesis*. Instituto Superior de Gestão - Business & Economics School.

Carvalho, N. (2009). *Business angel, entidade veículo ou sociedade de capital de risco*. Retrieved June 6, 2017, from Jornal de Negócios: http://www.jornaldenegocios.pt/empresas/pme/detalhe/business_angel_entidade_veiacuteculo_ou_sociedade_de_capital_de_risco

Diário da República. (2007). Decreto-Lei n.º 372/2007. *Diário da República*, 8080-8084.

Dias, C. P. (2012). Estrutura de Capital e Determinantes da Rendabilidade das Empresas do Distrito de Santarém. *Tese de Mestrado em Auditoria e Análise Financeira*. Tomar: Instituto Politécnico de Tomar.

Euronext. (2017a). *Cotações*. Retrieved June 22, 2017, from Euronext: https://www.bolsadelisboa.com.pt/cotacoes/accoes-lisboa

Euronext. (2017b). *Os nossos mercados*. Retrieved August 14, 2017, from Euronext: https://www.euronext.com/pt-pt/content/os-nossos-mercados

European Commission. (2003). Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises. *Official Journal of the European Union*, 36-41.

Executivo, P. (2017). *Como determinar a estrutura de capital e de financiamento da sua empresa*. Retrieved May 31, 2017, from pmelink.pt: http://www.pmelink.pt/article/pmelink_public/EC/0,1655,1005_5327-3_41098--View_429,00.html

Gitman, L. J. (2004). Princípios da Administração Financeira. Brasil: Person Addison Wesley.

IAPMEI. (2008). Manual da Garantia Mútua.

IAPMEI, & APCRI. (2006). Guia Prático do Capital de Risco.

INE. (1994). *Sistema de Metainformação*. Retrieved May 8, 2017, from INE: http://smi.ine.pt/Conceito/Detalhes/5373

INE. (2015). Set of Databases. Pordata. Retrieved May 3, 2017, from http://www.pordata.pt/Portugal

INE. (2017). *Portugal 2015*. Lisboa: INE.

Informa. (2016). *Longevidade Empresarial em Portuga*. dun&bradstreet.

Islam, M. (2014). *Agency Theory*. Retrieved May 24, 2017, from SlideShare: https://www.slideshare.net/muhibnash/agency-theory-36263676

Jensen, M. C., & Meckling, W. H. (1976). "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure". *Journal of Financial Economics*, 3, 305-360.

Lopes, S. R. (2014). As PME e as suas dificuldades em obter financiamento. *Mestrado em Contabilidade, Fiscalidade e Finanças Empresariais*. ISEG - Lisboa School of Economics & Management.

Luzio, R. F. (2015). Os determinantes do financiamento bancário às PME portuguesas. *Tese de Mestrado em Gestão Comercial*. Faculdade de Economia - Universidade do Porto.

Machado, A. (2009). *Como financiar a sua empresa*. Retrieved June 22, 2017, from Jornal de Negócios: http://www.jornaldenegocios.pt/empresas/pme/detalhe/como_financiar_a_sua_empresa

Millennium BCP. (2017). *Conta Corrente Caucionada*. Retrieved June 22, 2017, from Millennium BCP: https://ind.millenniumbcp.pt/pt/negocios/financiamento/Pages/Cta_Corr_Caucionada.aspx

Modigliani, F., & Miller, M. H. (1958). "The Cost of Capital, Corporation Finance and the Theory of Investment". *The American Economic Review*, vol. 48, pp. 261-297.

Modigliani, F., & Miller, M. H. (1963). "Corporate Income Taxes and the Cost of Capital: A Correction". *The American Economic Review*, vol. 53, pp. 433-443.

Moura, J. P. (2014a). *4 Desvantagens do Crédito Bancário*. Retrieved June 22, 2017, from Economias: https://www.economias.pt/4-desvantagens-do-credito-bancario/

Moura, J. P. (2014b). *4 Vantagens do Crédito Bancário*. Retrieved June 22, 2017, from Economias: https://www.economias.pt/4-vantagens-do-credito-bancario/

Muller, P., Devnani, S., Julius, J., Gagliardi, D., & Marzocchi, C. (2016). *Annual Report on European SMEs 2015/2016.* European Commission. Karen Hope.

Myers, S. C. (1977). "Determinants of Corporate Borrowing". *Journal of Financial Economics*, 5, pp. 147-175.

Myers, S. C. (1984). "The Capital Structure Puzzle". *The Journal of Finance*, Vol. 39, pp. 574-592.

Myers, S. C., & Majluf, N. S. (1984). "Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have". *Journal of Financial Economics*, 13, pp. 187-221.

Nota Positiva. (2006). *Autofinanciamento*. Retrieved June 21, 2017, from Dicionários Temáticos: http://www.notapositiva.com/old/dicionario_gestao/autofinanciamento.htm

OECD. (2018). *Financing SMEs and Entrepreneurs 2018: An OECD Scoreboard.* OECD.

Oliveira, I. G. (2012). Determinantes da Estrutura de Capital das PME Potuguesas. *Tese de Mestrado em Finanças*. Lisboa: ISCTE - Instituto Superior de Ciências do Trabalho e da Empresa.

Porto Editora. (2003-2017). *autofinanciamento*. Retrieved June 21, 2017, from infopédia - Dicionários Porto Editora: https://www.infopedia.pt/$autofinanciamento

QREN. (2017). Retrieved June 27, 2017, from O QREN: http://www.qren.pt/np4/qren

Rodrigues, R. (2016). *Conta Corrente Caucionada*. Retrieved June 22, 2017, from NValores: http://www.nvalores.pt/conta-corrente-caucionada/

Saldo Positivo. (2014). *Como financiar o seu negócio com a ajuda da família e amigos*. Retrieved June 05, 2017, from Caixa Geral de Depósitos:

http://saldopositivo.cgd.pt/empresas/como-financiar-o-seu-negocio-com-a-ajuda-da-familia-e-amigos/

Serrasqueiro, Z., & Caetano, A. (2011). Trade-Off Theory Versus Pecking Order Theory: Capital Structure Decisions in a Peripheral Region of Portugal. *Department of Management and Economics*. Évora: CEFAGE Research Center - University of Évora.

Silva, P. (2007). *Manual do Empreendedor.* Instituto Politécnico de Leiria, Gabinete de Projectos. IPL.

SPGM. (2017). *História*. Retrieved June 27, 2017, from Sobre a SPGM: http://www.spgm.pt/edicoes1/spgm/desenvArtigo.asp?r=31&c=2033&a=10389

Websites:

ALF. Retrieved June 22, 2017, http://www.alf.pt/pt/in%C3%ADcio

ANDC. Retrieved June 21, 2017, http://www.microcredito.com.pt/

Banco de Portugal. (2017). Retrieved June 24, 2017, https://www.bportugal.pt/ FNABA. (2007-2015). Retrieved June 23, 2017, http://www.fnaba.org/pt/

Garantia Mútua. Retrieved June 27, 2017, https://www.spgm.pt/pt/

IAPMEI. Retrieved June 23, 2017, https://www.iapmei.pt/

Portal das PME. (2014). Retrieved June 21, 2017, http://pme.pt/

Annex I

Inquérito às PMEs (Micro, Pequenas e Médias Empresas) - Financiamento

O meu nome é Ana Morgado e sou aluna do Mestrado em Gestão leccionado pelo ISCTE - Business School.
No âmbito da minha tese, surge este questionário que visa a recolha de informação acerca do financiamento das PMEs.
As respostas fornecidas serão mantidas como anónimas.
Agradeço desde já a sua contribuição!

* Obrigatório

1

Situação da empresa em 2016 *

- Micro
- Pequena
- Média

2

Tem a distinção do IAPMEI e do Turismos de Portugal como PME Excelência 2016? *

PME
excelência'16

- Sim
- Não

3

Sector de Actividade *

Introduza a sua resposta

4

CAE *

Introduza a sua resposta

5

Sede no Distrito de *

Introduza a sua resposta

6

Inicio de Actividade (Ano) *

Introduza a sua resposta

7

Origem da fundação da empresa? Ex: Familiar, ... *

Introduza a sua resposta

8

Situação atual da gestão da empresa? Ex: Familiar, ... *

Introduza a sua resposta

9

Nº médio de empregados em 2016 *

- 0-10
- 11-50
- 51-100
- 101-200
- > 200

10

Volume de Negócios em 2016 *

- 0 - 1.999.999€
- 2.000.001 - 9.999.999€
- 10.000.000 - 49.999.999€
- > 49.999.999€

11

Total do Ativo em 2016 *

- 0 - 1.999.999€
- 2.000.001 - 9.999.999€
- 10.000.000 - 49.999.999€
- > 49.999.999€

12

Qual (quais) as principais dificuldades de acesso ao financiamento? *

- Assimetria de informação
- Taxas de juro
- Garantias a prestar
- Burocracia nos processos
- Custos associados
- Ausência de confiança
- Outras

13

A empresa recorre a que tipo de financiamento? *

- Financiamento Interno
- Financiamento Externo
- Ambos

14

Em caso de Financiamento Interno, a qual (quais) das opções recorre? *

- Lucros Obtidos / Autofinanciamento
- Financiamento dos Sócios
- N/A - Selecionei na 13. Financiamento Externo

15

Em caso de Financiamento Externo, a qual (quais) das opções recorre? *

- Familiares e Amigos
- Business Angels
- Capital de Risco
- Leasing
- Factoring
- Microcrédito
- Crédito Bancário
- Sociedade de Garantia Mútua
- Bolsa
- Programas Governamentais de Apoio às PMEs (Ex. IAPMEI)
- Outra
- N/A - Selecionei na 13. Financiamento Interno

16

Qual (quais) os produtos financeiros a que recorre para obter financiamento? *

- Descobertos Bancários
- Empréstimo de Curto Prazo
- Empréstimo de Médio / Longo Prazo
- Linhas de Crédito (Conta Corrente Caucionada)
- Leasing
- Factoring
- Letras
- Livranças
- Outras

17

Qual a aplicação mais comum dos fundos obtidos? *

- Tesouraria
- Amortização de Dívidas
- Expansão do Negócio (Novos Investimentos)
- Aquisição de Ativos Fixos Tangíveis e Intangíveis
- Outra

18

Com a crise, notou algum reforço nas ajudas por parte de Instituições Públicas no financiamento a PMEs? Ex: Não; Sim, IAPMEI; ... *

Introduza a sua resposta

Submeter