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BACHELOR'S THESIS

PRESENT AND FUTURE OF CROWDFUNDING AS SOURCE OF ENTREPRENEURIAL FINANCING

ABSTRACT

New financing techniques have emerged due to the recently experienced deep crisis. In a changing technological environment any individual with an innovative business idea and an achievable entrepreneurial project can easily undertake it without resorting to traditional banking. As a result of the new Fintech technology, a word stemming from a contraction of the words "finance" and "technology", it may be possible for anyone to use a wide range of financial services in a faster, more comfortable and transparent way. This technological revolution has entered with force in our country. However, even though the high turnover figures that move financial startups of other countries have yet to be reached here, investment and growth in this sector is rapidly increasing. Therefore, the crowdfunding industry marks the present and the future as a source of financing for business projects in our country.

Key words: collective funding, entrepreneur, start-up, mass funding, entrepreneurial project, crowdlending.

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LIST OF CONTENTS

1. INTRODUCTION	3
1.1. CONTEXTUALIZATION	3
1.2. OBJECTIVES	4
1.3. METHODOLOGY AND STRUCTURE	4
2. DEFINITION AND MODALITIES OF CROWDFUNDING IN SPAIN	5
2.1. DEFINITION OF CROWDFUNDING	5
2.2. MODALITIES OF CROWDFUNDING IN SPAIN	8
3. EVOLUTION OF CROWDFUNDING IN SPAIN	13
4. LEGAL FRAMEWORK OF COLLECTIVE FUNDING IN SPAIN	17
5. STRENGTHS AND WEAKNESSES OF COLLECTIVE FUNDING	19
6. OTHER BANKING FINANCING ALTERNATIVES IN SPAIN	20
7. CROWDFUNDING AND TRADITIONAL BANKING	24
8. HAWKERS SUCCESS STORIES AND FOXIZE SCHOOL IN SPAIN	28
9. FUTURE CROWDFUNDING CHALLENGES	29
10. DISCUSSION AND CONCLUSION	29
11. BIBLIOGRAPHY	31
11.1 REFERENCES	31
11.2 ELECTRONIC RESOURCES	32
12. ANNEXED	

LIST OF FIGURES

FIGURE 1 FINANCIAL CROWDFUNDING PLATFORMS AND THE DIFFERENT BUSINESSES	
MODELS	6
FIGURE 2 CHARACTERISTICS OF CROWDFUNDING	7
FIGURE 3 MODALITIES OF CROWDFUNDING	8
FIGURE 4 BUSINESS MODEL FOR MEDIATED CROWDLENDING PLATFORMS	10
FIGURE 5 SEARCH TREND IN GOOGLE SEARCH OF THE TERM CROWDFUNDING	14
FIGURE 6 GEOGRAPHIC INTEREST OF THE TERM CROWDFUNDING IN GOOGLE SEARCH	
TRENDS	14
FIGURE 7 TOTAL AMOUNT RAISED BY MODALITY OF CROWDFUNDING IN MILLION EUROS	
BETWEEN 2015 AND 2016 IN SPAIN	15
FIGURE 8 LEGAL FRAMEWORK OF CROWDFUNDING	17
FIGURE 9 METHODS OF MEASURING CREDIT RISK ACCORDING TO BASEL II	25
FIGURE 10 RISK OF DEFAULT BY CREDIT CATEGORIES IN A RATING SYSTEM	27
FIGURE 11 FINTECH INFOREOGRAPHY IN SPAIN	36

LIST OF TABLES

TABLE 1 COMPARISONS BY MODALITY OF CROWDFUNDING RELEVANT FOR SMES, START	·_
UPS AND PROJECTS	. 12
TABLE 2 TOTAL AMOUNT RAISED BY MODALITY OF CROWDFUNDING BETWEEN 2015 AND	
2016 IN SPAIN	.16
TABLE 3 CHARACTERISTICS REGULATED BY THE ACT 5/2015, OF APRIL 27, ON THE	
PROMOTION OF BUSINESS FINANCING	.18
TABLE 4 STRENGTHS AND WEAKNESSES OF COLLECTIVE FUNDING	.19
TABLE 5 SPANISH FINTECH ACTIVITIES	.21
TABLE 6 MOST IMPORTANT VENTURE CAPITAL ENTITIES IN SPAIN	.23
TABLE 7 REGISTERED SPANISH CROWDFUNDING PLATFORMS	.35

1. INTRODUCTION

1.1. CONTEXTUALIZATION

The outbreak of the global financial crisis following the collapse of Lehman Brothers in 2008, and the serious bank restructuring situation that Spain has experienced in recent years have revealed new funding alternatives for both small investors and SMEs with difficulties in obtaining credit. According to Quirós-Zufiria (2017), financial markets are undergoing a technological transformation with internet, in the way of contracting new financial products. As a result a new latent market has appeared and to be served. The first Fintech companies appear -a contraction of the words "finance" and "technology". Fintech companies use information and communication technologies to create and offer financial services more efficiently and less costly. The financing of companies, of start-ups and entrepreneurial projects is one of the main points of the Fintech ecosystem. The rapid development of this new financial technology is challenging the banking services and at the same time allows the new emergence of new independent providers of financial services.

Nowadays, the high levels of unemployment and the low quality of existing jobs have generated the need for many people to start their own businesses, achieving their independence and economic stability. As Zahra and Wright (2015) showed, entrepreneurship is a crucial path for the economic, technological and social growth and development. Likewise, Zahra and Wright (2015) point out that one of the most forgotten aspects of entrepreneurship is the multiplier potential, that is, where business activities generate financial wealth that feeds the creation of additional social and commercial enterprises.

Nevertheless, new substitute and complementary products, such as crowdfunding and *peer-to-peer loans*, provide online financing quickly and cheaply avoiding the physical interaction for entrepreneurs. In addition, it may be crucial for banks to apply financial technology to banking operations, as the current processes of banks rely heavily on outdated legacy systems, as compared to the new Fintech providers. As a result, banks need to increase innovation in line with the evolution of Fintech solutions.

As Guzmán-Raja (2014) points out, as a result of the current economic crisis, credit has been reduced to companies, a situation that has caused a substantial decrease in the start-up of new projects, or the maintenance of those already in the pipeline. Therefore, a worldwide movement has appeared that in its Anglo-Saxon terminology is known as *crowdfunding*. This movement of mass financing has continued to grow especially in countries where the internet is more widespread.

In addition, Quirós-Zufiria (2017) argues that crowdfunding is found within the context of the information society, that is, an expansion of the internet as a vehicle for the exchange and transmission of information. Moreover, thanks to the evolution of new technologies crowdfunding has found a strong ally in online platforms. As Quirós-Zufiria (2017) concludes crowdfunding, also called *mass funding, collective microfinance*, or *micromanaging*, enables the founders of lucrative enterprises in the fields of arts and culture, to be able to finance their projects by using relatively small contributions from a relatively large number of people using internet, without financial intermediaries. It also allows firms that are in operation but need to address new lines of activity, new markets or increase capital through the sale of stocks, through *equity crowdfunding*.

One limitation of this Bachelor's thesis is the delay in the implementation of this medium in Geography, this is the most significant impediment due to the fact that in practice it has not been used in excess and thus, the data are not solid, nor secure. The short course of crowdfunding justifies that the efficiency and effectiveness of the *entrepreneurial projects*¹ being funded are not known for certain and that's another limitation. Obviously, there will be successes and failures in participatory investments, but as new technologies progress the defects of *mass funding*² will be improving.

1.2. OBJECTIVES

Throughout the course of the degree in Finance and Accounting, I have been able to study and learn from different subjects, but the ones that have most attracted my attention have been the subjects oriented to the financial area, for example Advanced Financial Management, Financial Mathematics, Markets and Financial Institutions, Analysis of Financial Statements, Banking Management, English for Finance, and Portfolio Management, as well as subjects focused on Accounting. Similarly, I have found interesting subjects in the area of Financial and Tax Law, which in addition to deepening my knowledge of the Spanish Fiscal System, we have been trained in business taxation. In my opinion, this degree is interesting as it offers solid, innovative and practical training. In order to expand my knowledge of the financial area, an in-depth analysis of crowdfunding has been carried out.

This research examines crowdfunding as a new financing alternative, and how the new online technology affects traditional banking. It is exceptionally interesting to analyze whether banks will adopt some of their innovations to expand their current product offering, and whether they are perceiving the use of crowdfunding as a preparation for the potential threats of the traditional banking sector. In summary, this research emphasizes on various issues such as characteristics and the definition of crowdfunding, its evolution both at global and national levels, the modalities of crowdfunding, the legal status, the strengths and weaknesses, other banking and financing alternatives in Spain, and the future crowdfunding challenges.

1.3. METHODOLOGY AND STRUCTURE

Different various channels of information have been used in order to complete this study and to perform an excellent investigation on crowdfunding. Mainly, the sources consulted have been extracted from the Google Scholar search engine, so I have been provided with complete, reliable, and above all, updated material. It has been very interesting to consult diaries, reports, books and the numerous articles published by the different specialists, all of them in English and Spanish. Finally, sources such as web pages or Internet blogs have also been consulted.

¹ **Entrepreneurial projects:** A entrepreneurial project is any scheme or a part of a scheme for investing resources. Thus, it is a scientifically evolved work plan devised to achieve a specific objective within an specified period of time, pursuant to Kumar *et al.* (2003).

² Mass funding: It is the collective funding also known as crowdfunding.

The work is structured as follows: In the 1st section, the introduction is developed, which is divided in the contextualization, objectives, methodology and structure. In the 2nd section, the theoretical aspects and characteristics of crowdfunding are explained, as well as the different modalities of crowdfunding. Then, in the 3th section, the evolution of crowdfunding will be developed, both globally and nationally. In the 4th section, the legal regime of collective funding in Spain will be analysed. Next, in the 5th section, the main strengths and weaknesses of collective financing will be described. In the 6th section, will be studied other banking financing alternatives in Spain. Later, in the 7th section, the crowdfunding and traditional banking will be commented. In addition, in the 8th section, two Spanish success cases on crowdfunding will be briefly developed, that is, the *Hawker* and *Foxize* success cases. Then, in 9th section, the discussion and the conclusion of this bibliographic review will be developed.

2. DEFINITION AND MODALITIES OF CROWDFUNDING IN SPAIN

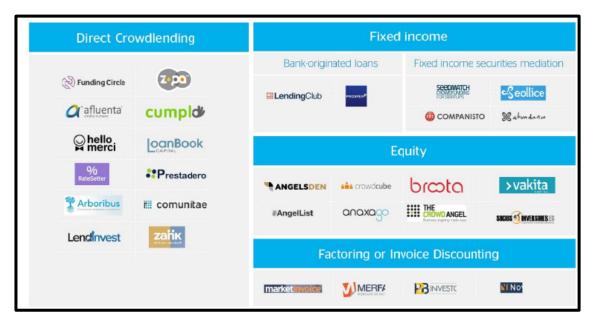
2.1. DEFINITION OF CROWDFUNDING

Nowadays, due to the success of new financing alternatives, anyone who desires to carry out an entrepreneurial project could turn to various sources of financing, such as crowdfunding. Furthermore, recently published investigations examine some important questions about the growing use of crowdfunding and other financial alternatives. This technique allows entrepreneurs to receive the necessary funding faster and less costly than with the traditional funding sources, but, what crowdfunding means?

González and Ramos (2016) defines crowdfunding as: "Crowdfunding is an alternative form of finance and exchange where those seeking funding and those looking to invest or donate can be matched. Creators and entrepreneurs can make use of these online crowdfunding platforms to expand the numbers of potential investors and donors, who finance their online project via the Internet" (2016:6). Belleflamme *et al.* (2014) find that the concept of crowdfunding is related with crowdsourcing, due to the fact that it uses people or the crowd as a way to obtain ideas, feedback and solutions to carry out entrepreneurial activities. Additionally, crowdsourcing contributes to create projects through a kind of activities, such as research and development of new technologies, by the various internet collaborators. Therefore, collective funding or crowdfunding is a system of cooperation that allows any person to create entrepreneurial projects to raise a sum of money among many people to support a particular initiative.

Moreover, Bruton *et al.* (2015) argue that crowdfunding uses collective decisions by a social media platform to decide in which projects invest. In addition, the amount of money to invest is small, thus, this makes it easier for ordinary investors to participate in funding these projects. Bruton *et al.* (2015) point out that entrepreneurs of developing and developed economies now invest in microfinance, crowdfunding and peer-to-peer to meet the requirements of new companies or ventures who make strategic decisions to expand. Furthermore, this is an interesting kind of financing for both business and social initiatives, where entrepreneurs may find a source of funding different from traditional banking. Belleflamme *et al.* (2014) show that as a result of this technique a considerable number of entrepreneurs can be provided of external funding, in which each investor provides a small amount of capital instead of applying for a high interest rate loan.

In Figure 1 bellow, the different financial crowdfunding platforms can be seen. As reported by BBVA research (2015), four modalities of platforms can be differentiated. Direct crowdfunding is the kind of platforms most used in Spain, and they act as administrators in establishing a loan contract between several lenders that received an interest rate as a benefit. Hence, in the fixed income platforms there are differentiated platforms on which loans are funded using fixed income securities, and platforms which mediate products similar to those traditionally used in fixed income, such as bonds, promissory notes or debentures. Moreover, the Equity platforms mediate stocks and work in a similar way to those which mediate fixed income securities and the platform charges fees to the capital issues as the operation has been funded. Finally, in the factoring or invoice discounting platforms, the companies choose which of their invoices or bills to make available for purchase.





Source: BBVA research (2015)

In addition, according to BBVA research (2015), it should be noted that there are three essential subjects in a crowdfunding project, thus, it will be described in an introductory way:

> The promoter or entrepreneur who seeks financing for his project.

The crowdfunding platform³ is used to make known the project with which it will be financed. Thus, the project is described, indicating the amount to carry it out.

³ **Crowdfunding platform:** A crowdfunding platform is a website that allows the collective collection of cash contributions to finance projects of any modality of crowdfunding depending on the platform. In the figure 1 it is shown the best known different platforms to hire.

> The group of individuals who believe in the project and supports it by providing funds.

The contributors are the crowd interested in supporting the entrepreneur's project, and makes possible the start-up of the project.

> The technological platform that makes possible the contact between the investors and promoters.

The contributors make themselves available for making contributions, to interact with promoters and use any other function of the platform. Hence, the promoters can publish their projects, monitor the status of the crowdfunding campaign and launch the funding campaign.

Moreover, in agreement with Agrawal (2011), perhaps the main striking feature of crowdfunding is the broad geographic dispersion of investors in small, early-stage projects. In addition, in Figure 2 below, the different characteristics in consonance with BBVA research (2015) can be shown:

Showcase	•It is a showcase where is described and promoted the main idea, project or need, in order to attract the financing that needs to carry it out.		
Intermediation •Platforms charge commissions to both inverse.			
Efficiency	•Transaction costs are reduced (the search costs), thus making efficiency gains.		
Clasification	•The projects are classified according to the risk, evaluating the solvency of the entrepreneur or the feasibility of the project.		
Risk manager • The risk of default is assumed by the projection investors, in order to diversify financial risks.			
Limited liability	•Solvency risk such as liquidity risk are assumed by the entrepreneur or by the investor.		
Traditional models	 It can classify the platform by financial products in a frame of multitude of investors. 		

Figure 2 Characteristics of crowdfunding

Source: BBVA research (2015)

2.2. MODALITIES OF CROWDFUNDING IN SPAIN

Nowadays, different variants of crowdfunding can be found in the modern commercial society. It is worth highlighting in general terms that the four types of collective funding are *donation, investment, loan and reward crowdfunding*. However, they find themselves creating new options, such is the case of *real estate crowdfunding*.

González and Ramos (2016) also point out that *real estate crowdfunding*, depending on the study, can be included within *investment crowdfunding* or be considered independently. In this essay of bibliographical revision, this modality will be considered independently since, as indicated by Alvarez (2017), its fundraising is quite high in Spain, that is to say, it represents 85% of the proceeds within the category of investment crowdfunding.

Therefore, in Figure 3, the five modalities of crowdfunding are shown. Subsequently, the five categories of crowdfunding will be drafted, and will also include the real estate crowdfunding modality independently as described above.

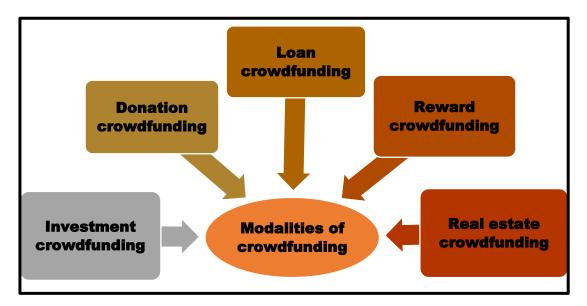


Figure 3 Modalities of crowdfunding

Source: Own preparation

> DONATION CROWDFUNDING

In this model, the investors donate their money without any consideration in return. As González and Ramos (2016) reported: "Used mainly by non-profit organizations, these are the same donations that have always been associated with this type of project, but in this case, with the Internet as a base, and with publicity done mainly on social networks" (2016:8). Furthermore, according to González and Ramos (2016) the main difference with respect to other types of crowdfunding lies in that the donor does not receive anything material in the form of presales, but simply the satisfaction of having supported a project that interested him.

In agreement with Aschenbeck-Florange *et al.* (2013), the *donation crowdfunding* is run by platforms i.e., through platforms that are based in pure donations without money returns, nor rewards. Moreover, in consonance with Quirós-Zufiria (2017), the main motivation for funding is the social performance, as *donation crowdfunding* often promotes social, humanitarian and solidarity projects, as well as initiatives where individuals are not interested in obtaining an economic profit. That is why the organisations keep informed their donors about the evolution of the funded company, as normally they provide funds on a recurring basis, according to Quirós-Zufiria (2017).

> INVESTMENT CROWDFUNDING

Currently, *investment crowdfunding* is growing strongly and will continue to do so in the coming years. This mode of crowdfunding is also known as *equity crowdfunding* and the individuals who buy the shares are called *investors*. González and Ramos (2016) describes *equity crowdfunding* as a way to obtain funding for a start-up⁴, usually an entrepreneur with a valid project and who offers stocks to the people who will support the project in return for their money. Then the promoter sets the value of the shares and the investors acquire shares of the financed company. Therefore, it is not only help to start the project, but also that investors could make money in the future, if the project is viable, in line with González and Ramos (2016).

In addition, *investment crowdfunding* is a way of investing that involves many individuals who are investing online in a business in return for being a shareholder of a company. This model is usually used by SMEs⁵ and microbusiness which are unable to obtain their desired level of credit. This is a mode of investment which works for projects that are in operation, but need to address new markets, new lines of activity or increase capital through the sale of stocks. Platforms of *equity crowdfunding* operate as fixed income products and they mediate stocks in a company, in consonance with BBVA research (2015).

Ahlers, *et al.* (2015) pointed out: "*Equity crowdfunding* is a form of financing in which entrepreneurs make an open call to set a specified amount of equity or bond like shares in a company on the Internet to attract a large group of investors" (2015:1). By extension, Quirós-Zufiria (2017) emphasizes that investors take part in the financed or expanded enterprise and consequently, the monetary remuneration is not immediate, but the company is expected to thrive and succeed. Additionally, *equity crowdfunding* model is in contrast to *donation crowdfunding*. Moreover, Quirós-Zufiria (2017) argues that the amount invested in this model is usually higher than the *reward crowdfunding* model.

Despite of this, Ahlers *et al.* (2015) show that the difference between traditional capital increase and *investment crowdfunding* that is the financing process that entrepreneurs make an open call for funding on a platform and consequently, investors make their decisions in the information available. Thence, *equity crowdfunding* investments in start-ups companies are normally much smaller than business angels (private investors) or venture capital pursuant to Ahlers, *et al.* (2015).

⁴ **Start-up:** It is a young company that has just been started. Startups are often small and initially operated and financed by one individual or a handful of founders.

⁵ SMEs: Small and medium-sized enterprises are non-subsidiary, independent firms which employ maximum 250 employees, as in the European Union.

LOAN CROWDFUNDING

The *loan crowdfunding* also known as *crowdlending* or *lending crowdfunding*, has penetrated heavily in the capital markets. Furthermore, it should be noted that lenders who lend the capital in exchange for receiving the interest rate are called "lenders." Moreover, González and Ramos (2016) explain that *loan crowdfunding* is carried out when a person requests an initial capital, and this person sends the information to a specialized crowdlending platform for its start-up. Consequently, this platform carries out a study on the solvency of the user and assigns levels of risk, indicating the interest rate that will have to pay if the target is reached, in line with González and Ramos (2016). Subsequently, the application is published on the platform and the lenders decide how much they wish to lend to the interest rate previously described by the platform or with another interest rate.

Apart from that, Soriano-Llobera and Roig-Hernando (2015) define the *lending crowdfunding* as the process of channelling funds through the platforms, that is., the public which provide funding to all firms to meet their financial needs. It is therefore relevant due to the impact it has had in Spain and its capacity to be converted to the solution of financing problems between the SMEs and the small savers. In this model, any individual contributes in the financing of a business project and thus, lends a certain amount of money. This modality of crowdfunding usually generates interests, therefore apart from recovering the amount of money that has initially been lend, normally the crowdworker receives a profit, in line with what Aschenbeck-Florange *et al.* (2013) mention.

In consequence, Quirós-Zufiria (2017) finds that the *loan crowdfunding* can be used for both business and social purposes. On the one hand, in business lending *loan crowdfunding*, the investor becomes a lender who recovers his contribution with a profitability. Thus, an interest rate on the money borrowed is received, similar to the mechanism of a traditional loan, hence this technique allows borrowing money from a group of investors rather than requesting it from a bank. On the other hand, the loans for social purposes constitute an activity that generates no interest, thus this form of financing is usually done to support the implementation of development or social assistance projects, in consonance with Quirós-Zufiria (2017). In Figure 4, the process of *crowdlending* model according to the BBVA research (2015) is shown.

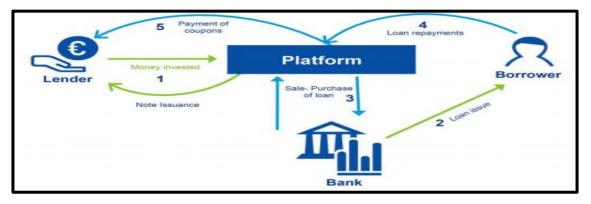


Figure 4 Business model for mediated crowdlending platforms

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Source: BBVA research (2015)
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> REAL ESTATE CROWDFUNDING

This modality of crowdfunding has been going on for about two years in our country. It is extremely important to point out, in line with Alarcos and Martinez-Almeida (2016) that to participate in the real estate crowdfunding it is necessary to have a minimum knowledge of the sector, since the real estate sector has had important swings over the last years. Likewise, Alarcos and Martinez-Almeida (2016) also find that the main idea of real estate crowdfunding is to propose an investment in real estate assets to a number of investors who participate in such investment through a collective investment mechanism.

On the other hand, González and Ramos (2016) explain that different models can be found in different platforms, such as those that act as intermediaries and create a corporation for each operation, as those who are promoters and contribute a large part of the necessary capital in each campaign. However, there is only one platform dedicated to the participative financing of the purchase or promotion of real estate that has the authorization of the *Spanish National Securities Market Commission*⁶ to operate, which is the case of Housers Global Properties, which became part of the registries in June 2017. In the annex of this essay will be a section with all the platforms that have the authorization by the *Spanish National Securities Market Commission*.

> REWARD CROWDFUNDING

The reward crowdfunding is the modality of collective funding best known in Spain. People who contribute to the project and receive something in return are called patrons. González and Ramos (2016) summarizes that the reward crowdfunding focuses on the pre-sale of something, such as the pre-sale of a book, a disk, a ticket, a product or a service. In this modality patrons always receive something in return, even if it is only thanks, although in most cases, they are usually products or services, according to González and Ramos (2016). In addition, since most products or services carry VAT, both promoters and patrons should know everything related to taxes.

It is the crowdfunding in which a reward is offered in exchange for the contributions. As Mollick (2014) showed: "This can include being credited in a movie, having creative input into a product under development, or being given an opportunity to meet the creators of a project" (2014:3). In this model, just as Mollick (2014) emphazises, it allows financiers to pre-sell products by allowing them to access projects financed to an earlier date with a better price or some added benefit. Besides, in line with Gajda (2017), this alternative is to provide financial support to SMEs, to carry out a pre-campaign of marketing of their products and normally serves as a support to creative and cultural projects. In some cases, patrons are allowed to be part of the project depending of the amount of capital contributed. Nowadays, in the case of Spain this kind of crowdfunding is the fourth type of mass funding that more volume raises.

⁶ Spanish National Securities Market Commission: It is also known as (Comisión Nacional del Mercado de Valores). It is the body responsible for the supervision and inspection of Spanish securities markets and the activity of all those involved in them. Furthermore, the aim of the National Securities Market Commission is to ensure the transparency of Spanish securities markets and the protection of investor, as well as the correct formation of prices.

In Table 1, the comparisons of the *reward, lending and investment crowdfunding* relevant for SMEs, Start-ups and Projects are shown.

	Reward	Lending	Equity
Purpose	Non-governmental and non-profit initiatives, SMEs commercial pre- sales of products, and cultural projects.	Small business loans, project finance: increasing working capital, small acquisitions, purchasing equipment.	Small and medium sized enterprises: Expansion, production or marketing.
Offer	Pre-orders, tangible rewards.	Repayment with or without interest.	Ownership stake in the company.
Average Funding	€ 10,000 - 20,000.	€ 0.3 – 1 mill.	€ 0.5 – 2 mill.
Funders	Anyone, Mostly individuals.	Individuals, institutional investors.	Mostly individuals, high net worth investors and increasingly professional investors.
Average Duration	Campaign: around 30 days; timeframe for delivery of reward: up to 1 year.	Campaign: depending on the platform; Loans: will run for months to years.	Campaign: usually up to 30 days, Investment: until sale of business.
Fees	+/- 3-5% plus payment fees via third party operators.	+/- 3-5% (plus interest).	+/- 5% listing fees, +/- 3-5% Transaction fees, due diligence fees.
Success Rate	+/- 50% for raising funds.	+/- 50%	+/- 40%
Financial Consequence	Booked as revenue in Profit and Loss Account.	Debt on balance sheet.	Asset on balance sheet.

 Table 1 Comparisons by modality of crowdfunding relevant for SMEs, Start-ups and Projects

Source: Gajda (2017)

3. EVOLUTION OF CROWDFUNDING IN SPAIN

In recent years crowdfunding has experimented a great development all over the world due to the appearance of several fundamental factors, though the main cause of them has been the economic recession, as well as the advance in technology. Besides, the inability of the financial sector in meeting the demand of funding in small firms was a significant cause which affected a large number of entrepreneurs. Subsequently, this event has been possible as a result of the reduction of credit, pursuant to Quirós-Zufiria (2017).

The evolution of these new technologies have increased sharply recently, hence it has been possible to incorporate the use of crowdfunding into our society. For instance, as Bruton *et al.* (2015) pointed out: "New financing alternatives, such as microfinance, crowdfunding, and peer-to-peer lending⁷, have expanded rapidly" (2015:9). Therefore, internet networks have an important role in contracting these innovative operations. This innovation may have arisen in Australia, United Kingdom, Netherlands and United States, but it rapidly diffused across the globe. *Equity and debt crowdfunding* began to expand over the globe after the financial crisis. Furthermore, crowdfunding models started to circulate through royalties, gifts and rewards, as suggested by Bruton *et al.* (2015).

Consequently, Quirós-Zufiria (2017) finds that donation and patronage have been throughout history one of the main ways to finance all kinds of projects, wars and expeditions. Hence, one of the most emblematic examples of crowdfunding was when France delivered to the US (United States) the Statue of Liberty as a reward at the end of the 19th century. Though some examples of collective project funding can be found throughout history, crowdfunding as an economic phenomenon is very recent, but it cannot be said that crowdfunding is a new form of financing.

Due to the recent financial crisis, new platforms began to appear that were dedicated to developing ideas and all kinds of projects. For instance, Crowdcube is a leader platform in Europe of crowdequity in which anyone can invest in companies and access to all the details of those companies. Moreover, there are already many projects that have been funded by this new concept of crowdfunding and they continue to increase. The progress and the success in this alternative of funding, has made it necessary to implement in some countries their own legislation to cover this kind of web platforms. In the case of Spain, the regulation to invest in crowdfunding across the platforms was approved in April of 2015, when the Act for the Promotion of Business Financing was created. Furthermore, these platforms are under control by the Spanish National Securities Market Commission.

According to Aschenbeck-Florange et al. (2013), The European Crowdfunding Market reached around \in 1 billion in value in 2012, that is more than doubled in value between 2011 and 2012. In addition, as Aschenbeck-Florange *et al.* (2013) found: "This market comprises a variety of different funding forms, such as donations, rewards and pre-sales, consumer lending as well as debt and equity finance for small and medium size enterprises" (2013:5). As a result, through this kind of funds, entrepreneurs contribute to economic growth, in addition to creating innovative products, services and new jobs.

⁷ **Peer-to-peer lending:** Modality of crowdfunding which belongs to the loan or crowdlending category.

The first platforms of crowdfunding in Spain were created in 2010 and they were Verkami⁸ and Lánzanos⁹. Today there are more than 50 crowdfunding platforms registered in Spain, for instance, some pioneer Spanish platforms are: a) Housers¹⁰ through which investors can participate in the purchase of a property or b) Finanzarel¹¹ in which the start-up sells its invoices and promissory notes to investors. As previously mentioned, there are specialized *equity crowdfunding* platforms that are booming e.g. Crowdcube which has invested in approximately \in 240 million in different projects.

In Figure 5 below the evolution of the interest of the term crowdfunding around the globe in the Google Search engine can be seen. It can be shown that it began to rise steadily from the beginning of 2010 and reached the peak approximately in 2016. Likewise, in Figure 6 the five countries with the greatest interest in the Google Search of the term crowdfunding can be shown.

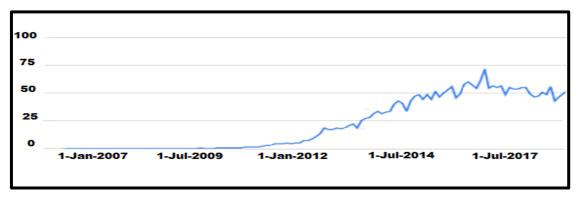


Figure 5 Search trend in Google Search of the term crowdfunding

Source: Google Trends (2017)

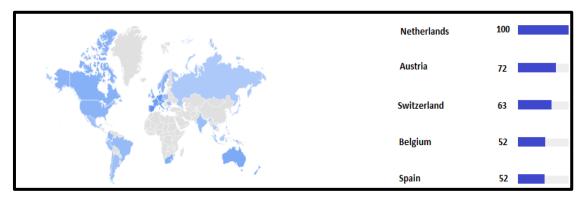


Figure 6 Geographic interest of the term crowdfunding in Google Search trends

Source: Google Trends (2017)

⁸ Verkami: Verkami is a crowdfunding platform based on traditional financing models for artists, creators, designers and collectives.

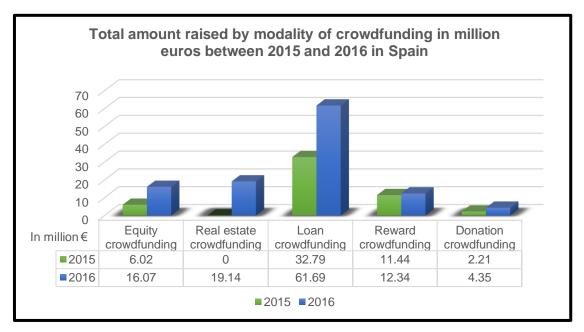
⁹ Lánzanos: Lánzanos has been the first platform of crowdfunding constituted in Spain. Lánzanos team offers training services and workshops on crowdfunding.

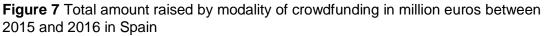
¹⁰ Housers: It is the first platform of real estate investment in Spain. Its main objective is to allow all small savers to invest in real estate projects and thus to obtain a good profitability.

¹¹ **Finanzarel:** Finanzarel is a Spanish company that allows to make the advance of invoices thanks to its network of professional investors.

The evolution of crowdfunfing in Spain is still developing, although it is difficult to take off compared to the United Kingdom and United States, according to Garcia (2017). Moreover, García (2017) pointed out that the three factors that most negatively affect the growth of the sector are the recent changes in regulation, the bankruptcy of platforms and fraud in the campaigns or in the loans themselves. However, it should be noted that in the last two years the fundraising in Spain has gone from \in 52.5 million to \in 113.6 million in 2016, pursuant to Alvarez (2017). Therefore, this growth means that Spain has experienced a significant increase that places it among the countries with the highest growth globally.

In Figure 7 below, the total amount raised by modality of crowdfunding between 2015 and 2016 in Spain is shown. Moreover, as can be shown the loan crowdfunding mode has the largest volume of capital administered in the two years studied. It can also be observed that in 2015, reward crowdfunding platforms raised \in 11.44 million, while equity crowdfunding \in 6.02 million. The opposite occurred in 2016 that in addition to appearing the new modality of real estate crowdfunding, equity crowdfunding exceeds the reward crowdfunding at approximately \in 3.73 million. Finally, as can be seen the segment that moves less volume in millions of euros is *donation crowdfunding*.





Source: Own preparation based on González and Ramos (2016)

For the first time, the fundraising obtained by crowdfunding platforms in Spain has surpassed ≤ 100 million in 2016, through the different modalities that operate in our country as stated by González and Ramos (2016). Additionally, over a longer period of time, this growth is even more significant, since only four years earlier, that is in 2013, total revenues amounted to $\leq 17,100,000$. Therefore, it represents a year-on-year growth of 564.3% between 2013 and 2016 according to González and Ramos (2016).

In Table 2, the growth in percentages of each modality of crowdfunding in Spain in the last two years is shown. As can be seen, in the last two years the fundraising has increased from 52,566,108 € in 2015 to 113,592,388 € in 2016, which represents a growth of 116.09%, a significant increase that places Spain among the countries with the highest increase. Likewise, González and Ramos (2016) state that in 2017, growth expectations in Spain will exceed € 200 million, according to the growth patterns observed in the last five years.

Table 2 Total amount raised by modality of crowdfunding between 2015 and 2016 in
Spain

MODALITY OF CROWDFUNDING	2015	2016	CHANGE	
Equity crowdfunding	6,018,964 €	16,078,958 €	167.14%	
Real estate crowdfunding	-	19,135,951 €	-	
Crowdlending	32,792,040 €	61,689,491 €	88.12%	
Reward crowdfunding	11,441,006 €	12,339,750 €	7.86%	
Donation crowdfunding	2,314,098€	4,348,238 €	87.90%	
TOTAL	52,566,108 €	113,592,388 €	116.09%	
Source: González and Ramos (2016)				

Source: González and Ramos (2016)

Therefore, González and Ramos (2016) define crowdfunding as a tool with a significant impact on job creation, and should therefore increasingly be seen as a central element in the design and implementation of active employment policies. Additionally, most of the work is in sectors where traditional financing is difficult to obtain, as in some social and cultural sectors. Likewise, it can be concluded that crowdfunding has created between 5,679 and 12,620 direct jobs in Spain, according to González and Ramos (2016).

In addition, crowdfunding continues to make its way in the real estate sector in Spain with the modality of real estate crowdfunding. As explained by De Ciria (2016), through this aspect of property development through an internet platform investors are brought together who are interested in financing real estate projects and receive a return on their investment by renting them, or by their subsequent sale or both. The main crowdfunding platform is Housers, a leader in revenues in 2016 and which has begun to expand to other countries.

Likewise, Housers, today has more than 45,000 users and has financed projects for more than € 21 million, according to De Ciria (2017). Housers will enter into the business of alternative financing¹² for property developers and will launch a campaign to raise € 800,000 to finance part of a residential project, in line with De Ciria, (2017). However, Housers has already planned new projects of this type and estimate that in a very short time they will account for between 25% and 30% of all their operations, in accordance with De Ciria (2017).

¹² Alternative financing: It refers to financial channels and instruments that have emerged outside of capital markets and the traditional banking system. For instance, it is composed of ventures capital, business angels, crowdfunding and so on.

4. LEGAL FRAMEWORK OF COLLECTIVE FUNDING IN SPAIN

Crowdfunding has grown without specific regulation, although Aschenbeck-Florange *et al.* (2013) argues that *peer-to-peer, equity* and loan *crowdfunding* models, relied upon other acts to make funding possible. On the contrary, the *rewards* and *donations* models lacked specific regulation to make collective financing possible. Hence, Spanish crowdfunding platforms operated outside the scope of supervision by the Bank of Spain or the Spanish National Securities Market Commission (CNMV: Comisión Nacional del Mercado de Valores, in Spanish).

Moreover, the platforms of *loan crowdfunding* were governed by the Act 2/2009 regulating consumer contracting loans or mortgage and brokerage services for the conclusion of contracts of loan or credit. As a result, platforms using this model were not required to have a specific license from a financial institution, so they acted as corporations, but their activity was regulated by the Act 2/2009 and the Corporations Act, in concordance with *Aschenbeck-Florange et al.* (2013).

Otherwise, the Equity Model was not feasible until today in Spain as in other countries that did have available a specific regulation. Therefore, according to Aschenbeck-Florange, *et al.* (2013) the *equity crowdfunding* that was used in Spain operated by means of "Customer Loyalty Accounts", that is they were regulated by the Spanish Code of Commerce, articles 239 to 243. It was just a simple technique for establishing a collective funding.

According to Quirós-Zufiria (2017), before the Act of the Promotion of Business Financing was approved, crowdfunding lacked a legal framework thus, it was necessary to enable the development of providing legal regulation of such activity. It was when in 2015 the act that regulated the law for collective funding was approved. It should be noted that the actual regulation of crowdfunding has only been in operation for two years, after the Act 5/2015, of April 27th was approved, and this act includes measures to make bank financing more accessible and flexible to small and medium enterprises, Quirós-Zufiria (2017). Figure 9 shows the main Acts, according to *Quirós-Zufiria* (2017):

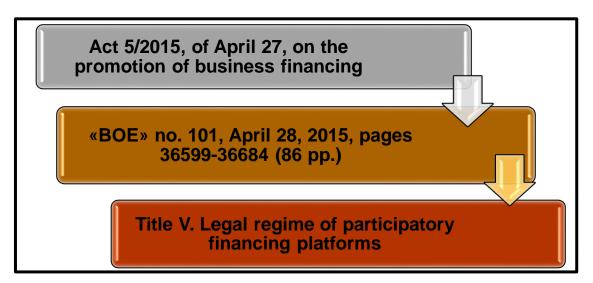


Figure 8 Legal framework of crowdfunding

Source: Quirós-Zufiria (2017)

In addition, Table 3 shows the main characteristics regulated by the Act 5/2015:

	Characteristics			
Platforms that regulate the law.	 <i>Equity crowdfunding</i> supervised by the CNMV. <i>Lending crowdfunding</i> supervised by the Bank of Spain. 			
Financial requirements of the platforms.	 Minimum social capital of € 60.000: > If financing exceeds € 2.000.000, the amount of capital will be € 120.000. > If it exceeds € 5.000.000, capital limit up to € 2.000.000. A civil liability insurance covering: > Minimum of € 300.000 per damage claim. > Total € 400.000 per year for possible claims. 			
Limits to invest.	 Accredited investors have no limits to invest. Non-accredited investors: Maximum of € 3.000 per project and € 10.000 per year. 			
To be considered as an accredited investor.	 Being a professional customer. To be considered an accredited investor beforehand. One of these requirements: Total assets equal or greater that € 1.000.000. Turnover of € 2.000.000 or more. Own resources equal or greater than € 300.000. One of these requirements: Annual income over € 50.000. Financial assets more than € 100.000. 			
Obligation of the platforms.	 Offer information to the customers about the operation. Advise of possible risks. Help in decision making to investors. Enabling channels of communications. 			

Table 3 Characteristics regulated by the Act 5/2015, of April 27, on the
promotion of business financing

Source: Own preparation based on the Act 5/2015, of April 27, on the Promotion of Business Financing

5. STRENGTHS AND WEAKNESSES OF COLLECTIVE FUNDING.

The following section shows the main strengths and weaknesses of crowdfunding, which despite having a wide range of advantages, it also has some disadvantages which will be mentioned. As pointed out by García-Reyes (2015), the **main strengths**, in the first place is that it is not necessary for a single person to contribute all the capital, since thanks to the collective financing it will be formed from small contributions from different investors. In addition, the *Spanish National Securities Market Commission* and the *Bank of Spain*¹³, supervise some platforms, which gives more security to the investment. Likewise, the contributions do not have to be raised, being possible of amounts between $\in 5, \in 20$ or $\in 50$. Finally, sometimes it is not necessary to return the capital received, such is the case of *donation crowdfunding*.

However, the *main weaknesses* according to García-Reyes (2015) are the following: Firstly there are few individuals interested in becoming investors, since most of the projects are in very early stages and therefore, this gives them insecurity. In addition, the project is publicly exposed through the platform before being launched, so it can be dangerous since other companies with the necessary resources, are copying and launching the same products and services ahead of time. There may also be cases of fraud, so that the project and the evidence they offer should be carefully analyzed. Finally, if the quantity demanded is not reached in a set period of time, the money is usually returned to the investors.

Similarly, as Infoautónomos Website (2017) shows, although crowdfunding has become in recent years an interesting financing formula for some companies and projects, which as a result of the financial crisis it has become a financing alternative, it is necessary to evaluate the strengths and weaknesses of financing the project through this technique. In Table 4, the main strengths and weaknesses of collective funding are shown:

STRENGTHS	WEAKNESSES
Total control over the project by the borrower.	It forces the maintenance and planning of a marketing and promotion campaign, pre-sales of products and services before it will be launched.
During the promotion process customers can be achieved as potential customers.	Each investor have different expectations about the project due to the diversity of microinvestors.
It allows obtaining the first buyers and customers who are the investors. In addition, these can become faithful to the project since they are interested to the prosperity of the project.	The fact that these are very early projects on hands of inexperienced entrepreneurs is a brake on many microinvestors who may prefer invest in any other more secure financial product.

Table 4 Strengths and weaknesses of collective funding

Source: Own preparation based on Infoautonomos data website

¹³ **Bank of Spain:** Bank of Spain is also known as "Banco de España" and it is the national central bank and, the supervisor of the Spanish banking system along with the European Central Bank. In addition, its activity is regulated by the Law of Autonomy of the Bank of Spain.

Moreover, first of all, other than those mentioned above, other strengths of crowdfunding may be the following:

- The main strength is that it can be possible financing the project collectively, as economic support can be found that would otherwise not be possible. Thus, individuals are encouraged to create crowdfunding campaigns, as it represents a significant financial advantage over the traditional source, where banks barely grant loans and institutional financial aids are increasingly limited.
- It offers the possibility to know the viability of the project and of the target public by crowdfunding type and the amount of support received.
- It strengthens the relationship between creators and investors, crossing the border of the purely professional and reaching the people due to the fact that the investors feel linked to the project from its evolution.

On the other hand, some weaknesses points of crowdfunding are mentioned in the following points:

- The key to the project depends on the success of the crowdfunding campaign, thus it can adversely affect the brand image if the proposed economic goals are not achieved.
- It should provide an image of transparency and security that generates in investors the necessary guarantee that the project will be carried forward.
- The project communication with investors must be maintained after the end of the campaign, as they have contributed to the project's finalisation.
- It can negatively affect to the brand image, in case of not achieving the proposed economic objectives.

6. OTHER BANKING FINANCING ALTERNATIVES IN SPAIN

Nowadays, an entrepreneur who wants to carry out a business activity, can not only resort to crowdfunding, but can go to other alternative financing sources encompassed in the Fintech world. Sánchez-López (2017) finds that Fintech emerged in Spain recently, of which 74% of start-ups were created between 2011 and 2014. In addition, 50% of companies have a direct approach to the B2C (Business to Consumer), while 37% of companies are engaged in business-to-business (B2B), according to Sánchez-López (2017).

On the other hand, Jiménez (2016) comments that most FinTech companies emerge as start-ups and often receive funding from so-called business angels, however, the objective of each company is different. In addition, venture capitalists, private equity firms and corporates have invested more than \$ 50 billion in nearly 2,500 Fintech companies since 2010, in consonance with Accenture report (2016).

At the same time, ABC (2017) states that the Fintech sector will continue to evolve during 2017 due to the technological development. In the Table 5, the different activities in which Fintech Spanish companies are present in 2017 are shown:

SPANISH FINTECH ACTIVITIES			
Financing	Payments		Loans
Investment tools	Financial a	ggregators	Financial technology
Cryptones		Foreign exchange	
Source: Own preparation base on Mooverang (2017			

Table 5 Spanish Fintech Activities

It should be noted, according to Mooverang (2017), that the Fintech sector in Spain grows with 181 companies, and furthermore, it concludes that the companies specialized in financing and payments are the ones that concentrate the most activity with 22% and 20%, respectively, followed by loans and investment tools, which reach 15% and 13%, respectively. Also, according to Mooverang (2017) regarding the seniority of Fintech companies in Spain, 77% are under 50 years of age, and that by location Madrid remains the capital of Spanish Fintech, followed by Barcelona and Valencia. In the annex of this work, it is possible to observe the infographics of the companies that form the Fintech in Spain divided by their respective activities. Further on some financing techniques that encompass alternative finance, such as business angels and ventures capital will be defined:

> BUSINESS ANGELS

A first definition about business angels as defined by Kraemer-Eis and Schillo (2011): "Individuals, acting alone or in a formal or informal syndicate, who invests their own money directly in an unquoted business in which there is no family connection, and who, after making the investment, takes an active involvement in the business, for example as an advisor or a member of the board of directors" (2011:5). As García-Reyes (2015) stated, business angels are individuals with high experience and high purchasing power who invest their money in a business initiative, usually in start-up or launch phases, and also provide intelligent capital, that their own experience, knowledge and their own network of contacts.

On the other hand, according to Hoyos and Saiz (2014) business angels have a high financial capacity allowing them to carry out investments between \in 50,000 and \in 300,000. In addition, they invest their own private money, that is, they contribute their own money individually. However, Hoyos and Saiz (2014) state that business angels usually invest either in startup business projects or in business projects in the process of expansion. According to Avdeitchikova and Landström (2016) four types of contributions can be distinguished, both for the economy as well as for companies:

- 1) Business Angels increase the supply¹⁴ of capital, that is, they contribute directly to the increase of business flow. In addition, business angels play a key role in the early stages of business development.
- They increase the quality of companies due to the fact that business angels can add value in a faster and more flexible way than other investors such as venture capitalists and banks.
- 3) They contribute to the strengthening of the business ecosystem. Therefore, an ecosystem with a high angel investing level can be perceived as more attractive for new companies, allowing an increase in the rates of growth and setting up of companies.

In Spain there is the Spanish Business Angels Association (AEBAN), whose purpose is to promote business angels activities and business angel networks in Spain. Currently AEBAN brings together a total of 38 business angels' networks with head office in 11 Autonomous Communities. In short, we can say that this association serves to bring into contact all those networks formed by angelic investors that exist in Spain and bring them into contact also at an international level. In addition, as set out in the Webcapitalriesgo (2017) report, seven business angels' network companies were created this year: ESADE BAN, IESE BAN, Keiretsu Forum, StartupXplore, Reus Tarragona BA, Business Angels Network Catalunya and Big Bang Angels.

> VENTURES CAPITAL

As Fierro-Carballo (2015) points out, venture capital in Spain encompasses two very different segments: *venture capital* itself and private equity. The first one covers investments made in the early stages of development, focusing on sectors with high risk, high future profitability and high growth potential, while *private equity* is based on more advanced stages and more traditional sectors with lower risk and lower profitability, according to Fierro-Carballo (2015). Therefore, resorting to this type of financing is a difficult option, but may be appropriate for companies with high growth potential. In Spain there is The Crowd Angel platform, which is the first platform that allows online investing in technology-based startups with the rigor and solidity of a Venture Capital.

Furthermore, as pointed out by Rodríguez (2016), venture capital companies participate in the revenues of start-ups controlling around 30% of the firm, in addition to obtaining voting rights in the company or obtaining managerial positions in the board of directors. In addition, according to Rodríguez (2016), the capitalist retires when he has obtained the main benefits, since the main objective is to help companies increase their value, thrive and prosper. In Table 6, you can see the most important venture capital entities in Spain:

¹⁴ **Supply of capital:** Amount of money set aside for investment purposes. Therefore, crowdfunding, venture capital and business angels, are an excellent cases since capital is being supplied.

Table 6 Most important venture capital entities in Spain

SECTOR	CITY
E-Commerce Sector	Barcelona
Digital Sector	Madrid
IT services sector	Madrid
Service sector	Madrid
Technological sector	Barcelona
Digital Sector	Madrid
Technological sector	Barcelona
Technological and internet sector	Madrid
Technological and internet sector	Madrid
	E-Commerce Sector Digital Sector IT services sector Service sector Technological sector Digital Sector Technological sector Technological and internet sector

Source: Rodríguez (2016)

On the other hand, venture capital is involved in the economy through the so-called Venture Capital Entities in Spain, although it also includes the Family Offices, according to Fierro-Carballo (2015). In addition, venture capital offer more substantial investments than business angels, although their conditions become more demanding, since in order to qualify for them it is necessary to have corporate maturity as well as future projection, according to Financiapyme. Millán-Alonso (2017) explain that the venture capital sector has resources between €3,500 and 4,000 million, available to be invested in Spanish companies during 2017. Likewise, according to González (2017), venture capital exceeded the sum of € 402.8 million in 469 investments at international and national level, where it accounted for 56% and 44% respectively in 2016.

Moreover, there are different types of venture capital investment as explained by Rodríguez (2016), which are divided into six categories:

- 1) Seed Capital. These are investments related to companies that have not yet closed an operation. Therefore, they are recently born companies and the capital contributed is usually used for expenses, such as market research, product development or other type of tests.
- 2) Start-up Capital. These investments are aimed at companies that have not yet started their production and distribution of products or services. In addition, these investments usually have a long development period and have the need to inject capital to finance the growth of the same.
- **3)** Expansion Capital. Usually used in companies that already have had a minimum business run. In addition, such capital reduces the uncertainty and risk of its operations because the company has already had a backround and business run.
- 4) Leverage management buy-out and management buy-in. The acquisition of a company is carried out, so a significant amount of money is used, which pays for acquisition costs. Often, the assets of the company are used as collateral for the loans.

- **5) Restructuring Capital.** The company requires funding to make a change in the orientation of its activities, as it obtained poor results during a prolonged period of time. In addition, it also requires a change in management teams.
- 6) **Replacement Capital or Secondary buy-out.** The investment company does not make any type of contribution since it forms part of the acquired company. This investment is aimed at relieving shareholders who are not interested in continuing the investment.

7. CROWDFUNDING AND TRADITIONAL BANKING

The use of crowdfunding is being considered by financial institutions¹⁵ as a preparation for potential threats to the traditional banking sector. It must be taken into account that finance are like a financial engineering, which will always be in development providing new financing alternatives, new financial products adapted to the customers' needs. Financial markets are in a new process of transformation in the way of contracting new financial products and services through Internet that remodel the consumer's attitudes, as reported by Setälä (2017).

The development of finance and technology has recently created the term "Fintech", that is, through which innovative financial solutions are offered and agglutinates all the financial services companies that use the latest technology available to be able to offer innovative financial products and services, both to customers and business, as well as new, faster and more efficient ways of managing their finances in a digital environment without the rigid regulation on traditional financial institutions.

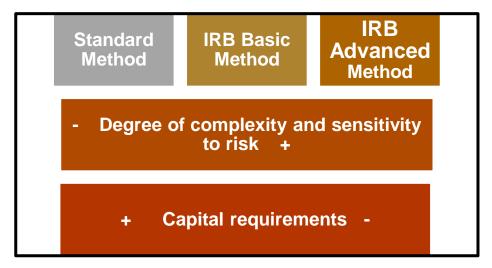
As the EY's Global Organization Report (2016) shows, 6 out of 10 customers expressed less dependence on their bank as their main financial services provider, thus the report emphasizes that banks need to simplify their products, increase innovation in line and improve their customer experience. According to Rodrigo García de la Cruz, vice-president of the Spanish Association of Finances and Insurance (AEFI), recommends that current bank employees are formed to alleviate this digital wave.

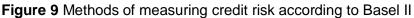
Furthermore, taking into account this new situation, financial institutions must strive to maintain their profitability by incorporating new products, services, repositioning themselves in the market and modifying the different channels through which they offer their services. As Setälä (2017) pointed out: "Banks are slowly beginning to realize that in addition to the business potential of crowdfunding, the up-and-coming industry might pose a serious threat to the conventional financial services business", (2017:7).

Despite this, owing to the financial crisis, the regulatory environment of financial institutions has increasingly become tight. Thus, Basel II tries to improve the security and solvency of the financial markets, offering incentives for entities to improve their management and control capacity, through a more reasonable capital adequacy that Basel II describes in its regulatory, as reported by Gomez and Partal (2010).

¹⁵ **Financial Institutions:** It is an institution that provides financial services for its customers or members. Most of financial institutions are regulated by the government and they are divided into three groups: Depository, contractual, and investment institutions.

Consequently, Figure 11 shows the methods of measuring credit risk in Basel II to determine capital requirements for credit risk:





Source: Gomez and Partal (2010)

In addition, banks can take advantage of crowdfunding to supply new channels, while at the same time to adapt better to the digital environment and provide funding to riskier companies that are not chosen to be financed. Consequently, crowdfunding can supply banks adequate funding and various solutions to evolve their current processes towards the digital age, through internet. The clear example is BBVA applying its *donation crowdfunding* platforms and its own techniques to approach the customer through technological applications. It could be interesting to explore the future of crowdfunding and the evolution of banks in the way of competing with crowdfunding.

It is widely believed that the role of the traditional bank has been affected due to the increase of the new financing alternatives. Confirming to BBVA Innovation Centre (2015), new collaborative alternatives have emerged due to the financial crisis experienced in recent years and a strong restructuring of the financial markets, with reference to crowdfunding has appeared complementing the traditional banking and not excluding it. As a result of these new collaborative alternatives an entrepreneur can raise external funding from a large audience without the necessity to borrow from a bank in concordance with Belleflamme et al. (2014). Hence, crowdfunding is not the only source of financing, since new sources of financing have emerged, such as microfinance, ventures capital and business angels¹⁶.

During the financial crisis, the banks has denied the loans' application to most Small and Medium-Sized Enterprises. Thus, SMEs have been the most affected due to the fact that they have fewer financial mechanisms than large companies. The largest banks have not wanted to miss this opportunity that is they are expanding and specializing in private banking. Similarly, in the following sections are analysed the issues in which the crowdfunding and traditional banking can complement each other in their development, in agreement with the BBVA Innovation Centre (2015) and Quirós-Zufiria (2017):

¹⁶ **Micro finance, venture capital and business angels**: All together constitute alternative financing sources within the so-called Fintech world.

> THE CUSTOMER

The main advantages of crowdfunding platforms are the speed and agility in offering customer service without the need to be physically in the bank's office pursuant to BBVA Innovation Centre, 2015. For instance, one of the innovations to having more proximity to the customer is through the programme "BBVA Contigo". This new innovation provides customer support via internet by a specialized manager, which allows making all kinds of queries through the mobile app, through e-mail or telephone.

> INNOVATION AND COLLECTION OF DEPOSITS

In agreement with Quirós-Zufiria (2017), and BBVA Innovation Centre (2015), it should be noted that credit institutions are better specialized than any crowdfunding platform due to their many years of experience in making loans and calculating rating¹⁷ or scoring¹⁸ systems. It is possible for banks to have a strong advantage. Additionally, one of the most important advantages of these platforms is the speed in offering customer services. However, crowdfunding is bringing new ideas that are driving innovation in the financial sector. Quirós-Zufiria (2017) reported that traditional banking is being transformed into a more digital banking approaching its customers through online banking and mobile banking, as well as strategies on customers' experience.

The traditional system and crowdfunding could be complemented. On the one hand, crowdfunding platforms are neither a depository, nor backed by deposit guarantee funds. On the other hand, such platforms do not capture deposits; hence investors do not acquire a deposit as a financial liability, in line with BBVA Innovation Centre (2015).

> CREATION OF NEW PRODUCTS

Modern banking is specializing in new products catering to the demand of companies as they have seen a great potential for growth and development. BBVA bank for instance, is already using a crowdfunding platform called "Suma", a digital platform of donations and solidarity causes. It is a digital platform for solidarity purposes and that the amount of money can be donated, both to NGOs (Non-governmental Organizations) and to local projects for community development according to BBVA website (2012) which can be accessed through the bibliography. Currently, the traditional banking is issuing new products for the retail investor, which is captured by the Peer to Peer platforms, in consonance with BBVA Innovation Centre (2015). Additionally they are financial products similar to those of variable and fixed income through shares of much lower amounts than the ones stated in Quirós-Zufiria (2017).

¹⁷ **Rating system:** Unlike scoring systems, these tools only classify customers in (SMEs, companies, corporations, public administrations, and so on). Thus, it allows customers to be classified into homogeneous risk classes.

¹⁸ **Scoring system:** Scoring system allows to decide to whom to grant a credit, how much to grant, and strategies that can contribute to obtain a greater benefit of the operation.

> NEW SCORING TOOLS

The rise of crowdfunding has brought new scoring and rating techniques that are being used and thus, replacing the traditional methods, according to BBVA Innovation Center (2015). Moreover, Quirós-Zufiria (2017) finds that the main objective of these tools is to obtain information from the customer, such as evaluating the number of visits on the project's website or the platform, the number of likes received or other positive references. As it is mentioned in the BBVA Innovative Centre's website, some platforms extract additional information from the entrepreneur or start-up who is seeking funding to complete the usual risk profile, such as the traditional risk measurement systems, through their digital reputation. There are two kinds of traditional credit rating systems that is scoring and rating systems. Gomez and Partal (2010) showed that the scoring is a system for automatically evaluating the requests for credit operations that allow deciding to whom to grant a credit, how much to grant and strategies to obtaining a greater benefit. Furthermore, Gomez and Partal (2010) defined a rating system as a system that allows classifying or putting in order customers referring to the probability of default.

Additionally, Figure 10 below shows the risk of default by credit categories in a traditional rating system:

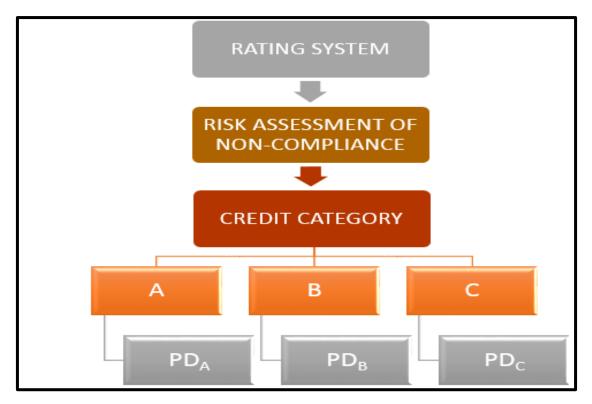


Figure 10 Risk of default by credit categories in a rating system

Source: Gomez and Partal (2010)

8. HAWKERS SUCCESS STORIES AND FOXIZE SCHOOL IN SPAIN

Hawkers is a Valencian company based in Elche, which sells sunglasses, using the internet as the main distribution channel. The company was founded in 2013 by Iñaki Soriano, Pablo Sánchez and the brothers Alejandro and David Moreno. Previously, in 2012, the founders of Hawkers created Saldum, a second-hand trading website similar to the current company known as Wallapop. However, due to the low number of sales this forced them to look for alternative sources of financing to invest in advertising and thus, grow their user base.

The company began selling US branded glasses (Knockaround) with an initial investment of \in 300, and after success began to successfully sell the brand (Miss Hamptons) and after both experiences they decided to create their own brand of sunglasses relying on outsourcing. In 2014, the company invoiced more than \in 15 million. Moreover, fiscal year 2015 closed with an income of \in 40 million, and last year, 2016 they announced that the year would close with \in 70 million.

In the summer of 2015 the Alicante company was financed by a crowdfunding campaign using the Kickstarter platform, as Guerrero (2015) points out. The main objective was to try to break through in the US market, putting on sale glasses worth \in 1 to gain visibility. Fortunately, the idea was a success as Hawkers got close to \in 190,000, with an initial target of \in 100,000 that was exceeded in just over three days.

Then Saldum Ventures parent company of the Hawkers sunglasses loom opened its door to external capital injections, so it was funded by Tuenti and O'Hara Financial, as Illescas (2016) points out. According to Webcapitalriesgo (2017), the financing of start-ups through venture capital grew by 198% up to \in 119 million in 2016 that is for the first time it exceeded the \in 100 million barrier. Consequently, this extraordinary growth was thanks to Hawkers, due to the new round of \in 50 million led by O'Hara Financial.

On the other hand, Torrego (2015) explains another case of success through crowdfunding, which is the case of Foxize School, the first business school that is funded through equity crowdfunding and allows entry to students and professors as shareholders. This school is currently present in Barcelona, Madrid, Palma de Mallorca, Tarragona and Valencia. In addition, it has a database of more than 250 professors and more than 15,000 students have passed, according to Torrego (2015). In Foxize, classes are held face-to-face and online courses are also offered covering a wide range of subjects related to finance, marketing technology and communication.

Likewise, Crowdcube's equity crowdfunding platform has funded Foxize School, closing a financing round of \in 205,850. Crowdcube, is a Spanish equity crowdfunding platform, one of the largest investor networks in the world. The Crowdcube firm was founded by Darren Westlake in 2011, in addition Crowdcube allows people to invest in companies with growth potential when and where they want. It should be noted that this company has the financial backing of the Spanish National Securities Market Commission, as can be seen in the Annex. On the other hand, Crowdcube helps companies to take control of their financing rounds, allowing family, friends, clients and professional investors to invest through its unique single channel. In addition, the firm has a subsidiary in Spain in the city of Barcelona. Finally, the Crowdcube platform interviewed Albert Garcia, CEO and co-founder of the Foxize School digital business school. From the interview it can be concluded that thanks to the use of crowdfunding, the firm Foxize School could be allowed to take on new challenges and accelerate growth, in addition to launching new products. In short, the financing was a success as the company was able to increase its sales at a positive pace since the launching of new products.

9. FUTURE CROWDFUNDING CHALLENGES

As detailed above, crowdfunding has experienced a great development worldwide due to the global economic recession and difficult access to credit, because of the development of new financing alternatives, thanks to the evolution of digital technology (Fintech). In addition, the regulation to invest in crowdfunding through the platforms has been recently approved in Spain. Hence any investor or entrepreneur with business ideas can provide the appropriate funding or profitability through internet. Moreover, as it has been described, the most widespread model in Spain is crowdsourcing, where investors take the place of traditional banking. To sum things up, banks have not wanted to lose this opportunity. Thus they prepare for the potential threats, for that reason they are beginning to use digital technology and traditional banking for companies and investors, using innovation, creating new products and using new investment rating tools.

In addition, González and Ramos (2016) argue that 2017 is expected to be a great year for crowdfunding surpassing € 200 million based on the growth patterns observed in the last five years. Despite good future trends, Spain has a long way to go to grow and consolidate itself in crowdfunding until reaching the US and UK, as they continue to be leaders in collective financing, as González and Ramos (2016) point out. Unfortunately, there is still no European legislation to legally control crowdfunding as the European Commission has decided not to legislate the crowdfunding of loans and investments at a European level.

On a global level, crowdfunding's growth around the world continues at a very good pace. In fact, González and Ramos (2016) point out that crowdfunding is becoming more global, and in the coming years will be globalized, which means that we can invest in projects of interest in other countries. However, as mentioned in the previous paragraph, there is still no legislation at a European level, although each country has its own legislation to implement this innovative financing alternative.

10. DISCUSSION AND CONCLUSION

The excitement of the mass media that have raised the use of crowdfunding and other alternatives of funding in the last five years is responsible for many projects that have been able to get ahead, though unfortunately also the opposite has happened. It is advisable, at least, to have a minimum knowledge of the crowdfunding concepts to be able to use this financing technique. Additionally, launching a crowdfunding campaign may seem simple; however, behind its success there are different factors to keep in mind that are summarized in the strategy and work.

Despite this, carrying out this technique could be too risky, for both the promoter, as for the investor who took a risk on the project. Some of the Spanish platforms of crowdfunding are Verkami, Lanzanos or Ulule. In their campaigns ideas, cultural projects that help to know books, films or social projects can be found. As an extra factor, the success of crowdfunding will come determined, performing an acceptable pre-campaign, a clear and well communicated project that arose interest in different sectors, and definitely has to be managed under a team that brings confidence.

Although crowdfunding allows start-ups to finance themselves through platforms, in a way without the custody of a traditional financial intermediary, consequently, to carry out this funding will depend on whether it is executed by the developer or the investor. Hence, investing in this financial product depends on investor's risk aversion, since it is not the same to invest in a strong firm that everyone may know historical data than to invest in a project whose success is not certainly known. Besides, on the promoter's side, before using this crowdfunding technique, you should be well advised if you do not have background knowledge in finance.

Nowadays, any entrepreneur, company, or private investor can be financed in three different ways. Firstly, if it is a company that needs to be financed it can carry out a capital increase. That way, the new shareholders become part of the share capital of the company or the existing shareholders increase their capital by buying shares. Secondly, request bank financing or funded through the financial markets, for instance, investing in fixed income, variable income or derivatives. Thirdly, they can issue public or private debt to raise capital, such as bonds or hybrid financial instruments. In the same sense, crowdfunding is regulated as part of an independent category within the Fintech ecosystem, as discussed in this article. As detailed, four modalities of crowdfunding are distinguished: *Donations, rewards, loans and investment crowdfunding*.

In spite of this, in concordance with Quirós-Zufiria (2017) after the global financial crisis and the serious banking situation suffered in Spain, this form of collective financing has not stopped growing, at both the national and international levels. In addition, as detailed above, the use of crowdfunding is considered by financial institutions as a preparation for potential threats to the traditional banking sector, owing to the current great rivalry. Furthermore, entrepreneurs or start-up companies must provide an appropriate environment for the crowd funders or also called project funders, apart from ensuring the viability of the crowdfunding campaign, in order to enjoy sufficient benefits from their contribution, pursuant to Belleflamme, *et al.* (2014).

In addition, as it has been described above, it is widely believed that the role of the traditional bank has been affected by the increase in new financing alternatives. Although there are not many studies yet and data on this financial alternative, it should be noted that crowdfunding will surely be subject to numerous studies as this alternative continues to evolve. Additionally, digital transformation is a non-negotiable priority to make available to all the opportunities of this new era. As Setälä (2017) showed: "Fintech new-comers provide financial solutions that allow customers and businesses to adopt new, faster and more efficient ways of handling their financial institutions" (2017:6). Although crowdfunding has become a great resource for getting financing for the entrepreneur, it is still far from a safe bet, in line with Quirós-Zufiria (2017). The main advantage of crowdfunding is the possibility of collectively funding through specialized platforms, finding economic support, taking advantage of the limitations of the lending banks.

Consequently, Setälä (2017) finds, due to the fact that the lending model represents most of the largest crowdfunding market, it could be interesting for banks because of it may create a larger business volume and revenues for them. Hence, as Setälä (2017) stated: "However, the transaction costs of banks' current processes are overly high compared to the automatized processes of crowd-funding platforms and unsuited for the provision of numerous small invest-ments" (2017:56). As reported by Mollick (2014), there is uncertainty about the future implications of the crowdfunding, and about if the projects meet expectations in which the investors have invested.

Furthermore, Mollick (2014) shows that there are some lessons for entrepreneurs who are seeking funding with crowdfunding: First, perform an exhaustive study of the project to be carried out for its triumph emphasizing on its quality. Second, have clear and appropriate objectives. Third, and finally, a careful planning is required both to set these goals and to prepare for a crowdfunding success.

Finally, despite the fact that not all crowdfunding campaigns are consolidated, this method of financing remains the most suitable for those entrepreneurs with great business ideas, and who do not have the economic means because they are risky projects, or by the entrepreneur's own motivation. Thus, crowdfunding shows that this system has become a very interesting and, above all, a viable option, covering the needs of both investors and entrepreneurs. The Fintech system is a threat to the financial sector, although it may provide an opportunity for the banks to focus on personal banking, private banking and companies. As previously mentioned, on the crowdfunding and traditional banking section, financial institutions should be constantly in innovation, creating new products and analysing the level of risk through the best innovative processes.

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12. ANNEXED

Nowadays, there are 20 participatory financing platforms registered by the National Securities Market Commission in Spain. Thus, Table 7 shows the updates of all platforms registered in Spain in accordance with the National Securities Market Commission (2017). In addition, the National Securities Market Commission offers the greatest guarantees against of defaulting problems.

Social denomination	Official registration number	Registration date	Web
Adventureros, PFP, SL	14	13/02/2017	www.adventureros.es
Arbol Finance, PFP, SL	13	29/12/2016	www.arboribus.com
Capital Cell Crowdfunding PFP, SL	17	17/03/2017	www.capitalcell.net
Crowdcube Spain PFP, SA	11	25/11/2016	www.crowdcube.es
Easy Financing Club, PFP, SL	6	21/09/2016	www.excelend.com
Ecrowd Invest PFP, SL	10	21/10/2016	www.ecrowdinvest.com
Einicia Crowdfunding, PFP, SL	16	13/02/2017	www.einicia.es
Fellow Funders, PFP, SA	12	02/12/2016	www.fellowfunders.es
Growly PFP, SL	7	14/10/2016	www.growly.es
Housers Global Properties, PFP, SL	20	02/06/2017	www.housers.com
La Bolsa Social, PFP, SL	1	15/12/2015	www.bolsasocial.com
Lendix España, PFP, SL	8	14/10/2016	https://es.lendix.com
Lignum Capital, PFP, SL	4	27/07/2016	www.lignumcap.com
Sociedad Económica para el Desarrollo de la Financiación Participativa, PFP, SL	5	21/09/2016	www.colectual.com
Socilen, PFP, SL	9	21/10/2016	www.socilen.com
Socios Inversores 2010, PFP, SL	2	15/07/2016	www.sociosinversores.com
Startupxplore, PFP, SL	19	21/04/2017	www.startupxplore.com
The Crowd Angel, PFP, SL	18	24/03/2017	www.thecrowdangel.com
Tutriplea Finance, PFP, SL	3	27/07/2016	www.mytriplea.com
Welcome Capital PFP, SA	15	13/02/2017	www.welcomecapital.com

Table 7 Registered Spanish Crowdfunding Platforms

Source: Spanish National Securities Market Commission (2017)

In Figure 11, the Fintech Infographics are shown in Spain. Therefore, it is shown all the start-ups and companies in the Fintech sector, divided into eight categories:

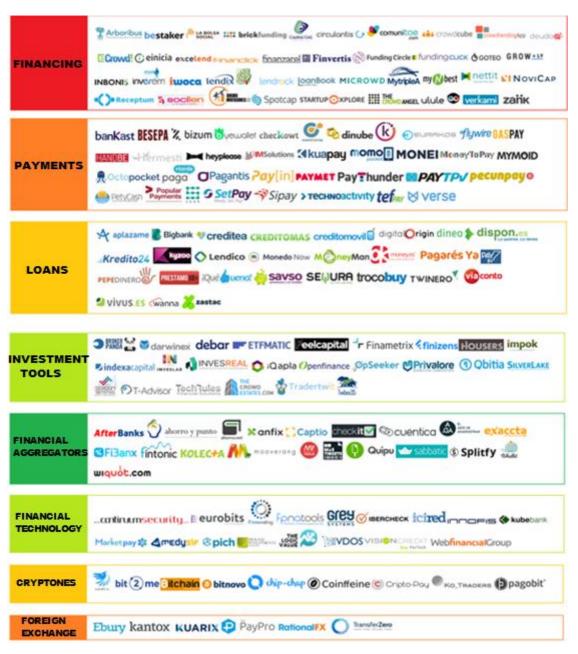


Figure 11 Fintech Inforeography in Spain

Source: Mooverang Website