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How Crowdfunding Changed Access To Credit For Startups Statistical Analysis of Innovative Capital Raising

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HOW CROWDFUNDING CHANGED ACCESS TO CREDIT FOR STARTUPS

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ABSTRACT

Entrepreneurs seeking cash for creative ideas have traditionally turned to banks, venture capital firms, business angels, and other institutional sources.

Advances in information technology (IT) have, however, changed the financial sector in recent years, helping to eliminate inefficiencies.

The "FinTech" (Financial Technology) industry, which has mostly evolved in the previous decade and is characterized by a wide range of financial technology breakthroughs, takes up a significant portion of this.

Crowdfunding is one of these innovations. This instrument is expanding and becoming increasingly widely used as a source of funding for unique ideas in the early stages of development. In fact, through this kind of funding, anyone can raise funds from a vast "crowd" of investors from all around the world . The channel used to raise funds is the Internet, they are collected through online platforms and digital tools.

Crowdfunding is being used as an alternative to traditional funding because of its democratic and simple nature; more and more entrepreneurs, startups, and SMEs are turning to the "crowd" for credit because traditional institutions have refused them, especially since the financial crisis of 2007-2008.

Crowdfunding is sometimes utilized as a supplement to other forms of financing to fill the funding gap that often exists in the early phases of a firm. In fact, funding from venture capital funds, business angels, and banks is easier to come by in the later stages of development, when the startup is already up and running and in the production phase. The nature of the business is too risky before the development phase, and the business can only give limited collateral as collateral for the cash it obtains.

It's tough to replace the function of professional investors who, in addition to funds, provide their knowledge and expertise. At the same time, this technology is expected to have a favorable impact on businesses' access to additional investment from business angels and/or venture capital.

Since a successful campaign can be a sign of a startup's business viability, Mollick and Kuppuswamy (2014) suggest that it is predicted that this will have an impact on getting additional investment.

Crowdfunding is gaining an increasingly important role in the startup funding market, the literature present on the subject so far has mainly focused on identifying factors that determine campaign success or analyzing Crowd behaviors.

However, few information are still known about how a crowdfunding campaign, specifically equity crowdfunding, can influence the startup funding market.

Crowdfunding is gaining an increasingly important role in the startup funding market, the literature present on the subject so far has mainly focused on identifying factors that determine campaign success or analyzing Crowd behaviors. However, little is still known about how a Crowdfunding campaign, specifically equity crowdfunding, can influence the startup funding market.

As a result, this thesis focuses on analyzing this aspect by looking at how equity crowdfunding campaigns affect the funding after them, as well as the relationships that exist between this new tool of alternative digital finance and professional investors like business angels and venture capital.

A random sample of 66 startup that completed an equity crowdfunding campaign between 2019 and 2020 was created to conduct the research. The database contained several types of information about the startups and the crowdfunding campaigns they launched. These were investigated to see if they may be used as potential signals by business angels and venture capitalists when making investment decisions.

After doing a descriptive analysis, it was shown that Italy has the largest number of firms that receive investment from professional investors after starting a crowdfunding campaign. It went on to prove that after an overfunding, there is a good probability of attracting professional investors' attention.

Following a study of the campaign parameters, the findings revealed that, when compared to the European average, equity crowdfunding campaigns of firms who go on to secure investments from business angels and/or venture capitalists receive much more financing. Furthermore, it was found that many campaigns were successful in exceeding their initial funding objective by doubling or even triple it.

In terms of the thesis's structure, the first chapter tries to provide a broad overview of FinTech and crowdfunding by providing a definition and some insights into their beginnings and

diffusion. It also explains the four types of crowdfunding, including equity crowdfunding, which is the model that will be examined in the thesis.

The dynamics within a crowdfunding project and between other projects will be explored at the end of the chapter, with an emphasis on the impacts caused by these and the campaign's organization.

In the second chapter, will be analyzed and discussed the risks and benefits of crowdfunding for both investors and project initiators, specifically in the context of equity crowdfunding.

Then a comparison with professional investors will be done and it will be explained the concept of the equity gap in early-stage businesses.

The chapter three examines the worldwide crowdfunding business and discusses about the democratization of finance. Then there will be an examination of the significance of crowdfunding in developing countries, and the chapter will conclude with a focus on China, where the phenomenon has played a large role.

Following a discussion of the advantages and disadvantages of each funding channel, and after having analyzed an Italian case study; the fourth chapter reports on a descriptive analysis of a random sample of startup and the characteristics of the campaigns completed by these startup, with the goal of determining whether and how Equity Crowdfunding can influence startup in obtaining additional funding.

CHAPTER 1 – What is Crowdfunding

1.1 FinTech

FinTech is the contraction of “Financial Technology”. It refers to the use of innovative technologies in the financial sector and it stands for all applications using analog and primarily digital IT to deliver financial solutions.

There is not a unique definition of FinTech, it comprises a broad variety of innovative ideas and new business models enabled by digital technologies.

This phenomenon can be seen and analyzed by two perspectives ¹. One is the functional perspective which denotes FinTech as the use of innovative technologies for the provision of banking, financing, payment, investment and advisory services; the second one is the institutional perspective which sees FinTech as specific types of (start-up) businesses.

One of the most popular and complete definitions of FinTech is given by the Financial Stability Board (FSB) which describes it as a: *“technologically enabled financial innovation that could result in new business models, applications, processes or products with an associated material effect on financial markets and institutions and the provisions of financial services”* ².

The financial technology is now revolutionizing the financial industry. As described in FSB’s report (2017) the main benefits that technology-enabled innovations in financial services bring to financial stability are decentralization and diversification, efficiency, and transparency ³.

Decentralization and diversification, in some situations, have the potential to lower the effects of financial shocks. FinTech supports decentralization and diversification through various channels: big data processing and automation of loan originations lead to lower barriers to entry, Robo-advice helps smaller companies to function at alongside bigger firms with less barriers and fixed costs, and finally distributed ledger technologies in payments can reduce concentration.

¹ Puschmann T., *Fintech*, 2017

² FINANCIAL STABILITY BOARD (FSB): <https://www.fsb.org/work-of-the-fsb/financial-innovation-and-structural-change/fintech/>

³ FINANCIAL STABILITY BOARD (FSB), *Financial Stability Implications From Fintech*, 2017

FinTech also helps to improve the efficiency in operations which contribute to stable business models of financial institutions and lead to overall efficiency improvements in the financial system and real economy. The new technologies also support the increase of transparency which brings down the asymmetry of information and enables more accurate risk assessment. By generating these benefits, FinTech makes access to financial services easier especially for private persons and SMEs. This is perhaps most noticeable in the It is possible to notice this aspect in the economies characterized by unbanked population and financial system in early stage of development. ⁴

In these countries, which are largely developing countries, cell phone ownership is equivalent to or even greater than the share of the population with bank accounts; this is especially true in rural areas where physical banks are few.

This group of people can use mobile banking obtain credit and make transactions more swiftly and easily. Digital identification and DLT-based apps, for example, can help improve the quality and accessibility of financial services for final consumer.

Emerging market economies may witness more decentralization and expansion in financial services outside of traditional banking as a result of the so-called fintech revolution than advanced economies, as mobile banking has a stronger positive impact on "unbanked" people.

The major innovations introduced by FinTech industry are:

- Digital banking which is the online provision of banking services;
- Digitalization of payments through new intermediaries such as Apple Pay and Alipay;
- Cryptocurrencies that are digital representation of value;
- Distributed Ledger Technologies which are databases where parties can exchange any kind of digital data;
- Crowdfunding which is an alternative financing channel for initiatives, business or social projects;
- Initial Coin Offerings that are basically a parallel and digital version of IPOs;
- Insurtech that is the FinTech instruments application to insurance industry
- Regtech which is FinTech application to the delivery of regulatory requirements;

⁴ FINANCIAL STABILITY BOARD (FSB), *Financial Stability Implications From Fintech*, 2017

- Artificial Intelligence and Big Data which are used in performing financial services.

The FinTech and the innovations that has introduced are part of the solutions offered by *alternative finance*.

Alternative finance refers to the financial channels and instruments which, in recent years, have emerged outside the traditional financial system represented by banks and capital markets⁵.

It has emerged after the global financial crisis began in 2007-2008 as a new form of access to microcredit for SMEs and entrepreneurs. These categories were the most negatively influenced by the crisis, due to the credit crunch that it caused. Risky projects, SMEs and companies in their early stages could not find funding from banks, that's why alternative finance became so important; it presented challenges intended to stimulate investment and promote economic growth and development, as well as provide a return on investment during turbulent times.

Alternative finance has grown very fast over the time, especially in the last years. Looking at the graphic below, it's possible to notice that in 2020 the global alternative finance volume (excluding China) is more than twice the value relative to 2015.⁶ The volume includes funds that were raised via an online, alternative finance platform and delivered to individuals, businesses, and other fundraisers.

It's necessary to exclude China because the market development in the country followed a very different path and it distorts reality if the data is aggregated on a global level⁷.

Alternative finance in China had quickly growth from 2015 to 2017 (in 2017, China represented the 86% of the total market) and then, from 2018 to 2020, the prominence of the Chinese lending marketplace has considerably decreased due to regulatory changes that were introduced in 2018⁸. In 2019, the Chinese market only accounted for 48% of the global volume, and in 2020 for less than 1% of the market.

⁵ Cambridge Center for Alternative Finance, *The Second Global Alternative Finance Market Benchmarking Report*, 2021

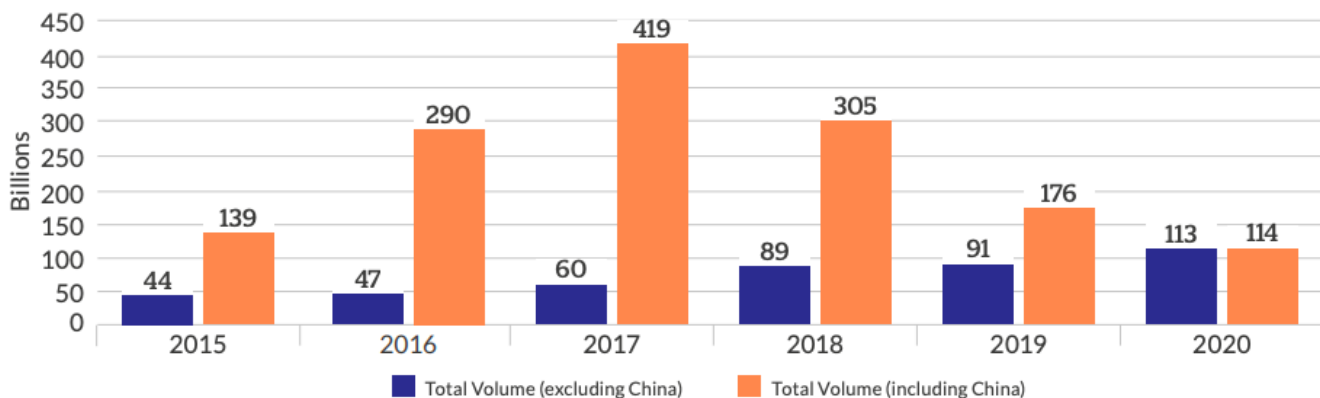
⁶ Cambridge Center for Alternative Finance, *The Second Global Alternative Finance Market Benchmarking Report*, 2021

⁷ Cambridge Center for Alternative Finance, *The Second Global Alternative Finance Market Benchmarking Report*, 2021

⁸ The specific case of China will be analyzed in the chapter 3.

China's collapse led to a global market decline of 42% between 2018 and 2019, while between 2019 and 2020 a 35% drop was recorded.

FIGURE 1: Total Global Alternative Finance Volume 2015-2020, USD



SOURCE: Cambridge Center for Alternative Finance

Despite the particular Chinese case, alternative finance has grown all over the world and its importance increased considerably. Total transaction volumes attributed to alternative finance platforms actually had continued to increase even despite the problems caused by the COVID-19 pandemic. As it's possible to notice from the graphic above, from 2018 to 2019 the global volumes (excluding China) rose by 3% while from 2019 to 2020, the volume rose by 24% and reached \$113 billion.

1.2 Crowdfunding

In this paper it will be analyzed the financial innovation due to crowdfunding and how it has changed the access to credit for startups.

The term is precisely the union of the words "crowd" and "funding", indicating a model of micro-financing that relies on investors who choose to invest freely, inspired by the project and the proposed idea. The term was used for the first time in 2006 by an entrepreneur in search of popular funding (Michael Sullivan, Mamacrowd.com, 2016) who, in an incubator of projects and events related to video blogging, had also provided the possibility of making an online donation.

Differently from traditional financial institutions, digital platforms don't control directly transactions, but they enable them by facilitating the interactions between users. In particular

crowdfunding has the role to facilitate the interactions between entrepreneurs in need of funding and contributors that want to invest in new projects⁹.

The term crowdfunding derives from the term crowdsourcing, which refers to the activity of outsourcing tasks to a large number of individuals (the crowd) and rely on their assets, knowledge or resources¹⁰.

A unique and global definition of crowdfunding is still open for a discussion, commonly it is defined as the process of taking a project or business, in need of investment, and asking a large group of people, which is usually the public, to supply this investment¹¹.

According to Schwienbacher and Larralde: “*Crowdfunding involves an open call, essentially through the Internet, for the provision of financial resources either in form of donations (without rewards) or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes*”.

In an entrepreneurial context,¹² crowdfunding refers to the efforts by individual entrepreneurs and groups to fund their ventures by drawing on relatively small contributions from a large number of individuals using online platforms, without recurring to standard financial intermediaries.

Crowdfunding is a young, articulated and constantly increasing phenomenon; it was born in the context of charitable donations, then this practice began to be used not only for social purposes, but also for individual ones, specifically in the entertainment industry (especially music and movies). Later initiatives were undertaken in other sectors such as journalism, beer, software, and fashion.

In the recent years it has extended to other industries because it has emerged as an innovative way for business ventures to secure funds without having to seek venture capital or other traditional sources of business investment. When equity crowdfunding was legalized in the U.S. in 2012 through *Jobs Act*, then-President Barak Obama stated that “*For startups and small businesses, this bill represents a potential turning point*”.

⁹ Belleflamme P., Lambert T., Schwienbacher A., *Crowdfunding Dynamics*, 2019

¹⁰ Hemer J., Joachim, *A snapshot on crowdfunding*, 2011

¹¹ Forbes H., Schaefer D., *Guidelines for Successful Crowdfunding* 2017

¹² Mollick E., *The dynamics of crowdfunding: An exploratory study*, 2013

Crowdfunding represents one of the most interesting offering-to-demanding platforms of the 21st century. It is a form of alternative financing that can be defined as the fundraising of the new millennium and that represents one of the many discoveries of the sharing economy that, in order to function, makes use of the most efficient means available in the 2.0 era, the web, where ideas flow quickly, information spreads rapidly and the tools made available to "advertise" are the most disparate.

It finds its roots in broader concepts such as micro-finance and crowdsourcing, but it represents a category of fundraising in its own right, facilitated by an increasing number of dedicated websites.

The Internet, a portal of easy accessibility, is today the most widespread place to promote innovative ideas because in the virtual world ideas can reach a huge number of potential sponsors and the money collected can be used to finance a portfolio of various projects.

The most important point of strength of in this new form of financing is that it exploits the capabilities of social networks and the function of viral networking and marketing to mobilize a large number of users in a relatively short period of time. It is not just a matter of funding coming to the entrepreneur from an indistinct multitude of internet users (in fact, there is no crowd that is eager to fund projects no matter what) but is rather the consequence of a very elaborate networking activity¹³.

1.1.1 Factors that triggered the birth of crowdfunding

The economist Steven Dresner identified three factors that led to the birth and to the fast adoption of crowdfunding as a new form of financing¹⁴:

1) The global financial crisis.

Starting in 2008, the financial crisis, which initially seemed to be a problem largely confined to North America and the subprime mortgage sector, began to spread and soon affected all advanced economies. One of the most serious consequences of the crisis was a change in the lending behavior of banks, which in fact reversed

¹³ Hemer, Joachim, *A snapshot on crowdfunding*, 2011

¹⁴ Dresner S., *A Guide to Raising Capital On the Internet*, Bloomberg, 2014

itself irreversibly: small and medium-sized companies, risky projects and economic initiatives in their early years could no longer find easy funding from banks. This logically caused systemic disruptions and both the financial markets and the real economy collapsed.

The strategy implemented by governments for economic recovery has focused more on fiscal policy and the banking system, so the weight of the financial burden was on small businesses and entrepreneurs who, however, have been left without financing. For these categories, crowdfunding can not only provide seed money ¹⁵, but it can also bring several strategic advantages such as product testing, market segmentation, pre-sales and customer feedback, thus enabling the implementation of new marketing and product distribution strategies.

2) *The rise of social web or Web 2.0.*

Web 1.0 was a platform made to go through information and to complete transactions. With the birth of social networks such as Friendster, MySpace and later LinkedIn, Facebook and Instagram, it became the most important platform for the proactive exchange of ideas, suggestions and initiatives. This was the crucial step that led to the rise of Web 2.0 that has more user-generated contents and usability.

The social Web permits users to communicate with friends or to build relationship with people who would otherwise have been difficult or impossible to meet in person.

It enables people to amplify the power of their donations by giving them the possibility to spread among friends, family and social network connections in general, the projects in which they have invested. They can also encourage their connections to participate to the campaign giving feedback about their experience.

3) *The birth and the development of crowdsourcing.*

Crowdsourcing is the way to obtain information, opinions and work from a large

¹⁵ Seed money is the type of financing used in the formation of a startup, it's a very early stage investment designed to support the business until it can generate its own cash flows or until it is ready to do other investments

number of people.

The most important phenomenon in its development has certainly been the use of the Internet because people share information and data via Internet, social media and Apps.

Crowdsourcing has laid the foundations of what is now crowdfunding as it has legitimized a model based on the participation of outsiders to the entrepreneurial vision anticipating and justifying the intervention of a community in the realization of a project or a start-up.

Thanks to this new financing process, a transition is taking place from the historical passive mass producer -consumer pattern to the phenomenon of co-creation.

While before the consumer had a merely passive role, today he finds himself closer to the entrepreneur or to the small group of creators of the project, being able to decide to finance it. All this creates an interconnected network and gives the consumer the possibility not only to finance the project, but also to merge with the creator to converge in the creation of the product/service.

1.3 Crowdfunding Models

In crowdfunding there are substantially three parties involved:

- 1) The project initiator or entrepreneur who needs the funding.
- 2) The contributors/investors, also called crowd/backers, who support the project.
- 3) The moderating organization which is the platform that acts as a neutral facilitator both for project initiators and for investors, allowing the latter access to information regarding the projects.

Projects engaging in crowdfunding can have various goals, depending on the goal it is possible to identify different crowdfunding models that will be analyzed below.

1.3.1 *Donation Based Model*¹⁶

In this case the purpose is philanthropic; the crowd altruistically donates a certain amount of money to support a specific cause and receiving no reward in return. The investors usually receives a non-financial remuneration such as social or personal recognition.

This concept was inspired by microfinance, social fund-raising crowdsourcing.

According to some sources, this is the original form of crowdfunding that was born in response to the growing shortage of welfare and later spread in a cross and multidisciplinary way in all sectors and in different social classes.

One of the most important donation-based crowdfunding campaign in Europe, is the fundraising started by Chiara Ferragni and Fedez, two Italian influencers, during the first lockdown due to Covid-19. They raised more than 4.4 million euros in just a few weeks to donate to the San Raffaele Hospital in Milan, which have been used to establish a new intensive care unit, bringing the total number of intense and sub-intensive care beds at the Milan hospital to triple.

The campaign was launched on the crowdfunding portal GoFundMe, and more than 200.000 backers from about 100 countries around the world have participated, making it the most important campaign in Europe launched through that platform.

1.3.2 *Reward-Based Model*¹⁷

This is a type of crowdfunding in which the investor receives a reward based on the amount invested in the supported campaign and which, generally, coincides with a product or service.

Often the reward becomes a pre-sale and, therefore, we talk about pre-selling crowdfunding where,

differently from a real pre-sale of products, the backers have a decisive role in establishing the characteristics of the future product/service.

In fact, the entrepreneur frequently offers the product for pre-sale to supporters solely to obtain feedback that helps him to change and improve it. In this scenario,

¹⁶ Rijanto A., *Donation-based crowdfunding as corporate social responsibility activities and financing*, 2018

¹⁷ Kunz M., Bretschneider U., Erler M., Leimeister J.M., *An empirical investigation of signaling in reward-based crowdfunding*, 2017

crowdfunding is being utilized to test the market, and backers can contribute suggestions to help shape the product or the concept that will eventually be marketed. This was the case of OLO, the small 3D printer for smartphones. The production of these printers was funded through a reward based crowdfunding campaign launched on the Kickstarter platform. In exchange for their contribution, investors got the product before it was launched on the market and were the first to test it. The project goal was \$80000 and the funding obtained was \$2.2 million. The project creators thus decided to ask for feedback on the product from the investors and, based on that, they reinvested the extra money obtained through the campaign to make improvements to the product.

This model can, enable the production of a particular product/service, which otherwise would not have the funds necessary for its realization. In addition, a reward campaign also allows entrepreneurs to understand if there is a demand for their goods. For these reasons, the price of the product/service offered in reward-based campaigns is usually lower than the price at which it will actually be sold on the market.

In addition to copies of the product/service, in this crowdfunding model it is also possible to recognize other types of rewards, such as: collaborations or participation in the project, creative experiences or memories and recognition.

1.3.3 *Equity-Based Model*¹⁸

Under the equity model, financing takes place in the form of risk capital: the investors receive in exchange company's shares and administrative rights, they become shareholders and assume the business risk.

The investors are individuals or institutions, and they buy unlisted shares or debt-based securities issued by a business, typically a SME.

The project initiator launches the funding collection on the online platform. Here, they have to publish all information about the project and the monetary goal that is aspired to be achieved. At this point, the fundraising goal is divided into quotas at a fixed price, and investors can buy them.

¹⁸ Shneor R., Zhao L., Flaten B., *Advances in crowdfunding*, Palgrave Macmillan, 2020

The project that reaches the minimum collection target can proceed with implementation, and the result must be achieved within the set timeframe. If this is not achieved, the amount must be returned to the investor. This is possible because the money is secured by smart contracts which are self-executing digital contracts between two or more parties in a transaction. In other words, they are a computer code that operates on a decentralized network and performs any previously defined terms of an agreement automatically.

Smart contracts are a critical component of distributed ledger technologies since they not only optimize and protect asset transactions, but they also eliminate the need for an intermediary.

Equity-based crowdfunding market has grown a lot in recent years and diversified applications have emerged beyond venture funding.

The most important subsets of this model are Real Estate and Property based crowdfunding. These enable investors to acquire real estate assets by investing a little amount of money.

Another interesting subset of the equity-based model is related to community shares; in this case the money are collected to support a revenue-generating community project.

This is the model that will be deeply analyzed in the following pages.

1.3.4 *Lending Crowdfunding*¹⁹

Lending crowdfunding, also known as social lending, is a form of alternative financing that consists of a loan between individuals, made through online platforms and aimed at the development of certain business projects.

Lending crowdfunding platforms are communication channels and financial intermediaries that allow lenders and applicants to meet and generate revenue opportunities for both parties.

Lending crowdfunding was born mainly to help companies and individuals who are often unable to obtain funding from traditional credit institutions. Very often, in fact,

¹⁹ Shneor R., Zhao L., Flaten B., *Advances in crowdfunding*, Pallgrave Macmillan, 2020

it happens that applicants are asked to meet strict requirements for the granting of a bank loan.

For the investors, who act as lenders, there are interesting earning opportunities. Through lending crowdfunding, in fact, the lender provides its own sum of money to support a project, obtaining the repayment of the capital increased by the proposed interest.

Subsequently, the repayment of the loaned capital takes place respecting a precise period of time necessary for the development of the entire project.

For both, borrowers and lenders, peer-to-peer platforms offer an unprecedented service characterized by an easier access to credit for SMEs and little entrepreneurs and by lower barrier of entry for contributors considering the fact that some platforms offer the possibility to do a minimum investment of 1\$.

1.3.5 *Invoice Trading Model*²⁰

This is a finance tool through which SMEs can sell their commercial invoices or unpaid credits, at a discount, to investors who purchase them by advancing the amount net of remuneration.

This process is implemented through an online platform by which the transferred debtors' commercial invoices are assigned to a third party investor which are usually institutions, individuals and professional investors as banks and insurance companies. The investors' remuneration is determined through online auctions. First of all the online platform evaluates the proposal by analyzing the creditworthiness and other data; after this it assigns the credit rating and the score. If the proposal is accepted, the invoices are published on the platform for the purchase, which is usually implemented by the upward auction mechanism.

The invoice trading model enables firms to speed up the liquidation of working capital and helps them to alleviate their cash flows. Differently from the other models, this is less about fundraising and more about cash-flow management.

²⁰ Shneor R., Zhao L., Flaten B., *Advances in crowdfunding*, Palgrave Macmillan, 2020

1.4 Crowdfunding Key Variables

In order to get an increasingly broad perspective on crowdfunding and to study the determinants of its success and failure, Ethan Mollick²¹ analyzed data from the world's largest crowdfunding platform, Kickstarter.

From the data analyzed, it was found that the key variables of interest in this phenomenon are:

- 1) *Project goal* which is the amount that entrepreneurs try to raise through the platform. The project goal has to be realistic to be chosen; in fact raising too little capital could be not enough to start fund the project and raising an high capital project can lead to a lower possibility of success. The project goal can be personal or social depending this depends on who will benefit from the project.
- 2) *Funding level* which is the percentage of the project goal already raised. In this case is important to know that a project is considered successful when it raises at least its goal. For the majority of the platforms this is the necessary condition to collect backers' pledged money, these platforms follow the "all or nothing" model.
- 3) *Backers* that are the number of contributors that support the project.
- 4) *Percent first time Backers*. This variable represents the percentage of backers that are first time backers.
- 5) *Pledge/Backer* represent the mean pledge per backer. It as it is not possible to know exactly the backers' individual contribution; just to have an idea about that a mean of the contributions is calculated. This variable is obtained dividing the total amount of money raised by the number of backers. .

²¹ Mollick E., *The Dynamic of Crowdfunding: Determinants of Success and Failure*, 2012

- 6) *Facebook friends of funders*. This variable underlines how important social network are in funding new ventures. In Kickstarter accounts are linked to Facebook; this allows to determine how large is entrepreneurs' network of connections and it permits them to present their projects to a larger number of possible funders, even outside the platform.
- 7) *Reward levels* which are the number of reward offered to backers in the crowdfunding reward based model. These depends on the level of funds they pledge; usually they start being small rewards and then they become larger rewards. One of the most common type of rewards are the products that are developed by the entrepreneur, in this case the platform operates has a "pre-order" system.
- 8) *Category*. Project are always categorized by the platform. There are some categories, as for example Design and Technologies, which projects are treated differently because they involve the use of concrete products as rewards; in this case a manufacturing plan has to be presented published on the platform by project's creators and they have to give investors a clear delivery date for the rewards.
- 9) *Updates* which are posted by entrepreneurs when the fundraising is still in progress; these are information about the projects an about how they are going. The updates help fundraisers to inform current backers and to find new ones.
- 10) *Comments* are posted backers and potential backers to express their positive or negative thoughts about the project.
- 11) *Duration* that is the number of days for which a project accepts funding. The limit on Kickstarter is 60 days even if the platform encourages users to open projects with 30 days limit.

1.5 Crowdfunding Dynamics

The crowdfunding phenomenon highlights the relationship between the expectations of two parties: project initiators and funders.

To understand how this relationship works, we need to highlight two variables: the goals of the founder of an innovative project and the goals of the funders/supporters of a crowdfunding campaign.

Regarding the goals of the founders, these can be essentially three ²².

- 1) Artists, founders of social initiatives or events (founders), choose to fund their projects through crowdfunding platforms to achieve goals strictly dependent on the type of project proposed. The types of initiatives they propose (events, social promotion campaigns or small art projects) require the raising of low capital that is often financed by members of the entrepreneur's household or their friends. This goal was the one which gave birth to crowdfunding, in fact it started to be used for charitable donations and then to support amateur artists, filmmakers etc.
- 2) Another goal may be use crowdfunding to obtain seed money to start an innovative entrepreneurial activity. Therefore, crowdfunding can be very useful to startups creators who are looking for seed money and are unable to raise it from traditional investors due to the small size of the project or the expected profits considered too low. This category is the one which benefits more from crowdfunding advantages.
- 3) The third objective for which to open a crowdfunding campaign is proposed by Mollick (2013) and concerns the possibility for the entrepreneur to test consumers' appreciation of the potential outlet market. In this case, backers are not just a conduit for funding, but a group of consumers who test the product and can disseminate market feedback that is useful to the company.

The motivations of the backers are divided into extrinsic and intrinsic, based on the elements of similarity with crowdsourcing strategies.

The reason that pushes individuals to participate in a crowdfunding campaign as backers vary according to the crowdfunding model under consideration; therefore it's possible to

²² Belleflamme P., Lambert T., Schwienbacher A., *Crowdfunding Dynamics*, 2019

distinguish three types of supporters: donors, backers and investors ²³.

Regarding the *donation based model*, it involves supporters who want to make a monetary contribution to a cause of moral and symbolic value, all without any expectation of reward. This backers' goal suggests that they are driven by a decisive emotional involvement in the choice to make an economic effort without obtaining any reward. ²⁴

In the case of the *reward based model*, the objectives of the contributors can have a financial nature (such as receiving profits from the future sale of a product or the pre-order option), of a non-financial but tangible nature (an example of this is the pre-order option), or of a non-financial and non-tangible nature (for example, public mention among the supporters of the project).

A particular case is the expectation of getting back the amount paid plus a percentage of interest: this goal makes the funder similar to an institutional creditor, but obviously the amount lent is less and the interest rate is usually reduced to symbolic values.

This model is more similar to microcredit, and intangible benefits play an equally important role as tangible ones.

In the third model, *equity crowdfunding*, the backer participates in an equity investment so he/she will have the opportunity to participate in the distribution of future profits and they can be part of the strategic direction of the project. In this case, the relationship between investor and project founder is based primarily on the expectation of long-term profit.

In addition to the goals of entrepreneurs and funders, there are other factors that influence the dynamics of crowdfunding as social learning and network effects.

1.5.1 *Social learning* ²⁵

One of the biggest problems for contributors is the lack of information. Unfortunately, crowdfunding is characterized by asymmetry of information, and this contribute to

²³ Kuppaswamy V., Bayus B., *The Dynamics of Project Backers in Kickstarter*, 2013

²⁴ Agrawal A., Catalini C., Goldfarb A., *Some Simple Economics of Crowdfunding*, 2013

²⁵ Belleflamme P., Lambert T., Schwienbacher A., *Crowdfunding Dynamics*, 2019

make more complex the decision-making process for backers. When they join a crowdfunding platform, they have to take a lot of decisions as for example which project invest in, at which stage to make the contribution, how much to invest and so on, and with an asymmetry of information is harder to decide.

Investors, usually, are not able to evaluate the quality of the project nor the entrepreneurs' trustworthiness and if some backers have more information, these are private and other contributors cannot look at them.

In this context, information about the quality and validity of the project during crowdfunding campaigns expands through social learning.

Social learning theory concerns the learning process and social behavior; it emphasizes that learning not only involves direct contact with objects, but also occurs through indirect experiences, developed through the observation of other people. According to this theory, the cognitive process occurs in a social context and new behaviors can be constructed by observing and imitating others.

The author of the theory, Albert Bandura, used the term modeling (imitation) to identify a learning process that is triggered when the behavior of an observing individual is modified by the behavior of another individual who serves as a model. Thus, behavior is the result of a process of acquiring information from other individuals.

This learning process also works in the context of crowdfunding; in fact, funders seek to infer the information such as the validity, qualities, and actual existence of the project, from the decisions of other funders.

1.5.2 *Network effects*²⁶

Crowdfunding platforms are two sides platforms, this means that there are two groups of users that employ the platform. Consequently, it becomes more attractive for one of the two groups when the participation in the other group is increasing. Investors prefer to operate with platforms where more entrepreneurs present their projects; in this way the chances for them to fund a project they are really interested in increase, and they have the possibility to receive the most suitable reward.

²⁶ Belleflamme P., Lambert T., Schwienbacher A., *Crowdfunding Dynamics*, 201

On the other hand, the presence of more contributors is necessary to make the platform more attractive for entrepreneurs. The more are the backers, the higher is the probability for entrepreneurs of having their projects funded and, in some cases, the higher is the possibility for them to test the demand for their products.

This aspect leads to underline two types of network effects:

- The indirect network effect who refers to the fact that backers benefit from the presence of other backers. This consequence is not immediate and direct, but it's due to the increasing number of entrepreneurs which attract more backers and which is also influenced by the increasing number of investors.

This effect is cyclic and it's exactly the same if it's seen from the entrepreneurs' point of view.

- The direct network effect which refers to the fact that participation decisions taken by one user affect directly the other members of the user's group. An example of positive direct network effect there is the backer's participation increase; this increases the funds available and makes more likely that a rising number of projects are funded, and more rewards are earned. On the other side it can generate a negative effect because a rising number of backers leads to more competitiveness on the market and, normally, in the rewards "menù" entrepreneurs offer rewards in a limited number. This means that in some cases contributors have to select a reward different from the one they expected to receive from their investments.

These network effects are also called "payoff externalities" because the payoff²⁷ each user can get is affected by the decisions of other users.

1.5.3 *Within project funding dynamics*²⁸

To analyze the effects of social learning on crowdfunding dynamics is important to understand if past projects and funding influence present ones. According to the

²⁷ Entrepreneurs' payoff is composed by funding and visibility, the one for backers is the compensation they obtain from the investment.

²⁸ Belleflamme P., Lambert T., Schwienbacher A., *Crowdfunding Dynamics*, 2019

literature, the answer is yes. Backers have limited information available about projects, for this reason they are very likely to try to complete the information set by analyzing the decisions made by previous contributors. The consequence of this phenomenon is that past contributions influence current ones, this generates a "within project funding dynamic". One question whose answer is still ambiguous is whether the influence of past contributions is positive or negative.

An example of influence giving rise to positive dynamics is when a project in the past has already received a lot of support from the crowd and from this the investors infer that the project is of high

quality and decide to support it. This is the case of Orapesce, an Italian innovative startups which operates in the food and beverage industry. The project creators launched an equity crowdfunding campaign on MamaCrowd, one of the most important equity crowdfunding platform in Italy.

The initial project goal was € 749.999 and the final amount raised was € 1.151.274. The campaign reached the goal in almost one week and when it reached € 773.00, the venture capital fund AliCrowd, given the support already received and the innovative idea behind the project, trusted on it and decided to invest 600,000 in the same.

Conversely, negative influence occurs when backers, seeing past positive performance, do not invest themselves, but rely on other contributors to complete the funding as they assume that the already popular project will not experience any problem in attracting funders.

This behavior is a classic example of free-riding and generates a negative dynamic within the project.

1.5.4 *Cross projects funding dynamics*²⁹

Apparently, it may seem that if the intra-project funding dynamics are positive, then the inter-project funding dynamics should be negative, since past contributions made to one project that stimulate future ones, should automatically discourage contributions to other projects.

²⁹ Belleflamme P., Lambert T., Schwienbacher A., *Crowdfunding Dynamics*, 2019

This is not exactly the case because the assumption on which this reasoning is based is extremely restrictive. In fact, it assumes that the set of funders and their willingness to contribute are fixed. In this case, the game would be zero-sum, this means that there would be the "victory" of a few projects and the "defeat" of others.

Crowdfunding, in reality, is a positive-sum game because total contributions on the platforms have grown continuously in recent years; this implies that positive funding dynamics can exist both for within and cross projects, however this possibility has not been tested yet.

The increase in total contributions due to social learning can be considered a plausible explanation for the presence of positive dynamics within inter-project funding; in fact, these may be due to the diffusion of information regarding project quality among users. It is very likely, but not proven, that funders also distinguish themselves according to their familiarity with the crowdfunding platform; in fact, recurrent funders have a different attitude than new funders. They make more informed decisions, and this is due to their experience on the platform. Therefore, recurring backers benefit from social learning and generate it by deciding to support certain projects rather than others. This helps to understand that recurring funders are a relevant source of cross-project funding dynamics.

Positive cross-funding dynamics for projects can also exist due to network effects that generate an increase in total contributions on a given platform; in fact, the value that each user can derive from the platform depends on the combined decisions of all other users. Positive cross-funding dynamics are due to indirect network effects.

In conclusion the interaction between crowdfunding platform users (among contributors and among contributors and entrepreneurs) produces informational externalities derived from social learning and payoff externalities derived from network effects.

These two types of externalities contribute to the evolution of crowdfunding and the diffusion of crowdfunding platforms in complementary ways: network effects contribute to attract new investors and social learning influence both the investors and the economic contribution they make to the platform, which is distributed among projects according to the initial choice made

by recurring backers ³⁰.

Network effects also sustain crowdfunding dynamics even after the end of social learning process, which occurs after backers obtain complete information about the existence and quality of the project.

1.6 Equity Crowdfunding Campaign

The case study of this paper will focus on equity crowdfunding, so it is appropriate to take a closer look at this model.

With an equity crowdfunding campaign, an individual or a start-up has the possibility of presenting an offer to subscribe to a part of the relevant entity's capital stock to an audience that, thanks to the visibility offered by the web, is potentially vast. This, as has already been pointed out, makes it possible to broaden the opportunity to raise the financial resources necessary for a given development plan.

The period in which the subscription offer is online represents the central phase, the operational process of an equity crowdfunding campaign actually begins much earlier, and only concludes after that period.

In any case, before resorting to equity crowdfunding, the entrepreneur must have a clear financial plan; in fact, the project must be translated into prospective economic-financial quantities that explain its future cash flows and income. The logic of modeling is the one of the business plan that compared to the traditional one, has strong peculiarities due to the fact that the financing of investors occurs online. The business model of these companies, in fact, is developed through the digital economy, that is through a continuous comparison with potential investors.

When the business plan is complete, it can be used to decide on the standard contribution, estimate the number of crowdfunding participants and set the share of profits to be allocated to contributors.

The business plan, however, is not only needed by the entrepreneur, but it will also serve the users of the equity crowdfunding platform to understand the company's area of operation, strengths, goals, reputation of the promoter, etc. The project, in fact, should allow the

³⁰ Belleflamme P., Lambert T., Schwienbacher A., *Crowdfunding Dynamics*, 2019

formation of a financial investment decision based on a set of information sufficient to appreciate the technical, market, financial and economic feasibility risk of the project.

Once the entrepreneur has completed the business plan it is possible to start the actual crowdfunding campaign which is composed of three phases ³¹.

The first phase is preparatory to the online publication, and concerns the preparation of the set of documents to be published. In particular, it includes: the eventual adaptation of the statute so that it complies with Consob applicable regulations; the preparation of the documentation foreseen by the relevant authority (e.g. Consob regulations in Italy), including the business plan, and the preparation of other elements and supporting documentation (e.g., presentation video, FAQs, etc.).

The next phase is that in which the offer is online. In this period the offering company will put in place the communication strategy (carried out online, offline, through interviews, participation in events, networking, web marketing, etc...), to support the collection.

Finally, there are the subsequent activities. If the collection target is reached by the deadline, the company will register the entry of new partners and start the development program. If, on the other hand, the fundraising target is not reached by the deadline, the capital increase will not take place and any underwriters will regain possession of the paid-up capital.

Contributors are generally a heterogeneous group of non-professional investors, linked or not by common interests, which varies according to the platform's business model and its degree of specialization.

Through various channels, from simple word-of-mouth to social media and various sites, possible investors are directed to the platforms.

Their membership is quite simple and intuitive. They can, in fact, freely access the online communities and through registration evaluate the projects published. The financial transaction will follow the modalities defined by the platform, both with respect to the online

³¹ A.Scutti, *Equity crowdfunding: uno strumento all'avanguardia per la crescita delle PMI*, ANDAF magazine, 2017

payment manager and to the transfer of the same to the proposer.

CHAPTER 2 – Crowdfunding Advantages and Risks

“Crowdfunding - the use of the Internet to raise money through small contributions from a large number of investor - could cause a revolution in small-business financing. Small businesses, especially startups, have a difficult time raising money. The usual sources of business finance: Bank lending, venture capital, retained earnings—are difficult to obtain for small and microbusinesses. Wealthy individuals known as “angel investors” fill part of the funding gap” (Bradford 2012)

It's clear that crowdfunding represents a revolution in financing. It allows everyone, especially categories such as small business, individuals and SMEs that were mostly affected from the financial crisis of 2007-2008, to access funding.

This revolutionary phenomenon has numerous advantages, but it also involves risks. In this chapter all the crowdfunding advantages, risks and opportunities will be analyzed to better understand how they can influence people and companies' decisions.

2.1 Crowdfunding Advantages

In drawing up a list of the advantages of crowdfunding it would be intuitive to consider only the financial aspect as it is one of the main facets of this phenomenon. However, this approach would be extremely reductive and, therefore, the rest of the benefits of crowdfunding will also be considered and analyzed below.³²

1) *It provides access capital.*

This is the main benefit and it is the one that led to crowdfunding spread and growth. Before entrepreneurs had to raise capital for early stage projects from banks, venture capitalists and accredited investors. Thanks to this new financing method they can access to seed capital easier, sometimes without giving up equity or accumulating debt; in fact if project initiators use the reward based model, they can raise funds giving back in exchange tangible products or other gifts.

³² Prive T., *10 Benefits of Crowdfunding*, 2012

2) *It hedges some risk.*

Starting up a company is very risky and challenging as unforeseen expenses and challenges may occur in capturing a market share during the early stages.

These risks can be hedged through the launch of crowdfunding campaign. As described in chapter one, the reward based model provides that backers may also have a pre-sale of the product in exchange for the funds. This allows consumers to test the product and the project initiator to get feedbacks so that changes can be made to the product or an effective marketing and distribution strategy can be applied to increase market share. Crowdfunding allows an entrepreneur to gain market validation and avoid giving up equity before taking a product concept to market.

3) *It is a viable funding option*³³

Differently from traditional investors, crowdfunding is a viable funding option, in fact, project initiators may have difficulties to attract traditional investors especially if these are banks.

4) *It serves as a marketing tool.*

Through an active crowdfunding campaign it is easier to reach a larger number of people and numerous channels; it is a good way to introduce a business' mission and vision and to spread it.

More small investors become involved in the firm after a successful crowdfunding campaign, and they can act as brand ambassadors, generating marketing benefits by reaching out to others and spreading the brand's message to their connections.

Many platforms include social media links, and this makes easier to get referral to the company's web site or social account; in this way more people can have a faster access to the business information and initiatives. This allows ventures to receive a larger number of visits from potential funders.

The spread of project information between backers, possible backers and their connections is a very effective marketing tool.

³³ Hazam D., Karimova D., Olsson M., *Crowdfunding as a Source for Social Enterprise Financing*, 2017

5) *It gives proof of concept.*

This advantage occurs after the crowdfunding campaign. Even if the campaign has been successful, the entrepreneur might need further funding and investors for their company and the best way to acquire these is to be able to prove the venture has received sufficient market validation at an early stage. A good way to gain respect and credibility as a start-up is being able to show investors that it had a successful crowdfunding campaign.

Crowdfunding can also result in a higher valuation of the company due to the generosity of retail investors compared to traditional investors. In fact, unlike traditional investors, when a crowdfunding campaign is successful, the project creators often obtain more money than the amount originally requested. This happens due to the indirect network effect, which occurs when a campaign is about to reach or has already reached the project goal, causing an influx of new investors to contribute to the project.

In contrast, when funding is obtained through traditional channels, the entrepreneur simply receives the initial capital required.

A greater increase in capital leads to a higher valuation of the company due also to the fact that it has received trust and support from the crowd.

6) *It allows crowdsourcing of brainstorming.*

Thanks to the positive effects of crowdsourcing and to the social learning dynamics that are present in crowdfunding, the entrepreneurs can receive comments and feedback but also ideas.

The feedback can help the project initiator to notice some aspects that he/she didn't consider before and it can also inspire new ideas for new products or improvements.

7) *It allows access to impact-minded investors* ³⁴

In contrast to traditional investors, crowdfunding investors are not narrow-minded by focussing only on the profit but rather have a wider value orientation. Social enterprises which use crowdfunding will be confronted with investors who aim to

³⁴ Hazam D., Karimova D., Olsson M., *Crowdfunding as a Source for Social Enterprise Financing*, 2017

realise ideas with which they can do something good and valuable for the community and make profit at the same time. Therefore, pure financial companies would not succeed with a crowdfunding campaign because of the lack of social investment. Thus, the attraction of social orientation is higher because people aim to help others and make a difference despite the risk. The investors can decide freely and control their investment by choosing the project they want to promote and the amount of the investment while doing something good for the community too.

8) *It introduces prospective loyal customers.*

A crowdfunding campaign gives the entrepreneur the possibility to share the message and the purpose behind the project.

People that decide to support the company are ones that believe in its success in the long run. These people are called early adopters and they are pivotal to every benighted as they will help the initial growth and spread the project among their connections without asking for anything in return.

Early adopters care about the brand, mission and vision and they are likely to be loyal customers in the long term.

9) *It is easier than traditional applications.*

Applying for a loan or for other capital investments are really difficult and long processes that have to be followed by the entrepreneur especially during the early stages of the company. On the contrary, the application process for a crowdfunding campaign is much easier. In order to start a crowdfunding campaign an entrepreneur has to choose the crowdfunding platform that best suits its project theme and purpose and then he/she has to share the venture's message, mission and vision and establish the rewards.

As described in chapter one in the equity based crowdfunding the process is more structured, but is surely simpler than in traditional funding.

10) *It is a free "PR".*

A successful crowdfunding campaign and a good marketing strategy give the venture

the opportunity to attract potential contributors from traditional channels and attention from media outlets.

This allows the company to amplify the success; entrepreneurs who have been successful with their projects have experienced larger success and a higher exposure.

11) *Alignment with company principles / Engagement creation* ³⁵

Crowdfunding is a sign of globalization and democratization of the funding. It is accessible to everyone and people from all over the world can invest in other countries and they can find other users that have the same vision and interests. It creates greater community engagement at an international level.

12) *It provides the opportunity of pre-selling.*

As mentioned in chapter one, the reward based model gives the possibility to entrepreneurs to pre-sell a product that they haven't yet launched into the market.

The crowdfunding campaigns that make this possible are increasingly widespread among project initiators. This approach enables entrepreneurs to conduct a prior market analysis in order to decide whether to pursue with the same concept.

The approval of the market and the big validation reduce the risk and thus attracts potential venture capitalists or other investors.

13) *It promotes power balance towards investors*

Crowdfunding allows the business to be run in the way that is best for everyone, rather than following the wishes of investors. Crowdfunding investors are less powerful, and entrepreneurs can avoid the risk of being controlled.

14) *It is free*

The all or nothing crowdfunding platforms are free. This means that the project initiator only gets the funds raised if the campaign reaches 100% or more of the funding goal, but there is no fee to participate.

³⁵ Hazam D., Karimova D., Olsson M., *Crowdfunding as a Source for Social Enterprise Financing*, 2017

If the goal is not reached there is no penalty for the entrepreneur; all the funds collected are returned to the backers and they don't get anything and neither does the platform. An average commission around 5% of total funds raised is taken from the platforms only if the fundraising project is successful.

These were the general benefits of crowdfunding; as mentioned above, in this paper it will be specifically analyzed the equity crowdfunding. In the following pages will be evidenced the advantages of this model.

2.2 Disadvantages of Crowdfunding ³⁶

Efficiency concerns

Having a high number of investors and, in the equity crowdfunding model, a high number of shareholders, can lead to inefficiencies in terms of the high complexity of communication, dealing with heterogeneous investors, and dealing with the volume of potential crowdfunding investors. In fact, in this case it is more difficult to inform everyone about any decision taken by the management. It is also difficult to obtain everyone agreement on some topic due to the heterogeneity of the investors that can have different cultures, ideas and objectives.

Higher costs

Higher costs due to higher interest rates for the potential investors, even if the interest rates charged by the bank would be lower, but the individual would be taking a higher risk by using his savings for the investment.

Inexperienced investors

One of the main risks is inexperienced investors who cannot properly assess the risks, which can lead to dissatisfaction with the company management.

Large number of investors

There can be problems due to communication difficulties in using equity crowdfunding when

³⁶ Hazam D., Karimova D., Olsson M., *Crowdfunding as a Source for Social Enterprise Financing*, 2017

too many investors are involved. Therefore, sometimes investors do not invest in a later stage because the size of the investors can complicate things.

Public exposure

Disclosure through crowdfunding campaign causes stress for management team as they have to explain themselves in case of misinformation and if the campaign is not successful, they'll may have reputational damages.

2.3 Advantages and Disadvantages of Equity Crowdfunding

*2.3.1 Advantages for investors*³⁷

Financial return

By investing in the project, backers receive business' shares as a reward. Crowdfunding campaigns are usually started to finance start-up; therefore investors can use start-up shares to generate high future returns by selling the shares when the enterprise will be in a mature stage or by collecting dividends.

They can also make investments at a lower cost than traditional channels thanks to the internet and to the crowdfunding platforms.

Community participation

Freely choosing a project and helping to create the desired product creates a sense of community and awareness of being part of the project's supporting team. Different types of investors coming together can strengthen ideas through their cultural diversity.

The sense of belonging to a community with heterogeneous individuals creates the *Wisdom of the Crowd*.³⁸ This phenomenon is made possible by the fact the individual knowledge of the community members is amplified inside the crowd.

Risk of failure reduction

Accumulating the capital from many people can prevent the project from failing, also the wisdom of the crowd is important in risk reduction; in fact, through it the contributors, which

³⁷Agrawal A., Catalini C., Goldfarb A., *Some Simple Economics of Crowdfunding*, 2013

³⁸Hakenes H. and Schlegel F., *Exploiting the Financial Wisdom of the Crowd*, 2014

usually are really interested in the project, develop a specific know-how and they can bring useful ideas for business success.

2.3.2 Advantages for project initiators³⁹

Lower cost of capital

Through crowdfunding entrepreneurs can access capital facing lower expenses. This is possible because they can find shareholders among a larger and international pool of investors that they can reach through the internet which is almost or totally free.

Another important benefit is given by the platforms that offer the bundling. This practice allows entrepreneurs to give investors some reward, as for example early access to innovative products, in addition to the sale of shares. A lot of contributors want to be “part of the innovation”, therefore this can be an incentive to invest in the project for them.

The innovation is a key aspect because it attracts early adopters who are those who want to be the first to invest in order to be the first to have access to the product or they want a social recognition for being part of the innovative product development.

All of the aspects that increase investors' willingness to pay reduce the cost of capital.

Benefits from the community

As the investors, also the project initiators are interested in sharing their knowledge and experience with their network to support success.

The participants of the community are the first customers and will be the future customers of the campaign creator.

Community participation is a key aspect of market validation, as the potential success of a product depends on community feedback, which in turn can help avoid future failures.

Also, the fact that the community is composed by heterogeneous investors with different cultures is important because they can bring ideas to improve the product, the marketing or the logistic aspects.

Maintain control

³⁹ Agrawal A., Catalini C., Goldfarb A., *Some Simple Economics of Crowdfunding*, 2013

The possibility of issuing shares without voting rights makes easier for entrepreneurs to keep the majority of voting shares that allow them to take decisions without a necessary approval from the shareholders.

2.4 Equity Crowdfunding Risk Factors

Equity-based crowdfunding is a very good alternative for traditional financing, but it's surely riskier.

The high economic risk inherent to this new method of financing has led to the need for regulation on the subject. The formulation of a new legislation regarding equity crowdfunding aims to make this instrument more attractive to investors and to protect them from the major risks they face investing in crowdfunding campaigns.

The main risks faced by investors are:

1) *Failure of the financed project.*⁴⁰

Newly formed companies, especially those that operate in innovative sectors, have a greater likelihood of failure than established companies. This aspect obviously increases the likelihood of the contributors to the project losing their capital.

As it's already known, there can be many reasons for the failure of a company.

If the project initiator is a startup it can happen that creators do not have experience with the logistic function, as for example dealing with suppliers, or they make some mistakes in considering and calculating the total costs and they may incur in unexpected costs that the startup cannot face. When a startup fails, the investors will almost certainly lose their money due to the fact that newly formed companies do not usually have enough capital or transferable assets to repay all creditors. Moreover, it needs to be considered that equity investors are generally the least likely to be refunded.

However, if the crowd is composed by professional or institutional investors well informed and with a good related preparation, the number of startups financed through a successful crowdfunding campaign that fail decreases.

⁴⁰ Agrawal A., Catalini C., Goldfarb A., *Some Simple Economics of Crowdfunding*, 2013

While around the 80% of startups is reported to fail in the first two years of activity, this number decreases by 60% if we consider only the equity crowdfunding model ⁴¹. This means that the startups financed through a successful crowdfunding campaign are the ones that have a solid and well-studied base that allows them to survive and perform.

Linked to the risk of failure there is the risk due to the lack of dividends. In its first few years of activity, a startup or a SME will not necessarily produce profits, that's why the investor has to have patience and a long term vision.

2) *Frauds.* ⁴²

Anyone can invest in a crowdfunding campaign, both professional and non-professional investors. Some investors may be inexperienced and optimistic and may be subject to bad investments as well as fraud. This risk is strictly linked to use of the internet to carry out transactions; unfortunately, it is relatively easy to create websites that look like fundraising campaigns, and this can put crowdfunding in the crosshairs of professional criminals.

One element that disfavors crowdfunding over fraud is the fact that very small investments can be made, so there is less incentive for a contributor to perform a thorough due diligence process. Also, in the case of small contributions it can cost more than a possible total loss on the investment. If the cost of due diligence is high and the individual benefit low, backers may underinvest in the first one and rely on other backers' investment decisions since the relevant information is public.

Precisely in order to limit fraud, the obligation has been imposed on banks or investment companies to manage payments. The amount of contribution can be paid only and exclusively to an account in the name of the issuer, opened with a bank or a securities brokerage firm.

Another aspect that can reduce the risk of fraud is *wisdom of the crowd*. If someone presents a fraudulent project in a big crowdfunding platform there is a high probability that some backer identifies it and, thanks to networks effects, he/she can spread the

⁴¹ Barret C., Rovnic N., *One in five UK crowdfunding investments fail*, Financial Times, 2013
Link: <https://www.ft.com/content/90eff1cc-8e00-11e5-8be4-3506bf20cc2b>

⁴² Agrawal A., Catalini C., Goldfarb A., *Some Simple Economics of Crowdfunding*, 2013

fact among the community. This will stop the criminal from continuing the campaign and will discourage them from starting a new fraudulent campaign as creating a new one with a different name and bank account will be difficult under the above-mentioned regulation.

3) *Liquidity risk.*⁴³

Investments in a crowdfunding platform are not illiquid, so if the contributors have an immediate need for cash, they will may not be able to get it so easily by selling their investments.

The liquidity of a financial instrument refers to its ability to be readily transformed into cash. An essential prerequisite for an instrument to be liquid is the presence of an organized market that allows supply and demand to meet. For financial instruments issued through equity crowdfunding platforms the trading in organized markets is not always allowed; this happens in the period in which the company is considered an innovative start-up.

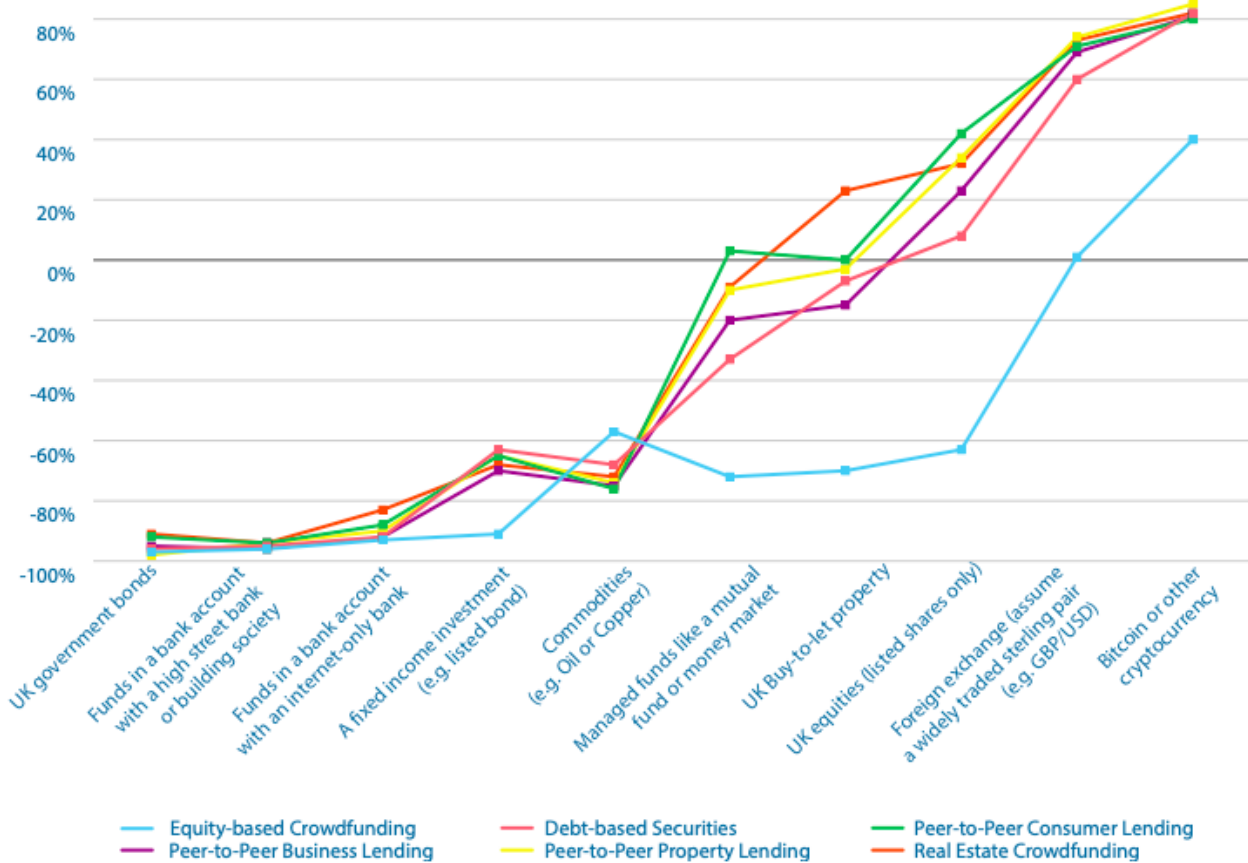
Another problem that makes liquidity risk higher is the fact that secondary market of instruments issued through a crowdfunding platform is undeveloped. This makes difficult for backers reselling their instruments to have a capital gain or to transform them into cash. This aspect have been discussed for a long time and in some case are the platforms that creates a framework to allow users to trade the instruments.

Despite the benefits it brings to the community, equity crowdfunding is considered the riskiest investment product.

The Cambridge Center For Alternative Finance conducted a study (2017) on the perceived riskiness of alterative finance instruments compared to traditional instruments and, as shown in figure 2, it was found that equity crowdfunding is perceived as the riskiest.

⁴³ Agrawal A., Catalini C., Goldfarb A., *Some Simple Economics of Crowdfunding*, 2013

FIGURE 2: Perceived Risk of Alternative Finance Compared to Other Forms of Investment by Model



SOURCE: Cambridge Center for Alternative Finance

British investors surveyed were asked to rate the "riskiness" of the online alternative finance activity they invested in compared to other forms of investment activity.

To compare perceptions of risk the responses were measured relative to each other, assigning the highest risk as -100% (all respondents consider crowdfunding riskier than the individual activity) and the lowest risk as 100% (all respondents consider crowdfunding less risky than the individual activity). On this scale, 0% represents the same amount of risk when comparing crowdfunding to the asset class.⁴⁴

Investors tend to view crowdfunding activities as riskier than traditional investment activities; specifically equity-based crowdfunding is considered the riskiest investment channel.

⁴⁴ Cambridge Center for Alternative Finance, *Entrenching Innovation – The 4th UK Alternative Finance Industry Report*, 2017

Is also possible to notice that all investment models are viewed as having similar levels of risk, with the exception of real estate crowdfunding; Buy-to-Let in the UK is seen as less risky than real estate crowdfunding compared to other crowdfunding models.

Crowdfunding doesn't involve risk only for investors but also for project initiators.⁴⁵

Even if starting a crowdfunding campaign is totally free due to the fact that the platform does not require any initial commission, this does not mean that the entrepreneur does not incur other types of costs. The first to increase are the administrative costs that serve to support the management of the fundraising and the eventual diffusion of the same among the community. These costs are not to be underestimated, especially if small and medium enterprises or startups have to face them.

Legal costs should not be overlooked either. They derive from the advice related to the issuance of new shares, the eventual changes in company's statutes and then the need to comply with the regulation imposed by the legislator and the platform.

A last but not least cost to consider is the one related to the mutation of the relationship with the "old" shareholders after the addition of new ones that, especially in the case of startups, can be a lot. Having a very large number of shareholders, moreover, entails a further increase in costs for the company, even if only in terms of the information duties that one has towards them.

The information that the project initiator has to share about the project and the eventual company behind it are also a factor of risk.

The entrepreneur has to consider two aspects in spreading their idea: it can be stolen or it can influence negatively the project initiator's reputation.

Most of the ideas are not patented and they are put into the public domain; this makes higher the possibility that they can be easily stolen especially if the stealer is a big company that can finance and realize them in a better way. This can damage the project initiator reputation and it can influence negatively possible future projects.

Entrepreneur's reputation can be damaged also if the campaign fails. The consequences, of course, depends on the reason of the failure. If it's due to project initiator's unfair conduct,

⁴⁵ Agrawal A., Catalini C., Goldfarb A., *Some Simple Economics of Crowdfunding*, 2013

he/she will surely have problem in gathering investors for the future campaigns.

Another risk related to the presence of all company's information in the crowdfunding platform concerns the relation between entrepreneurs and suppliers. Having access to all information the project and the company, suppliers can look at the balance sheet, at the cost structure and even at the forecasts and future plans. With all these information their bargaining power increases significantly.

2.5 Equity Crowdfunding: Comparison With Other Financing Models

Equity crowdfunding has all the general characteristics typical of crowdfunding and consequently there are traits in common with the other models such as a potentially large number of investors and fundraising made possible by the use of a web platform.

However, there are some differences from the general model such as the project goal (i.e., to finance an entrepreneurial project) and the type of reward that is given to the investor in return for the investment (i.e., the attribution of the title of shareholder and the rights that come with it).

According to the study done, this alternative finance tool has taken hold following the credit crunch due to the financial crisis of 2007-2008 and has offered SMEs and startups the possibility of easier access to credit which, through the traditional financing channel, would have been very difficult if not impossible.

Even access to public grants is not to be considered a viable alternative for these categories as they would have no guarantees regarding the timing of disbursement of funds and would not have the possibility of anticipating them while waiting for repayment.

Equity crowdfunding can be considered also a valid instrument of meritocracy insofar as those who have created a project with an excellent chance of success can turn directly to the public which, if it shares the initiative, will finance it without the need to provide guarantees. In addition, a large community of investors can give visibility to the project and contribute to its success drawing attention of banks which, given the number of investors and the company's performance, may decide to finance it.

This is what happened with Oval, an innovative startup which, following a crowdfunding

campaign through which it raised about 1.3 million euros, also obtained funding from the Intesa San Paolo group, which otherwise would probably never have fund it.⁴⁶

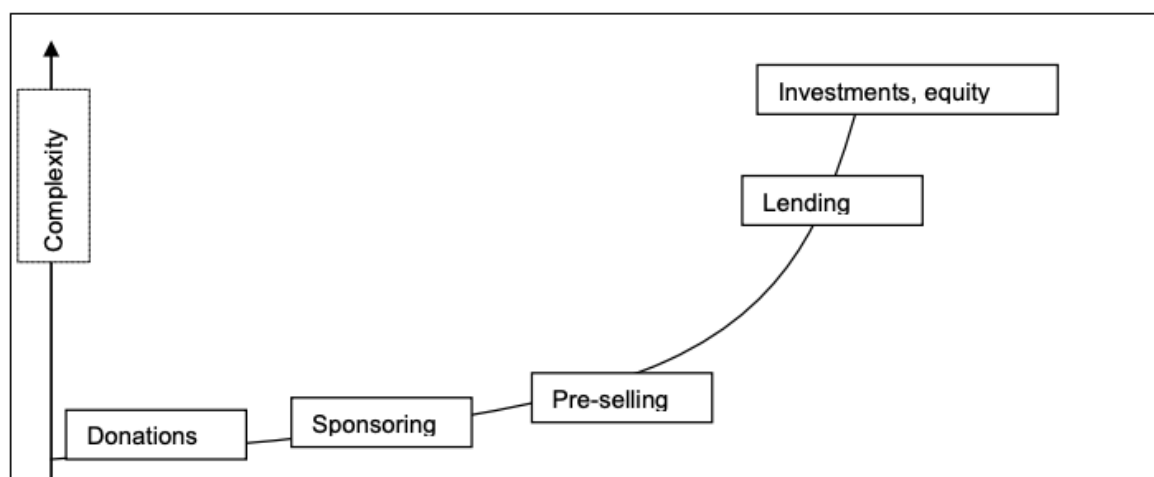
Equity crowdfunding differs from other models also for the complexity of the financing process, Hemer (2011)⁴⁷ proposed a classification of the types of crowdfunding depending on the complexity of the financing process. In order to proceed with the ranking, he analyzed the funding process under the point of view of the provision of capital.

The author argues that as it can take the form of donations (donation based model), sponsoring and pre-ordering or pre-selling (reward based model), lending (lending model) and Private Equity investments (equity based model), the complexity of processes varies greatly.

He also ranked the different forms of capital provision in the graph below starting from the simplest which are donations and ending with investments in equity that are the most complex processes. This aspect is easily deductible from the fact that is also the riskier and more articulated model.

The complexity of these processes increases due to a larger number of backers and an increase in micro-payment transactions that have to be managed.

FIGURE 3: The major forms of capital provision ranked by process complexity



Source: [A Snapshot On Crowdfunding \(2011\)](#)

⁴⁶ Oval website: <https://blog.ovalmoney.com/en/post/thanks-to-crowdfunding-oval-has-2-000-new-members-and-the-best-is-yet-to-come/>

⁴⁷ Hemer J., *A Snapshot on Crowdfunding*, 2011

Equity crowdfunding also has elements in common with other forms of investment, specifically with Business Angel and Venture capital.

The European Commission defines Business Angel as “*A business angel is a private individual, often with a high net-worth, and usually with business experience, who directly invests part of their assets in new and growing private businesses. Business angels can invest individually or as part of a syndicate where one angel typically takes the lead role*”.⁴⁸

Business Angel investors are typically entrepreneurs or managers that have a capital to invest. In addition to capital, they also provide specific skills, experience, and a wide network of strategic connections. These professional investors, who are aware of the risks and waiting period involved in such investments, are not interested in an immediate return. Their goal can be managing a business with high growth potential, or just being shareholders in a future successful company in order to generate a significant return with the sale of the shares.

Business Angel have an important role in the economy especially for new established ventures because they contribute to the success of the company and to the creation of new jobs.

Venture Capital is defined by the European Commission as an “*Innovative and growth-oriented small businesses need to acquire capital (equity investment) from external sources because they do not have their own or cannot access loans. Firms typically use venture capital to expand, break into new markets, and grow faster. Although only relevant to a smaller group, venture capital is essential for the growth of innovative firms*”.⁴⁹

Also Venture Capital investors focus on early stage firms and they provide them their experience and knowledge too, but they are generally funds and not individuals. They are particularly interested in businesses with a high potential for rapid growth, usually these are technology-intensive industries that have problems in obtaining financing from traditional channels.

These two types of investment, as well as equity crowdfunding, have in common the fact that they finance early stage companies with an high growth potential to generate a return from

⁴⁸ European Commission: https://ec.europa.eu/growth/access-to-finance/funding-policies/business-angels_en

⁴⁹ European Commission: https://ec.europa.eu/growth/access-to-finance/funding-policies/venture-capital_en

the future sale of shares, there is no real interest in remaining shareholders in the long term, but they also present substantial differences.

In the case of Business Angel and Venture Capital investments, financiers actively participate in the management of the company through the contribution of technical and managerial skills unlike backers who may be non-professional investors and therefore would have no way of being able to provide the company with any specific expertise in the sector; even less could they participate in the management of the activity.

The difference between Business Angel and Venture Capital investments and equity crowdfunding is not only substantial, but also formal; in fact the contracts in the case of crowdfunding are standardized and accessible through the platform, on the contrary those of Business Angel and Venture Capital are highly personalized and often subject to long negotiations therefore also involve higher costs.

These three sources of financing are not necessarily mutually exclusive, an early stage business can resort to two of them or all of them at the same time to finance its activities.

In some cases, they validate each other, in fact if a business is already the object of investment by an Angel investor or by a Venture Capital, it has a higher probability to run a successful crowdfunding campaign because this aspect can be seen as a positive one from the crowd.

This relation is bilateral: if a business' crowdfunding campaign was successful, it has more possibilities to become an object of interest of an Angel investor or of a Venture Capital fund.

2.5.1 Equity Gap

Equity crowdfunding appears to be a good mechanism to use at the beginning period, when new companies are entering the market and need to cover the existing funding gap.

The same Consob describes equity crowdfunding as a tool that is particularly well suited to use during the initiative's debut phase, or in the period immediately following, when the first revenue is generated. However, in certain circumstances, the founders of the business delay bringing on new partners in order to get a higher valuation for the project and the prospect of selling a reduced share of the company given the same financial resources.

Due to a lack of collateral and the risky nature of their business, they are frequently unable to obtain debt financing. As a result, they rely on income generation, financial aid from friends and family, and external sources of money to fund the early phases of their development.

Because many early-stage enterprises are unable to generate revenue, friends and family are frequently the first sources of external finance.

However, these financial sources are frequently insufficient to get through the early-stage phase, necessitating the use of additional venture capital sources.

Business Angels and Venture Capitalists, the traditional sources of venture capital, have switched their focus in recent years to larger investments in more developed companies.⁵⁰

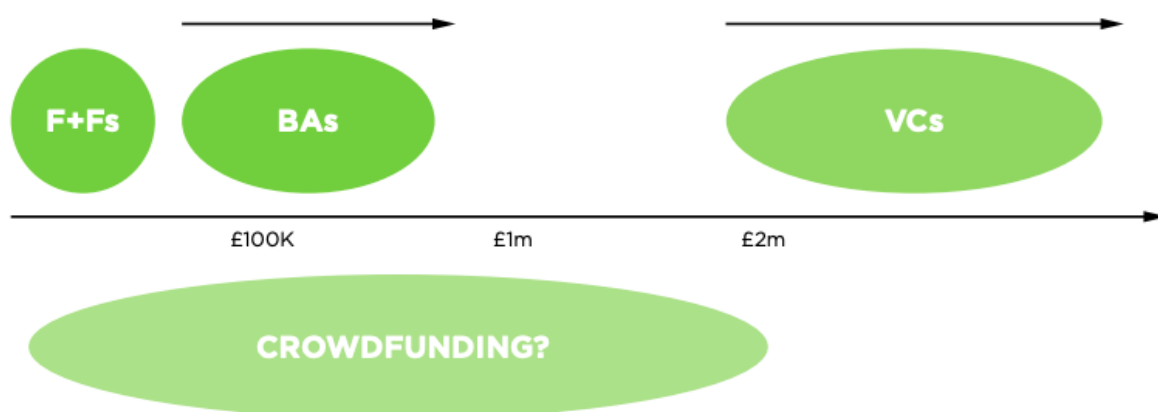
Business angels are increasingly banding together to invest in enterprises that are already well-established and seeking to fund between \$200k and \$1 million.

Venture capitalists, on the other hand, have generally abandoned early-stage investments as the link between transaction costs and investment size becomes increasingly unsuitable for their business model.

According to the study done, two new market sectors have emerged where equity crowdfunding could be beneficial.⁵¹

The first is in the seed stage: when personal capital is insufficient and the sums necessary are too modest for business angels to invest, equity crowdfunding can assist the early-stage firm. The gap between the level at which Business Angels are active and the level at which Venture Capital firms operate is the second area where this funding strategy is becoming increasingly popular (see figure).

FIGURE 4: Equity Crowdfunding in Relation to the Equity Gap



SOURCE: Collins L., Pierrakis Y., The Venture Crowd, 2012

⁵⁰ BVCA, *Private Equity and Venture Capital Report on Investment Activity*, 2017

⁵¹ Collins L., Pierrakis Y., *The Venture Crowd*, 2012

Until recently, most of the funds raised through Equity Crowdfunding were in the lower gap, but as the phenomenon spreads and platforms improve, average funding is progressively growing.⁵²

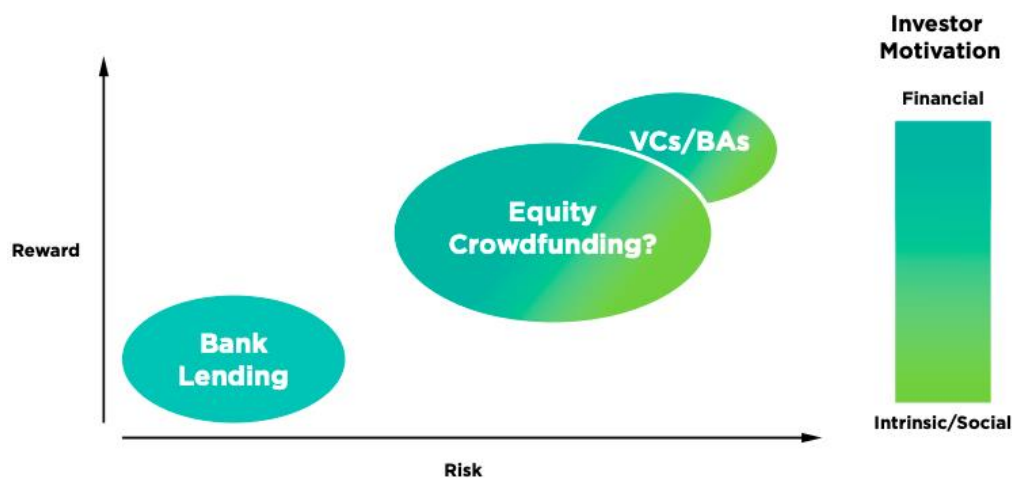
2.5.2 Risk-Reward Opportunities

Entrepreneurs seeking financing frequently encounter a problem with the balance of risk-return that traditional investors desire when investing in early-stage enterprises.

High-risk initiatives are favored by business angels and venture investors because they provide for a higher return. This makes access to venture capital and business angel funds very difficult for enterprises that do not have the potential to give such high returns and that are characterized by a lower level of risk (figure 5).

These firms, as well as initiatives whose associated risk is larger than the possible reward, are frequently able to finance themselves through Equity Crowdfunding.

FIGURE 5: Business risk–reward profile where crowdfunding may fit



SOURCE: Collins L., Pierrakis Y., *The Venture Crowd*, 2012

Non-financial benefits such as material and intangible material rewards and intangible benefits related to the fact of participating in an entrepreneurial initiative represent sufficient added value to make investors willing to accept greater risks are available for the second type of initiative.

⁵² Collins L., Pierrakis Y., *The Venture Crowd*, 2012

In this scenario, equity crowdsourcing could be a useful supplement to traditional corporate finance. Because of its qualities, this strategy is better suited to getting lower quantities than traditional techniques due to limiting considerations such as the extent to which individual investors can and are willing to contribute given the high level of risk they are exposed to. However, this is dependent on whether or if professional investors participate in Equity Crowdfunding campaigns.

The notion of co-investment between professional investors and crowdsourcing is still a relatively new occurrence. In recent years, the number of professionals using crowdfunding has increased.

Another element that makes Equity Crowdfunding particularly ideal for seed-stage and early-stage fundraising is the ability for investors to commit relatively small amounts to many initiatives, allowing them to diversify their investments and so reduce risk.

CHAPTER 3 – The Global Crowdfunding Market

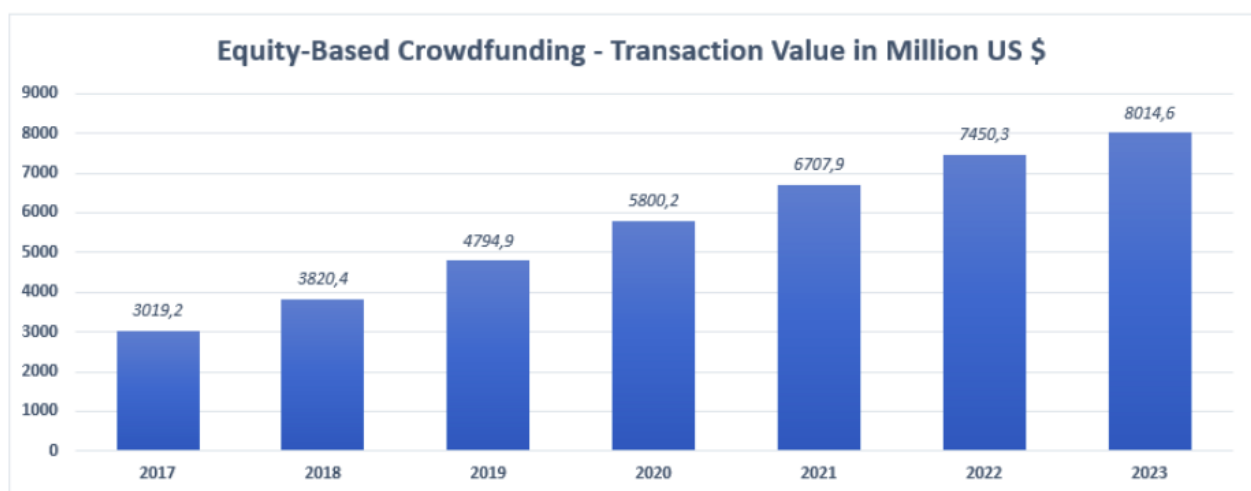
3.1 Global Crowdfunding Market ⁵³

This next chapter is going to focus on alternative finance and equity crowdfunding global markets especially in developing economies. It will be analyzed the specific case of China, where crowdfunding had a rapid boom and an even more rapid crash.

By taking a closer look at the crowdfunding market analysis, latest data reveal that the crowdfunding market is growing rapidly. The market consists of equity-based crowdfunding, reward-based crowdfunding, donation-based crowdfunding and P2P consumer lending and P2P business lending with a total market size \$358,275 billion.

According to the study from Statista, equity crowdfunding transactions will continue to grow until 2023 (Figure 6). Although the numbers of campaign almost doubled during the period 2017-2020, the analysis emphasize a slower pace which means the growth will be 23,3% in 2020, but only 7,8% in 2023. Therefore, the forecasted CAGR will be 3,37 for the 2020-2023. Due to the improvement of education, the higher standards of economics and living circumstances allows the crowdfunding market to grow and crowd investors to invest higher amount in the projects.

FIGURE 6: Equity-Based Crowdfunding – Transaction Value



SOURCE: Statista

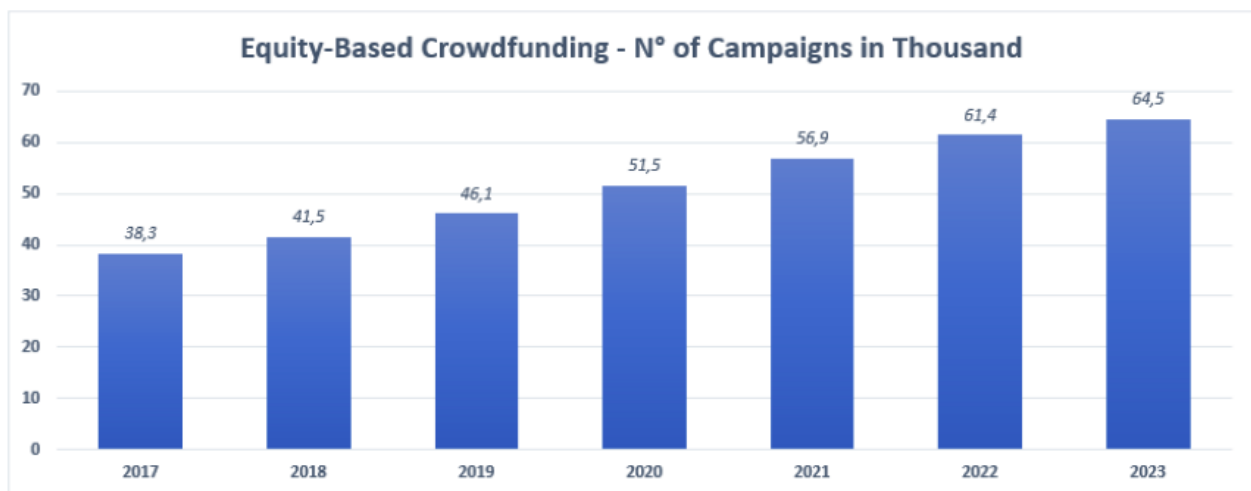
⁵³ All the data have been taken from STATISTA reports

Looking at the geographical aspect China with a transaction value of \$7,049 billion takes 83% of the whole market. In second place the United States stands with \$782 million and a 9% share of the total market. Followed by the United Kingdom with \$100 million, accounting for 1% of the total market. Central and Western Unions have a funding amount of \$296 with a share of 3,46%

Regarding the equity-based crowdfunding, compared to the period 2017-2020 the growth will be slower too and the number of campaigns grew of 34.46%.

For the period 2020-2023 the expected growth of the number of campaigns will be 24.27%, from 51,5 thousand to 64,5 thousand campaigns and the anticipated annual CAGR will be 11,4% with an amount of \$8,014 billion (Figure 7). Followed by an increase of the amount per campaign from \$112.615 to \$124.208. Due to the lower risk compared to the equity-based crowdfunding, the reward-based crowdfunding attracts more capitalist.

FIGURE 7: Equity-Based Crowdfunding - Number of campaigns



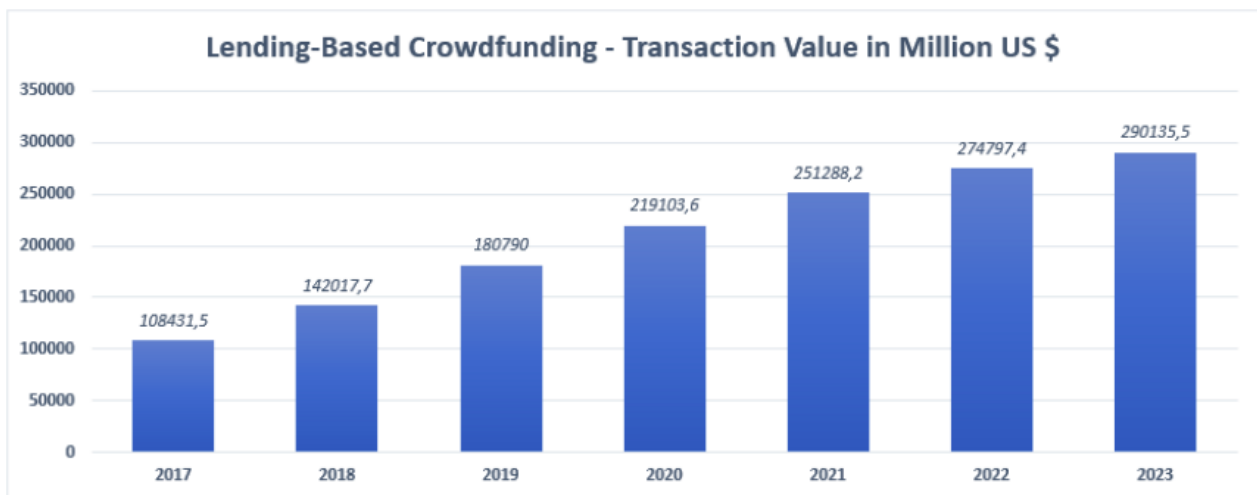
SOURCE: Statista

A closer look at the geographical distribution shows an inverse trend as equity-based crowdfunding market is more balanced than reward-based crowdfunding. The first place is taking by the Central and Eastern Europe with \$1,711 billion which means they are taking 29.5% of the market share than followed by Eastern Asia with \$1,353 with 23,32%, Western Asia with \$1,209 and 20,84%.

Another crowdfunding model is the lending based one. For the period 2020-2023 the forecast CAGR will be at 9,8%, compared to the period of 2017-2020 it will be lower. In general, the total number of loans grow with and an increasing amount from 41,797 thousand to 50,671 which results in a start of an amount of \$219,103 billion and ends with an amount of \$290,135 billion (Figure 8).

The same trend will be followed by the total number of transactions, increasing in nominal terms from \$ 41,797 thousand in 2020 to \$ 50,671 thousand in 2023, with a CAGR of 6,69% (compared to 9,89% during 2017-2020). Even though, the average funding per loan will increase from \$ 4.829,3 (2020) to \$ 5.726 (2023).

FIGURE 8: Lending-Based Crowdfunding – Transaction Value



SOURCE: Statista

Geographically, Eastern Asia is the frontrunner, taking 81,48% of the whole market and a transaction of \$178,522. The second place takes Northern America with \$7,813 and 3,57%, closely followed by Central and Western Europe with \$4,054 with 1,85%.

In this study traditional bank loans and business-to-business credit service are excluded.

Consider the year 2020 where the total of all types of crowdfunding is \$233,44 billion, donation-based crowdfunding has a global market size of \$124,835.

Regarding the analysis of the crowdfunding market with respect of the geographical aspect, China is the leader with a market volume of \$325,25 billion and a market share of 85,99%. The United States which take a global market share of 10,27% dominates the American

market with a market share of 96,5% and market volume of \$42,8. Nevertheless, Latin America and Caribbean countries could double their transaction level since 2013. In the European market there is a huge gap between the frontrunner, United Kingdom with 1,88% and \$7,85 billion, to the other countries for example France with \$0,73 billion, Germany with \$0,66 billion, Netherland with \$0,31 billion and Italy with \$0,27 billion.

Equity based crowdfunding amounts to approximately \$5 billion of the global online alternative finance market where real estate crowdfunding accounts for \$2.96 billion of the total amount.

Real estate crowdfunding is a type of equity crowdfunding in which the project developers are companies or individuals that operate in the real estate sector. By participating in real estate crowdfunding campaigns, the investors can buy a part of the company and they will be treated as a company' shareholders, therefore they will earn a portion of the profits generated by the property. Real estate crowdfunding is 60% of the total equity based crowdfunding activity.

Beside its very small size compared to debt based models, equity crowdfunding gets more attention from regulators and policy makers. US is the leader talking about the equity based crowdfunding model, followed by UK and Europe in third place with \$278 million (CCAF, 2020).

Non-investment crowdfunding models that are reward based and donation based constitute the smallest percentage of the global alternative finance market, but they are critical for countries who just entered into the alternative finance world. US once again leads the reward based crowdfunding market, second Asia-Pacific region (excluding China), and lastly Europe.⁵⁴

Internationalization has been increasing in terms of platforms operating in multiple countries and engaging in cross border activities for what concerns the lending crowdfunding, the invoice trading model and the debt based securities; but its level is lower for other models such as real-estate crowdfunding and equity based crowdfunding that require property as a security or local relations. Investing in close proximity-companies happens quite commonly

⁵⁴ Yasar B., *The New Investment Landscape: Equity Crowdfunding*, 2021

in equity investments, and this local bias seems to hold for equity-based.

Equity based crowdfunding seems to be mainly a domestic activity since investors may prefer to know the business owner to estimate the risks of the investment. Investors will also try to avoid cross-border investments because they feel safer when they are familiar with the regulatory compliance. Moreover, equity investments are more regulated due to relatively higher risk (regulations may change between countries)⁵⁵.

3.2 Finance Democratization

One of the main research questions is whether alternative finance has democratized access to finance and can lead to bigger financial inclusion.

Financial inclusion is defined by the World Bank as “*people’s access to financial products and services suiting their needs*” and has wide ranging benefits such as improving people’s potential to earn income and reduce penury.⁵⁶

Having an account at a financial institution or mobile service provider indicates financial inclusion as it enables individuals to save, access loans and manage financial risk.

One metric for financial inclusion is individual’s banking status because people that use financial service always have at least a bank account and they have the opportunity to access banking services. The CCAF conducted a survey to understand how many people cannot have access to traditional financial products and services or are unbanked. The survey tells us that the highest percentage of unbanked customers is around 18% in Africa and Asia-Pacific (not including China). In the USA and Canada, the number of unbanked customers is almost equal to zero but while underbanked customers who have access to financial products and services are 25% and 38%. CCAF suggests that the promise of democratization of access to finance has yet to be fulfilled and this may be related to platforms’ efforts to get legitimacy and scale up first or the discrimination by institutions which are growing in numbers in alternative finance market as well.

Banking status of customers also differs across alternative finance models; for example, the equity based and real estate crowdfunding models have recorded the highest percentage of banked customers.

⁵⁵ Yasar B., *The New Investment Landscape: Equity Crowdfunding*, 2021

⁵⁶ Demirgüç-Kunt A., Klapper L., Singer D., Ansar S., and Hess J, *The Global Findex Database 2017 – measuring financial inclusion and the fintech revolution*, World Bank Group, April 2018.

Guenther et al. (2018) investigate whether equity crowdfunding democratizes access to finance for remotely placed entrepreneurs or whether investors in equity crowdfunding, similar to traditional investors, are sensitive to the geographic distance between them and the potential investment's location. Using a sample from one of the leading equity crowdfunding platforms in Australia, ASSOBS, the authors find that home country investors are sensitive to distance, but overseas investors are not. Home country investors', both accredited and retail, likelihood to invest in equity crowdfunding projects decreases as the distance between them and the potential venture increases. Empirical evidence has shown that besides distant entrepreneurs, women have difficulties in accessing financing in capital markets. Vismara et al. (2017) investigate whether equity crowdfunding democratizes access to finance for women using a sample from one of the leading crowdfunding platforms in the United Kingdom, Seedrs, and show that gender diversity is greater in equity crowdfunding platforms than traditional entrepreneurial finance markets. On the other hand, another study⁵⁷ shows that the likelihood of successfully raising funds in equity crowdfunding is not higher for women and minority entrepreneurs. More research is needed on whether equity crowdfunding succeeds in democratizing the supply and demand sides of entrepreneurial finance. Future research can focus on other underrepresented or underserved groups (which depends on age, gender and so on) in entrepreneurial finance markets. More and following analysis can observe whether the funded ventures succeed and spread in a similar fashion to ventures raising capital via traditional channels.

3.3 The Importance Of Crowdfunding In Developing Economies

Choosing which crowdfunding model to use is based on the type of project, the geographic area in which you operate, and the level of capital you need to raise.

The world bank proposes a table in which they break down the various models and the contexts in which it would be best to use them, these contexts are determined by final goal of the crowdfunding campaign and by the amount of capital needed⁵⁸. The last two columns of the table below (Figure 9), evidence the suitability of the models in developing countries and in the case of the project initiators are high-growth/innovative startups.

⁵⁷ Cumming D., Johan S., Zhang Y., The Role of Due Diligence in Crowdfunding Platforms

⁵⁸ The World Bank, Crowdfunding's Potential for developing World, 2013

From an analysis of the table below, it can be seen that the donation based model fits better with projects related to the arts or to social and charitable purposes that need to raise a little amount of capital. This model is not useful to finance startup because the capital raised through it is usually too low.

The reward based model is more suitable in the case where a product or concept is being developed, this model is suitable for startups because it's a good tool to receive feedback about a product in development or just to start its production.

Lending crowdfunding is more suitable for loans to small businesses that need a moderate amount of money in the short term and that already have a positive cash flow to be able to repay the debt.

Finally, there is equity crowdfunding which is more suitable in the case of financing companies or startups with great growth potential. Most of the times the startups financed through this financial tool are the ones who work in technology industry.

All of the models are suitable to be used in developing countries and, as it will be explained in the following pages, they are useful to enhance developing economies.

FIGURE 9: Suitability of crowdfunding models for the developing world

	Most suitable project type	Average funding sought (US\$)	Suitable for exploration in developing world?	Suitable for high-growth, innovative start-ups?
Donation-Based Crowdfunding	Arts	< \$10,000	Yes	No, if capital requirements are > \$10,000
Reward/Pre-sale Crowdfunding	Project, Product	< \$100,000	Yes	Yes, as a testing ground for proof of concepts
Microfinance	Micro development	< \$1000	Yes	No if capital requirements are > \$1000
Social Lending	Micro development	< \$50,000	Yes	Only if capital requirements are < \$50,000
Crowdfund Investing/Equity	Technology Innovation	< \$250,000	Yes with the right infrastructure	Yes

Source: World Bank

The World Bank has conducted research aimed at identifying the factors that favor the spread of crowdfunding in a given country so as to be able to understand in which countries the phenomenon is most likely to succeed. The result of this research establishes that the factors mentioned above are ⁵⁹:

- *Education.* A positive correlation was found between educational variables and the launch of crowdfunding campaigns. States with citizens with a higher level of education are more likely to have successful crowdfunding platforms. Education enhances the spirit of entrepreneurship and provides the knowledge necessary to pursue business.

- *Face-saving.* A negative correlation has been shown between face-saving (i.e., the primary need to save reputation and dignity) and the prevalence of crowdfunding portals. Face-saving leads to uncertainty avoidance and thus increase risk aversion. This phenomenon is especially widespread in societies characterized by strong collectivism in which individuals exert a strong influence on others.

The countries most likely to witness crowdfunding success are those with a more individualistic society in which individuals snub the thoughts of others and are more performance-oriented.

- *Regulation.* Countries with a highly regulated economy possess a barrier to entry that is complicated to break down because it raises the cost of entering the market. In these countries it is more difficult for crowdfunding to be successful because if on the one hand regulation offers a guarantee of protection to investors (positive correlation), on the other it blocks potential project initiators or platform owners. The emergence of the latter, in fact, is favored by low market entry costs.

- *Social media penetration.* Social media penetration, of all things, is the variable that has the greatest correlation with the emergence, growth, and spread of crowdfunding platforms. This aspect could only be deduced by analyzing the nature of crowdfunding,

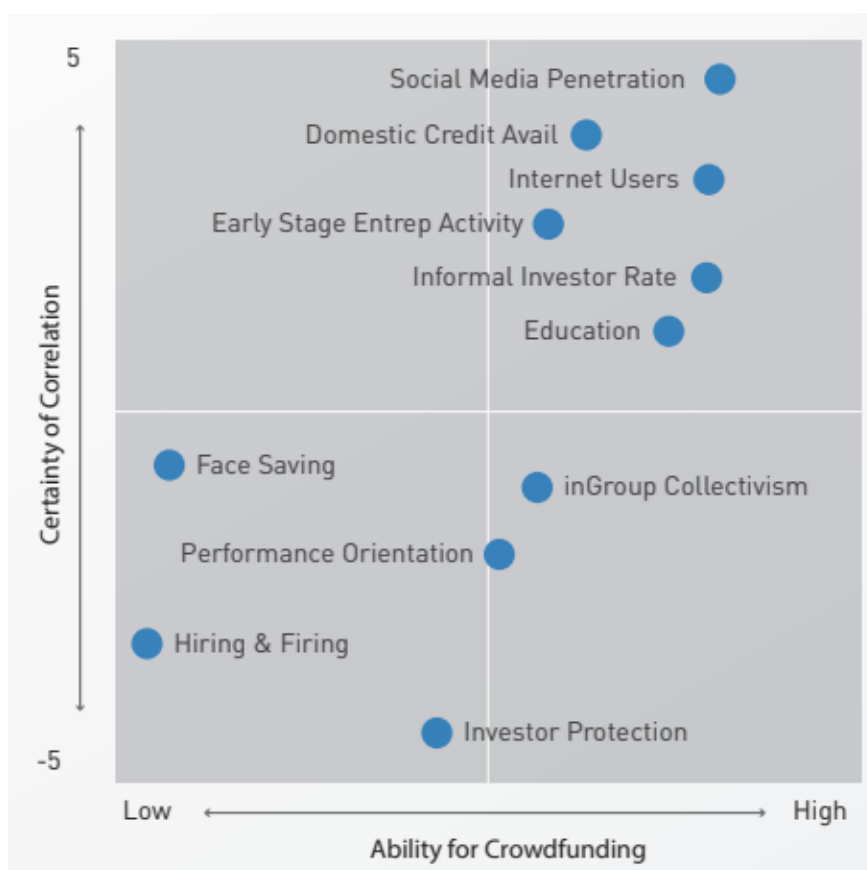
⁵⁹ The World Bank, Crowdfunding's Potential for developing World, 2013

the success of which basically depends on the use that project initiators and investors make of social media.

- *Invested capital.* The amount of invested capital within a given country by foreign investors and formal domestic credit are positively correlated variables with the number of crowdfunding platforms present in the same.

The world bank has collected the above results within the following graph in which the variables correlated to the facilitation of the launch of crowdfunding platforms and the level of certainty of the correlation are highlighted.

FIGURE 10: Factors enabling or deterring a crowdfunding ecosystem



SOURCE: World Bank

Understanding what factors influence the increase or decrease in the number of platforms within a country is very important as the geographical distribution of these is totally asymmetrical.

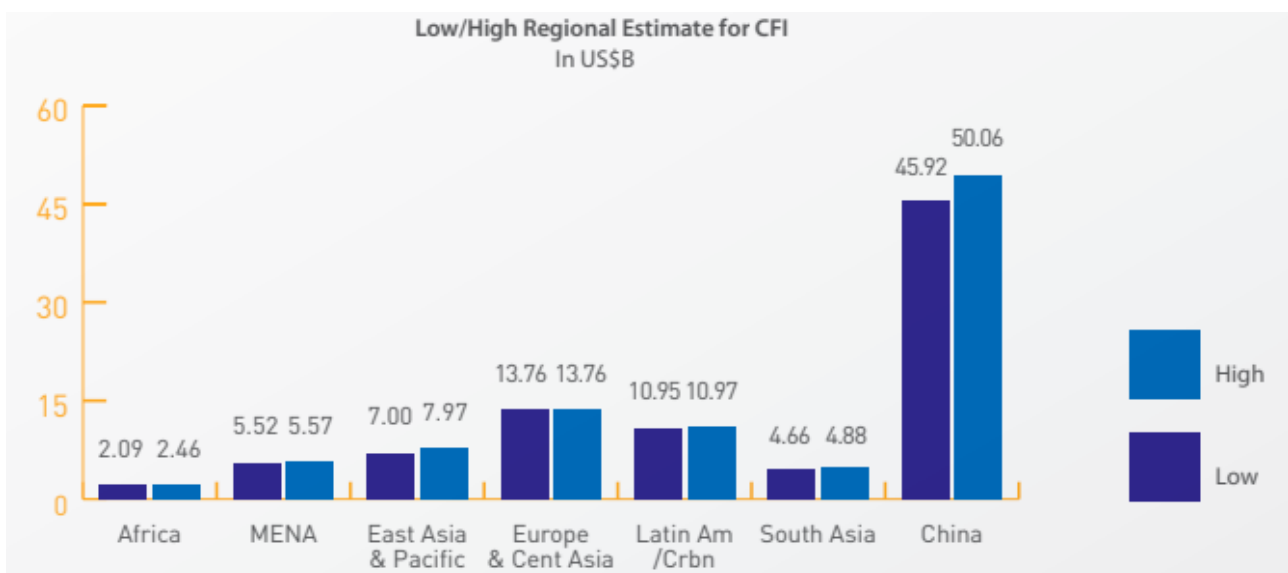
In recent years, numerous platforms have been created or expanded in Africa, South America, Asia, and the Middle East, but the vast majority (about 95%) of these operate or are based in Europe and North America.

Considering the fact that crowdfunding is a phenomenon of recent reaction and diffusion, it is difficult to predict what its future developments will be and in which countries it will take off the most. However, the World Bank has conducted an analysis to estimate the possible evolution of crowdfunding in developing countries.⁶⁰

The research was carried out taking into consideration the number of households that have the possibility to access the services offered by the platforms; the amount that can be invested in crowdfunding (in USD, based on securities) and the amount of money that will be reallocated by the investors.

The results of the research show that in developing countries, considering the level of income, 240 million to 344 million households could access the services offered by crowdfunding platforms and that the total market potential of crowdfunding is estimated at up to 90-96 billion dollars per year.

FIGURE 11: Crowdfunding potential by region



SOURCE: World Bank

In the figure above (Figure 11) it's possible to see which is the crowdfunding potential for

⁶⁰ The World Bank, Crowdfunding's Potential for developing World, 2013

each region. The country with the most potential is China, which has an estimated 50% of the total. In second place you can find Central Europe and Central Asia, right after there is the rest of Asia followed by Latin America/the Caribbean; MEDA and the last one is Africa. China seemed to have all the potential to become a world leader in the crowdfunding market, however it has structural problems such as intellectual property, and limitations on securities markets that delay its development or block it.

3.3.1 Opportunities

Crowdfunding, if properly regulated, can increase the growth opportunities of an entire economy starting with small business owners and SMESs.

The most important benefits bought by this funding option is the fact that it improves financial inclusion.

As argued by Global Partnership For Financial Inclusion (2016) crowdfunding can support financial inclusion as "*... it can be a quick way to raise funds with potentially few regulatory requirements; it can be cost-effective and can produce a good return for the funder; and its potential market reach is limited only by barriers to accessing the platform and regulatory restrictions where applicable.*"

This phenomenon can contribute to financial inclusion by: ⁶¹

- 1) Improves access to credit by individuals who would otherwise be excluded from the traditional financing system.

This is the most immediate benefit you think of when talking about crowdfunding.

As highlighted earlier, crowdfunding platforms are the means for SMEs, startups, and individuals with no collateral and limited credit background to access funding. This narrows the gap between these individuals and large companies or already established entrepreneurs, therefore allowing the inclusion of new categories of users within the financial markets.

Crowdfunding can be also useful to address a period of financial distress, it is not necessarily aimed at creating new businesses.

⁶¹ Jenik I., Lyman T., Nava A., Crowdfunding and Financial Inclusion, 2017

- 2) Allows the continued innovation of existing financing methods such as microfinance Crowdfunding facilitates the digitization of finance and does so by enhancing the use of certain financial products or by leveraging technological innovation to replace or enhance traditional investment models and make them more easily accessible.

The digitization of finance enhances the globalization of investment therefore developed economies have less cost and more incentive to invest in underdeveloped ones. One of the platforms that has been most involved in this is Kiva, which has facilitated more than 1 million loans from backers residing in developed countries to low-income entrepreneurs residing in developing countries.

- 3) Allows access to more complex financial investment vehicles for real estate construction (such as real estate crowdfunding).

having extra security, these households may decide to invest their surplus perhaps in asset savings. These investments can also be made with a derisory capital, just think of real estate crowdfunding, which allows you to invest in a property even with a low amount of savings.

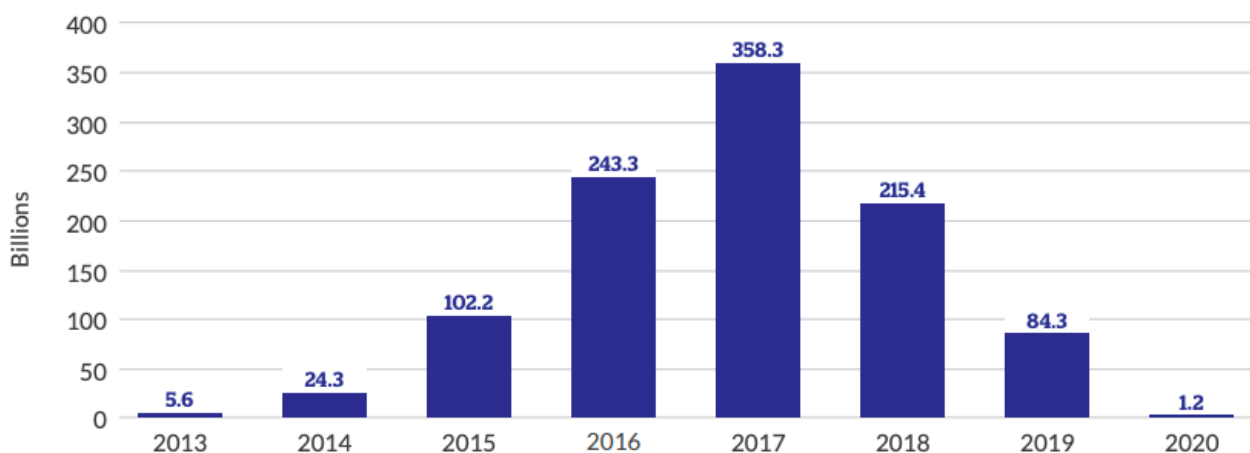
3.4 Crowdfunding In China

Online alternative finance in China has had a unique development over the years. The volume of transactions grew dramatically at first from \$5.6 million in 2013 to \$358.3 million in 2017⁶² and then collapsed from 2018 to the present. As shown in the chart below, in 2019 the total volume dropped to \$84.3 billion and then to \$1.2 billion in 2020.

This collapse is primarily due to 'tightening regulation in this area and a crackdown on improperly licensed platforms. The latter has emerged as a result of growing complaints due to the large number of frauds carried out, defaults and loan defaults, elements that have led to the closure of a large number of platforms that have gone from being 6,000 in 2017 to currently being 29.

⁶² The size of the industry has grown by nearly 6,400%.

FIGURE 12: Chinese Alternative Finance Market Volume 2013-2020, USD



SOURCE: Cambridge Center for Alternative Finance

According to the report of Cambridge Center for Alternative Finance (2021), in 2020, China's alternative finance accounted for only 1.03% of global volume.⁶³

The latter phase is not considered by all authors on the subject to be a collapse phase; authors Liang Zhao and Yuanqing Li still consider it to be a development phase. They divide the period of expansion of the crowdfunding phenomenon into three phases.⁶⁴

The first is called the "rudimentary phase" and runs from 2011 to 2013, a period in which the phenomenon was contained in geographic expansion and volumes; the second is called the "hyper-growth phase" which runs from 2014 to 2017 in which the number of platforms and their volumes increased considerably; and the third which runs from 2017 to the present which is called the "Cautious Development Phase" where both the number of platforms and the volume of transactions decreased dramatically due to the tightening of regulation.

The latter is not considered a phase of decline, but rather one of continuous development and settling while waiting for a new official regulation that may allow for a new phase of expansion.

⁶³ Cambridge Center for Alternative Finance, *The Second Global Alternative Finance Market Benchmarking Report*, 2021

⁶⁴ Li Y., Zhao L., *Crowdfunding in China: Turmoil of Global Leadership*, 2020

Alternative finance was an important financing option for entrepreneurs, start-ups, and small and medium-sized businesses. Finally, original ideas found financial support and SMEs had a better chance of growth. In 2017 the volume of equity based crowdfunding was 224.97 million dollars and then collapsed to today where it amounts to 40000 dollars. ⁶⁵

In 2017, 1053 online equity-based crowdfunding campaigns were conducted in China; among them, 745 projects reached the project goal with success rate is 70.75%.

In the country, equity crowdfunding was used to finance mostly projects belonging to the following sectors: technology, physical stores, music, film and television, tourism, music, publishing, games, and agriculture.

A peculiarity of equity crowdfunding in China is that the number of investors per project was not high; in fact, 63% of successful campaigns had less than 60 investors and 93% of successful projects had less than 160 investors. Only 44 projects had more than 160 investors. Also in the same year, total business funding volume was \$111.8 billion, a value the after decreased significantly. ⁶⁶

With the decrease in the volume of investment models there has been a growth of non-investment models that have seen a reversal of the trend since, as can be seen from the table below, from 2015 to 2017 they decreased (the donation model was even considered zero) and, instead, from 2017 to today they have increased.

TABLE 1: Crowdfunding Market Size in China

Crowdfunding Models	Market Size (USD)					
	2020	2019	2018	2017	2016	2015
Equity-based Crowdfunding	0.04m	0.07m	22.18m	224.97m	461.00m	1447.78m
Donation-based Crowdfunding	0.41m	0.13m	0.12m			
Reward-based Crowdfunding	7.89m	9.87m	5.68m	5.04m	2015.52m	829.52m
Invoice Trading	13.45m	94.02m	691.31m	5605.17m	2280.10m	1458.38m

DATA SOURCE: Cambridge Center for Alternative Finance

⁶⁵ Cambridge Center for Alternative Finance, *The Second Global Alternative Finance Market Benchmarking Report*, 2021

⁶⁶ Li Y., Zhao L., *Crowdfunding in China: Turmoil of Global Leadership*, 2020

The crowdfunding platform Demohour was the one that started the spread of the phenomenon in China in 2011. Demohour, to date, is the most important crowdfunding portal in China. In its first two years of operation, from 2011 to 2013, the total volume of funds raised by the platform was about 6.5 million Y (about \$1 million). The maximum amount raised to fund a single project was 1.6 million Y (about \$260,000), 3596 backers participated in the capital raise, and the project raised 131% of its initial goal.⁶⁷

The most successful platform within the country is not Chinese but is the most famous American platform Kickstarter that only in the year it started operating in the country, 2012, raised US\$319 million. An element that has favored its success over that of Demohour is the fact that the former only asked for a 5% commission at the moment of concluding the campaign, while the latter 10%.

In the early years of crowdfunding growth in China, the government took a wait-and-see approach; thus, there was a kind of laissez faire towards the crowdfunding platform market that did not have a well-defined regulatory framework.

The consequence of this approach was that the number of platforms grew by leaps and bounds and practices developed that were complicated to control and contain, such as pooling, slicing, other processes similar to securitization and bundling of the underlying loans (a process not too far removed from securitization)

distant from securitization) and maturity transformation similar to shadow banking.

In addition, provinces and cities had enough autonomy when it came to regulatory requirements, so there were discrepancies between platforms and geographies.

Due to the increase in fraud and insolvencies, the government created a regulation specifically for the phenomenon, which with the tightening of rules saw the relevant platforms halved at first, to 29 against the initial 6000.⁶⁸

With the new regulations crowdfunding platforms have suffered, especially due to the law which prevents the sale of shares to the public by unregistered companies and individuals. Campaigns involving shares or the promise of future returns are often cancelled because they are considered illegal.⁶⁹

⁶⁷ The World Bank, Crowdfunding's Potential for developing World, 2013

⁶⁸ The World Bank, Crowdfunding's Potential for developing World, 2013

⁶⁹ The World Bank, Crowdfunding's Potential for developing World, 2013

This is a strong barrier to the development and spread of equity crowdfunding; therefore, the most popular models within the country are based on rewards and donations, and platforms. For these reasons crowdfunding is often used in the same way as for other types of investors. This is the case of many fundraisers that represent only a small percentage of the capital that the project initiator needs to finance the entire project; in these cases, the real goal is to successfully conclude a crowdfunding campaign and use it as a proof of concept in order to attract the interest of other investors such as venture capitalists or business angels.

Another reason for the higher success of the reward based model in China is that Chinese backers have a more consumerist than entrepreneurial mentality, they prefer to buy the product than to invest in a project to get a future return. They are generally more interested in the benefits that the reward-based model gives to buyers (preselling, early information about the product etc.) than in the idea of participating in the creation of the project or becoming shareholders.⁷⁰

⁷⁰ The World Bank, Crowdfunding's Potential for developing World, 2013

CHAPTER 4 – Empirical Analysis

In the next chapter, it will be analyzed the successful equity crowdfunding campaign of YOCABÈ, an Italian innovative startup whose main job is working with different brands in order to improve their sales and their presence on marketplaces.

Then it will be conducted an empirical analysis of the European crowdfunding campaigns in order to demonstrate that equity-based crowdfunding is a good funding option for innovative startups, and it gives them different benefits.

4.1 Equity Crowdfunding: An Italian Case Study

YOCABÈ⁷¹ is an Italian startup founded in 2016 that helps businesses connect with the marketplaces of the most popular e-commerce platforms. It provides a technology platform and infrastructure for major fashion and accessory brands to advertise their image and sell their products on e-commerce behemoths like Amazon, eBay, Zalando, and others, which account for 50-70 percent of total sales. The platform, in particular, uses a mobile algorithm to manage logistics, product listings, and pricing.

Vito Perrone and Lorenzo Ciglioni, today's managing director and head of the purchasing department, founded the company, which is now joined by Andrea Mariotti, who is in charge of the many brand agreements.

As Perrone explained: *"the startup has created the technological platform and infrastructure necessary to enhance the image of a brand and its products on online retailers, to manage inventory allocation and global distribution, and to define margins and sales volumes in compliance with brand policies."*

To streamline shipments and returns, the firm has 35 facilities across Europe and the United States. Germany, France, Holland, Belgium, Austria, Spain, Switzerland, the United Kingdom, and the United States are the company's key markets. Among its clients, there are a lot of important and famous brands such as Diadora, Refrigiwear, Carrera, Breil, Obag, and ALV by Alviero Martini.

⁷¹ All the information about the startup have been taken from the company's website. They are available at the following link: <https://www.yocabe.com/chi-siamo/>

YOCABÈ's service is aimed at medium-sized businesses, which account for half of the European market; it excludes huge corporations (who have the means to spend in proprietary e-commerce) and small businesses that are not yet ready to expand their operations online.

The technological infrastructure of the firm is made up of the following components:

- *Smart Catalogue*: to construct multi-language digital catalogs that adhere to each platform's specifications.
- *Smart Pricing*: algorithms determine the optimal selling price at any given time based on brand partner indicators, shipping, and return costs, and competition.
- *Smart Logistics*: to reduce shipping costs and times by optimizing product allocation across different warehouses (including retail and marketplace logistics).
- *Smart Synching*: To synchronize quantities and update content across many platforms.
- *Customer service*: to manage customer inquiries from multiple marketplaces in a unified manner.

While The logistics infrastructure consists of:

- *Logistics Network* that includes national and international logistics centers, brand partner warehouses, and marketplace logistics centers.
- *National and international couriers*, hand-picked to satisfy each platform's requirements and cut shipping costs and returns.

Business Model

YOCABÈ allows its customers to distribute their products through the *direct-to-consumer model*. Companies that adopt this distribution model create and ship their goods directly to customers, bypassing traditional retailers and other middlemen. This enables them to sell their products at lower prices than traditional consumer brands while also maintaining complete control over their production, marketing, and distribution.

The company charges clients a commission on sales in exchange for the services provided. Clients must additionally pay for shipping and returns, as well as, if necessary, storage services if warehouses are used (70 percent of cases). Because of the increased volume of sales, it has been able to reduce logistics expenses by providing clients with low and

convenient rates, which has increased customer loyalty. This allows YOCABÈ to earn a growing extra profit on logistics infrastructure.

This was possible by the realization of growing economies of scale and the optimization of IT and operational flows.

4.1.1 The Equity Crowdfunding Campaign

The Financial Times included YOCABÈ in the list of the 500 companies with the highest annual growth rate in Europe. From April 2019 to March 2021 the company's revenues increased by 110% and the first quarter of 2021 registered revenues 105% higher than the year before. In 2020 the revenues were 3.123.210 euros.

YOCABÈ launched the crowdfunding campaign on MamaCrowd⁷², the most important equity crowdfunding platform in Italy. The platform is owned by SiamoSoci S.R.L. and it is based in Milan. It is specialized in equity crowdfunding financing for innovative startups and SMEs.

MamaCrowd is an all-or-nothing platform; this means that the project is financed only if the goal is reached. This platform is considered reliable and secure because it is authorized by Consob, the supervisory authority of Italian financial markets. This means that it complies with the regulation imposed by the financial authority, therefore users have greater faith on it and they feel safer investing in the projects launched through this platform.

This makes MamaCrowd responsible for compliance with the relevant legislation and it checks the reliability of firms and investors. The portal, also, publishes only valid projects with a good probability of success in checks the firm's transparency to protect investors.

YOCABÈ's project aim was to increase capital in order to accelerate current growth and take advantage of the advantageous e-commerce environment generated by the pandemic.

The amount raised will be invested in the following areas:

- *Technology* that allows the platform to scale more easily and fast, allowing the platform

⁷² The equity crowdfunding campaign information has been taken from the crowdfunding platform MamaCrowd website which can be visited through the following URL:
<https://mamacrowd.com/project/yocabe-2>

to serve a larger number of consumers.

- *Channels and Markets*, which includes speeding the development of new marketplaces and streamlining the logistics infrastructure that supports them, particularly in emerging markets. For both the firm and its clients, more sales channels equal more sales.
- *New Consumers*: by bolstering the customer acquisition and management team, the fashion industry will be able to gain additional customers faster, and new sectors such as beauty, home design, and consumer electronics will be included.

The campaign started on the 5 of July 2021 with a minimum goal of 499.999,50 euros and a maximum one of 1.200.000 euros. The campaign reached overfunding in only one week. Therefore, the firm decided to increase the project goal first to 1.600.000 euros and, when this amount was reached, to 1.999.998 euros.

The campaign will end on the 29 of September 2021 but it is already a big success. The financial projections given by the first project goal (figure 8) were already quite positive, thanks to the new amount of capital increase they will be even greater since the money will all be invested to push the startup growth.

Today ⁷³, the funding percentage of the project is 394% and the amount is about to reach the final goal of 1.999.998 euros.

A campaign's success is determined not only by the presence of a unique and innovative idea but also by the dedication of the corporate team to the campaign and the dissemination of information about it.

The preparation of a strong business plan is one of the most significant aspects of the planning phase, as well as a probable component in the campaign's success.

YOCABÈ's business model on the platform is divided into two sections:












- In the first part of the document has been described the business activity carried out, the startup's business model has been analyzed, the team of people coordinating the startup has

⁷³ The current date is 23rd August 2021

been presented, and finally, brief market analysis has been carried out to present the project's target market and existing competitors.

The startup prepared also a table (Table 2) in which divides the competitors depending on the type of the service offered and it sets out, for each group, a strategy for defending the market position.

TABLE 2: Competitors and Competitive Strategies

	Player B2B	Agency	Logistic E-tailer ⁷⁴	DIY Marketplace ⁷⁵	Player D2C (Europe not Italy)
Competitors		 TRIBOO 	 	   	  THEAGENT
Competitive Strategy	Increasing the speed with which technology and logistical infrastructure for the D2C model are developed	Experts in D2C sales. Complementary Partners.	Sales via many channels. Multi-location. Smart pricing. Smart catalogue Smart logistics.	Plug-in approach. Integration between sales channels and infrastructure logistics.	Improve positioning and technological and logistical infrastructure in Italy and abroad.

SOURCE: MamaCrowd

⁷⁴ E-tailing is the business of selling retail products over the Internet. Customers use the e-tailing to purchase goods or services directly from the seller.

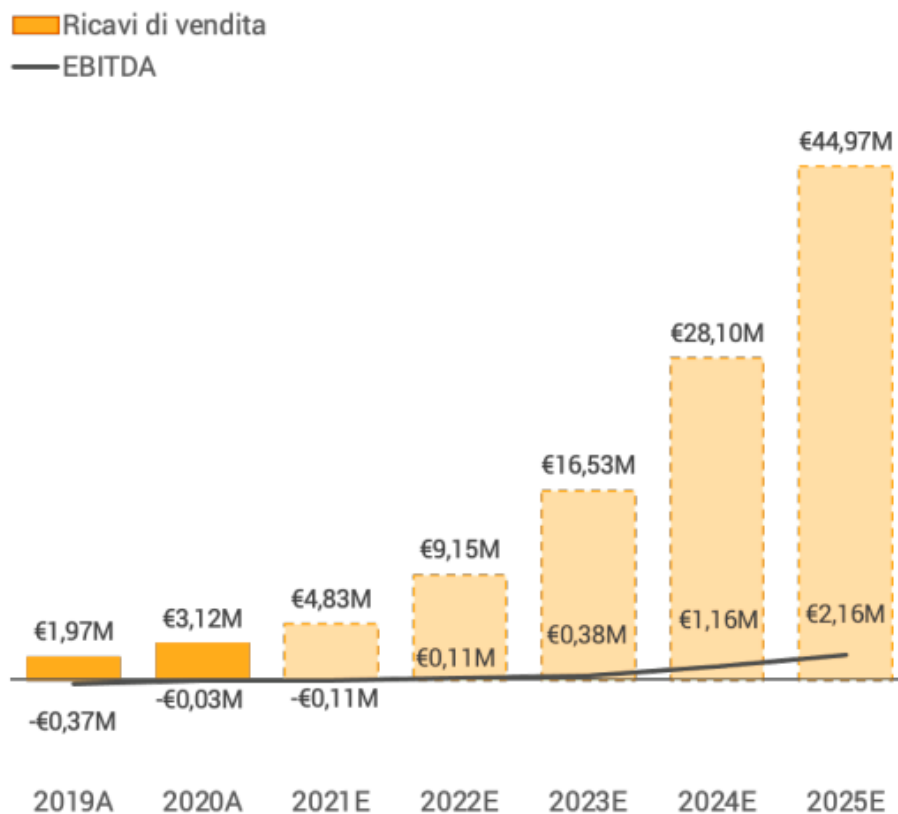
⁷⁵ The term is an abbreviation of “do-it-yourself. Oxford Advanced Learner’s Dictionary define DIY as “the activity of making, repairing or decorating things in the home yourself, instead of paying somebody to do it.”

- In the second half, the financials of YOCABÈ were examined, and future estimates were prepared considering the increased capital objective.

A resume of the financial projection presented by the firm can be observed in the next two figures. Looking at figure 13 below, it is possible to notice that with an increase of €499.999,50 the revenues (orange columns) will probably grow significantly from 3,12 million of euros in 2020 to 44,97 million in 2025 (estimated); their growth is expected to be 1340%. The 2020 EBITDA was negative, but it increased compared to 2019. It should remain negative also in 2021; in 2022 it will probably have a positive value with an estimated increase of 22 million euros.

An increase in EBITDA means that the company is becoming more profitable, and it will likely be able to make profits in a few years. It is assumed that in the first years the profits will be reinvested in the company and any case, they cannot be distributed as long as the company is listed as an innovative startup.

FIGURE 13: Financial Projection With an Increase of Capital of 499.999,50 €



SOURCE: MamaCrowd

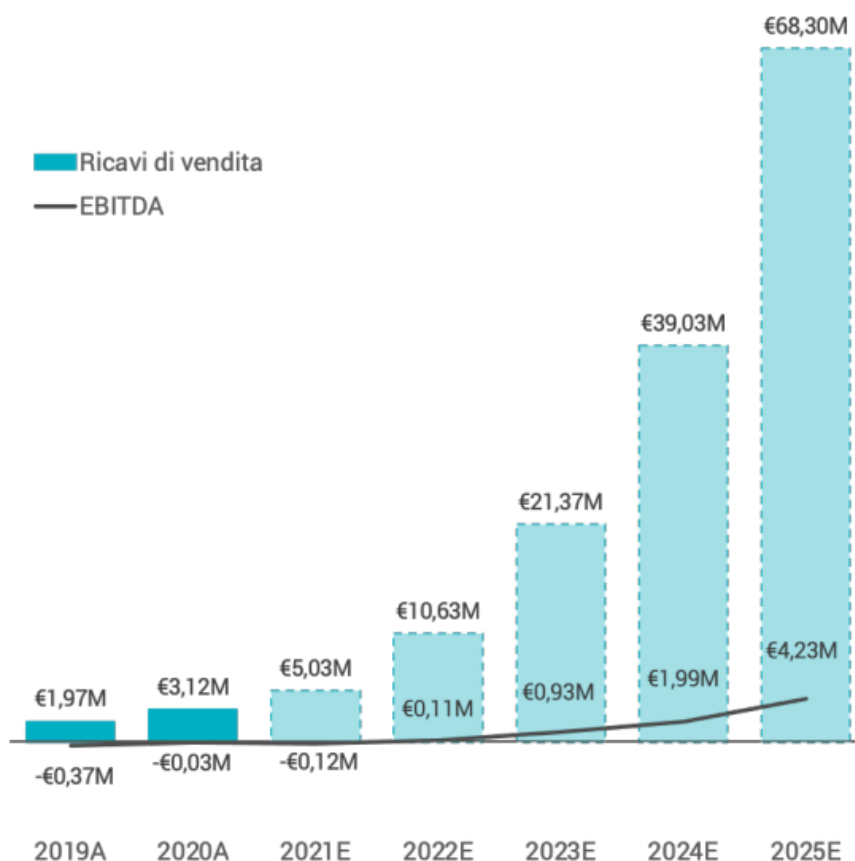
On the other hand, with a capital increase of € 1.200.000 the estimated growth in revenues, again from 2020 to 2025, will probably increase from 3,12 million euros to 68,3 million, in this case, the increase should be around 2087% (look at figure 14).

The EBITDA, as in the precedent case, will also increase and it will likely be positive from 2022 with an increase of 9,81%.

The capital increase reached through the platform is almost double the first maximum goal imposed, this suggests that the startup's growth will be even higher and that the startup has a strong chance of surviving in the long run, also given the market's current trajectory.

In fact, e-commerce is growing significantly; in 2020, sales of fashion, home, and cosmetic products on European marketplaces reached 95 billion euros.

FIGURE 14: Financial Projection with an Increase of Capital of 1.200.000€



SOURCE: MamaCrowd

Sales are expected to hit 140 billion euros by 2024, with an average annual growth rate of 10%. Also, the D2C business model is increasingly chosen by brands as it allows more direct contact with customers and a decrease in costs; only on Amazon this model represents 55%

of sales and the various e-commerce platforms are pushing for it to become the main sales strategy in the next 3-5 years.⁷⁶

The pre-campaign YOCABÈ's valuation was €8.000.000, this means that if it reaches the final goal of €1.999.998 the post-campaign valuation will be € 9.999.998.

In the business plan were also presented the categories of shares the would be issued, which are three: category A, category B and category C depending on the underwriting amount.

In fact, shares of category A are for contributors that invest at least €999.000; category B for the ones that invest at least €24.997,50, and category C for those who invest at least €1.996,50.

The different categories assign, of course, different rights that will be summarized in the next table.

TABLE 3: Issued Shares Categories⁷⁷

A – From 999.000 €	B – From 24.997.50 €	C – From 1.996,50 €
<ul style="list-style-type: none"> - Property Rights - Voting Rights - Drag Along Rights - Tag Along Rights - Right of First Refusal - Right of Liquidation Preference - Right of Anti-Dilution - Reserved Materials 	<ul style="list-style-type: none"> - Property Rights - Voting Rights - Drag Along Rights - Tag Along Rights - Right of First Refusal - Right of Liquidation Preference - Right of Anti-Dilution 	<ul style="list-style-type: none"> - Property Rights - Tag Along Rights

⁷⁶ MamaCrowd website which can be visited through the following URL: <https://mamacrowd.com/project/yocabe-2>

⁷⁷ Data taken from MamaCrowd: <https://mamacrowd.com/project/yocabe-2>

The campaign has raised a total of €1,981,265 so far, considerably exceeding the basic minimum objective and approaching the final aim of €1,999,998.

Only ALIcrowd, the Azimut Group's first Venture Capital ELTIF ⁷⁸, has purchased Category A shares out of 153 investors so far. This fund was established to invest in innovative SMEs and startups and was funded through a MamaCrowd equity crowdfunding campaign that raised € 29,265,100.⁷⁹

This is a clear example of the equity crowdfunding benefits; in fact, the initial success of the campaign attracted a Venture Capital fund that invested half of the capital raised. Without the crowdfunding campaign, ALIcrowd would likely never have turned its attention to the startup. The category B shares were purchased by 12 investors, or 7.84 percent of the total number of investors. The remaining 140 investors all bought shares in category C.

The campaign was a huge success, with the original fundraising goal being nearly quadrupled. This is another advantage of crowdfunding: projects frequently raise more money than they expected, yet unlike traditional fundraising methods, as the amount raised grows, neither the possible interest nor the possible guarantees to be offered to the funding entity grow.

In the second part of the chapter this last point will be analyzed in order to demonstrate that equity crowdfunding is one of the best options for SMEs and startup.

4.2 Empirical Analysis

4.2.1 Research objective and methodology

After analyzing the literature on crowdfunding, equity crowdfunding, and the relationship between equity crowdfunding and professional investors, in particular Business Angels and Venture Capital, and thus providing a sufficient explanation on the motivations that can push a startup to choose one method over another, in this chapter, we want to investigate the type of relationship that exists between equity crowdfunding and professional investors, in particular Business Angels and Venture Capital.

⁷⁸ European Commission definition: "European Long-Term Investment Fund, or ELTIF, is a new type of collective investment framework allowing investors to put money into companies and projects that need long-term capital."

⁷⁹ MamaCrowd crowdfunding platform URL: <https://mamacrowd.com/project/alicrowd>

We will also analyze the aspects that can lead to think that equity crowdfunding is a better option than traditional debt.

The thesis aims to address the following questions: is there a link between a successful equity crowdfunding campaign and a professional investor's involvement in the same startup? What are the advantages of using equity crowdfunding as a source of finance for startups? What features must startups and their campaigns possess in order to pique professional investors' interest?

As a result, the goal will be to examine the linkages between equity crowdfunding and professional investors and to understand if the first is or not one of the best options for startup financing. Even if they appear to be polar opposites in terms of finance, these are gradually finding ways to cohabit.

For this study, a database was created to collect information on successful equity crowdfunding campaigns.

To conduct this study, a random sample of 66 startups was drawn from among the projects financed between 2019 and 2020 on the platforms Companisto, CrowdCube, Invesdor, and MamaCrowd. These are some of the most important equity crowdfunding platforms in Europe. Two sets of data were collected for each startup in the database, one for the startup's attributes and the other for the features of the Equity Crowdfunding campaigns that they have run.

The following factors were considered from the perspective of the startups: geographical origin and the sort of good/service they offer. It was easy to gather information about the firm's origin and the type of market it serves from the equity crowdfunding platform where the startup ran the campaign.

The data collected on the equity crowdfunding campaigns of each startup in the sample are: several completed crowdfunding campaigns, overall funding obtained through crowdfunding, overall goal set in the campaigns, and funding obtained from professional investors (yes/no). By analyzing the funding obtained through the campaign and the initial set goal, we divided the startup performance into 4 categories: unsuccessful, goal reached 100%, overfunding 1% – 99%, and overfunding 100% or more. To gather this data, we examined each platform's research tools, blogs, and descriptions of success stories that they provide to users.

The campaign's currency was the euro, hence the sums of projects sponsored through platforms that used different currencies were converted according to the exchange rate at the end of the campaign.

The database is showed in the following table.

TABLE 4: First Analysis Database

STARTUP	Sector	Country	Number of investors	Initial Goal	Amount collected	Professional investors
Abacus Diagnostica	Technology	Finland	361	500.000,00 €	1.458.858,00 €	Yes
Adaptive Balancing Power	Technology	Germany	661	1.205.000,00 €	2.473.057,00 €	Yes
Aimage	Technology	Italy	141	250.000,00 €	523.340,00 €	Yes
Airlite	Retail	Italy	225	500.000,00 €	938.001,00 €	No
AlvinOne	Health & Fitness	Finland	27	200.000,00 €	68.352,00 €	No
Aplagon	Biotechnology	Finland	581	1.000.000,00 €	2.227.944,00 €	Yes
Applied Behaviour System	Data Processing	UK	332	349.280,00 €	463.650,00 €	Yes
Ase	Energy	Germany	1220	1.000.000,00 €	1.000.000,00 €	No
Auddy	Entertainment	UK	362	512.276,00 €	821.705,00 €	Yes
Barberino's	Retail	Italy	139	500.000,00 €	1.300.000,00 €	Yes
BeFoodAg	Food & Drink	Germany	694	500.000,00 €	500.000,00 €	Yes
Bier-Deluxe	Food & Drink	Germany	645	500.000,00 €	258.070,00 €	No
Big Exchange	Finance	UK	516	174.640,00 €	465.608,00 €	Yes
Bionit Labs	Biotechnology	Italy	132	100.000,00 €	199.987,00 €	Yes
Bloovery	E-commerce	Italy	40	100.000,00 €	147.133,00 €	Yes
Bluquist	Technology	Germany	327	600.000,00 €	1.075.761,00 €	Yes
Coindex	Finance	Germany	369	1.000.000,00 €	761.919,00 €	No
DAM	Technology	Gibraltar	906	1.164.264,00 €	1.587.340,00 €	Yes
E-motion	Technology	Italy	54	300.000,00 €	336.886,00 €	Yes
Eattiamo	Food & Drink	Italy	117	100.000,00 €	223.258,00 €	Yes
Emmy	E-commerce	Finland	127	500.000,00 €	238.452,00 €	No
Epicura	Health	Italy	183	450.000,00 €	999.999,00 €	Yes
Flexvelop	Technology	Germany	375	800.000,00 €	1.082.990,00 €	Yes
Ghost Writer	Marketing	Italy	34	100.000,00 €	141.985,00 €	Yes
Golf4U	E-commerce	Germany	469	500.000,00 €	187.460,00 €	No

Green Energy Storage	Energy	Italy	615	505.593,00 €	2.200.000,00 €	Yes
H2ydrogen Solutions	Energy	Germany	423	960.000,00 €	1.552.365,00 €	Yes
Hyre	Technology	Germany	265	300.000,00 €	373.839,00 €	Yes
Idana	Technology	Germany	735	500.000,00 €	500.000,00 €	No
Injeq	Technology	Finland	508	400.000,00 €	2.000.367,00 €	Yes
Karhia Pro	Consumer Products	Finland	152	100.000,00 €	207.318,00 €	Yes
Keesy	Technology	Italy	303	595.051,00 €	595.051,00 €	Yes
Kippy	Consumer Products	Italy	244	500.000,00 €	1.100.000,00 €	Yes
KomeroFood	Food & Drink	Finland	275	350.000,00 €	480.014,00 €	No
Kurabu	Entertainment	Germany	214	800.000,00 €	946.597,00 €	No
Livsdal	Consumer Products	Sweden	18	3.000.000,00 €	1.194.000,00 €	No
Mama Clean	Retail	Italy	248	500.000,00 €	944.030,00 €	Yes
Midori	Energy	Italy	50	150.000,00 €	176.950,00 €	Yes
Mowea	Energy	Germany	775	500.000,00 €	500.000,00 €	No
Myssyfarmi	Consumer Products	Finland	488	200.033,00 €	432.547,00 €	Yes
Notizie.it	Entertainment	Italy	150	99.993,00 €	431.459,00 €	Yes
Onemind Dogs	Education	Finland	249	350.000,00 €	512.364,00 €	No
Optimus Price	Technology	UK	472	523.919,00 €	771.135,00 €	No
Orapesce	Food & Drink	Italy	117	80.000,00 €	399.995,00 €	Yes
Papu	Consumer Products	Finland	519	150.000,00 €	499.001,00 €	Yes
Playwood	Consumer Products	Italy	95	200.000,00 €	296.236,00 €	Yes
Powau	Food & Drink	Finland	229	200.000,00 €	357.263,00 €	Yes
Pryntd	Electronic	UK	141	93.141,00 €	91.830,00 €	Yes
Rekki	Consumer Products	Finland	206	150.000,00 €	253.870,00 €	Yes
Rydiess	Technology	Germany	256	600.000,00 €	165.500,00 €	No
Shipfunk	Technology	Finland	16	264.250,00 €	87.996,00 €	No
Skoot	Technology	UK	260	349.279,00 €	461.121,00 €	Yes
Sleep Cogni	Biotechnology	UK	218	523.919,00 €	665.613,00 €	No
Smart Cart	Retail	Finland	55	600.000,00 €	182.700,00 €	No
Solar Water Solutions	Technology	Finland	662	250.000,00 €	1.200.001,00 €	Yes
Sortflow	Technology	UK	406	278.125,00 €	367.126,00 €	Yes
Storie Libere	Entertainment	Italy	81	100.000,00 €	181.880,00 €	Yes
Stratiphy	Telecommunications	UK	707	232.853,00 €	514.261,00 €	Yes
Switch Ltd	Technology	UK	659	1.280.691,00 €	1.394.958,00 €	Yes
Teyuto	Entertainment	Italy	39	80.000,00 €	115.247,00 €	Yes
Thermulon	Energy	UK	1087	523.919,00 €	1.104.958,00 €	Yes
Veen	Food & Drink	Finland	161	450.000,00 €	544.305,00 €	Yes
Vin-Exchange	Food & Drink	UK	156	250.000,00 €	227.616,00 €	No

Wello	Technology	Finland	706	1.000.000,00 €	1.709.333,00 €	Yes
Xircles	Technology	Germany	416	1.000.000,00 €	1.693.940,00 €	Yes
Yeplly	Sport & Leisure	Finland	266	500.000,00 €	972.750,00 €	No

4.2.2 Projects analysis and results

This section reports a descriptive analysis of the startups in the sample. It is divided into three parts:

- The first part concerns the country in which each startup was founded. This aims to assess whether there is a greater likelihood of raising additional funding from professional investors in certain countries than in others.
- The second part evaluates the cases of success and overfunding within the sample. With this analysis we will try to understand if indeed crowdfunding gives an extra opportunity for startups to succeed.
- The third part, instead, concerns the possible relationship between a successful campaign and the intervention of professional investors such as business angels and venture capital in the financing of the startup.

1) Country of origin

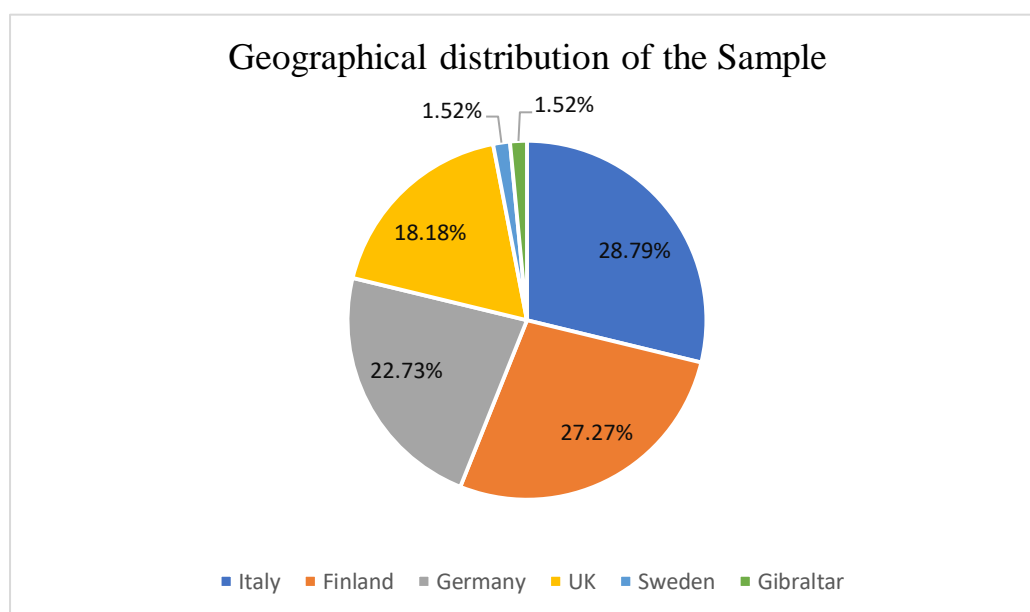
As it is possible to notice from the chart below (Figure 15), most of the startup of the sample come from Italy, precisely the 28,79%. Then there is Finland with 27,27%, it is followed by Germany (22,73%), UK (18,18%), Sweden and Gibraltar (both 1,52%). Due to the difficulty of locating information on French equity crowdfunding platforms, this research could not be extended to French enterprises, which are actually missing from the database.

The findings of evaluating the countries of origin of the firms in the sample suggest that after successfully completing an equity crowdfunding campaign, it is simpler to obtain funding from professional investors in Italy.

By analyzing the projects in which professional investors contributed per each country, we can say that the country with the highest rate of intervention in startup financing by professional investors after the campaign is Italy with 89%.

In second place is the United Kingdom with 75%, then Finland with 61% and finally Germany with 40%.

FIGURE 15: Geographical Distribution of the sample



In this section, Switzerland and Gibraltar are not considered because the number of startups was too small to analyze.

2) *Overfunding*

Out of 66 equity crowdfunding campaigns, 56 were successful (84.9%) and 52 of these 56, concluded the campaign with an overfunding; this means the 92.86% of the startups that launched a successful campaign, obtained more funds than they requested.

Among them, there are 21 startups (50%) that even raised more than double the funds initially requested.

This is one of the greatest benefits that an equity crowdfunding campaign can bring to a startup; in fact, it is not uncommon for the campaign to end with overfunding.

When using traditional channels (banks and other financial institutions), as the amount requested grows, so do the collateral guarantees that must be offered. It's also worth

remembering that, because of the higher risk, startups are often obliged to pay higher interest rates.

This does not happen with crowdfunding. First of all, it is not a loan, and therefore the startup does not have to return the money to the shareholders, but it must only think about growing and investing the funds collected; second, if the campaign reaches overfunding, practically nothing changes; the only things that will increase are the number of investors, the number of funds collected and to invest in the project to make it grow.

This second point of the analysis highlights that equity crowdfunding is the best funding resource for an innovative startup because:

- 1) The overfunding cases are more than frequent (in the sample we analyzed they are 78,8%), so there is a good chance of raising more funds than necessary and it is known that the more resources are invested in the business, the more it has a chance to grow.

For this reason, overfunding also reduces the risk of failure of the startup, so we can say that it has a double benefit both for project initiators and backers.

- 2) The startup is not obliged from the outset to return the funds obtained. The equity holders, in fact, can have a return only in the case in which they decide to sell the shares to third parties, or in the case in which the company will distribute dividends. As a result, the company will reinvest the earning to continue to expand and it will decide which will be the right moment to pay dividends.

3) *Professional investors*

As seen in the case study analyzed in the previous section, equity crowdfunding and professional investors can coexist and in some cases are a successful combination.

Among the benefits that equity crowdfunding brings, there is one concerning the attention that a successful campaign can attract. A startup that has launched a successful campaign (whether it's already finished or not) is much more likely to attract the attention of business angels and venture capitalists.

In the case of YOCABÈ, ALIcrowd invested in the startup a few days after the beginning of the campaign because it had already gathered several investors and reached the project goal. This is not an isolated case, on the contrary, there are many in which investors decide to participate in the campaign if it is having success.

The sample above was analyzed precisely to highlight this positive relationship between a successful equity crowdfunding campaign and the contribution made to the startup by professional investors. Out of 56 successful campaigns, 82.1%, or 46 campaigns, received an investment from a business angel or venture capital as a result of their success. Instead among the 10 campaigns that have obtained a failure not even one has received a professional investor investment.

Out of 52 total overfunding projects, 88,5% (i.e., 46 campaigns) have attracted professional investors and this percentage increases to 100% if we consider only the overfunding cases where the starting capital has been doubled.

Therefore, we can say that there is a positive correlation between a successful campaign and the interest shown by professional investors towards the early-stage business that launched it; and that overfunding gives the project initiator even more chances to get funding from business angels and venture capital.

4.2.3 Campaign analysis and results

The final two points of the previous analysis will be discussed in further depth in the following section in order to better understand the connections between equity crowdfunding and more traditional means of startup funding.

From the previous sample, campaigns that received investment from professional investors were isolated and it was created a new database (Table 5). For each project with this characteristic, two variables were analyzed in order to carry out a comparative analysis be:

- The average amount of capital raised through the equity crowdfunding campaign.
- The average percentage of overfunding.⁸⁰

⁸⁰ Overfunding percentage represents the exceeding goal amount of money.

TABLE 5: Second Analysis Database

STARTUP	Country	Professional Investors	Numbers of backers	Amount collected	Overfunding %
Abacus Diagnostica	Finland	Yes	361	1.458.858,00 €	292%
Adaptive Balancing Power	Germany	Yes	661	2.473.057,00 €	205%
Aimage	Italy	Yes	141	523.340,00 €	209%
Aplagon	Finland	Yes	581	2.227.944,00 €	223%
Applied Behaviour System	UK	Yes	332	463.650,00 €	133%
Auddy	UK	Yes	362	821.705,00 €	160%
Barberino's	Italy	Yes	139	1.300.000,00 €	260%
BeFoodAg	Germany	Yes	694	500.000,00 €	100%
Big Exchange	UK	Yes	516	465.608,00 €	267%
Bionit Labs	Italy	Yes	132	199.987,00 €	200%
Bloovery	Italy	Yes	40	147.133,00 €	147%
Bluquist	Germany	Yes	327	1.075.761,00 €	179%
DAM	Gibraltar	Yes	906	1.587.340,00 €	136%
E-motion	Italy	Yes	54	336.886,00 €	112%
Eattiamo	Italy	Yes	117	223.258,00 €	223%
Epicura	Italy	Yes	183	999.999,00 €	222%
Flexvelop	Germany	Yes	375	1.082.990,00 €	135%
Ghost Writer	Italy	Yes	34	141.985,00 €	142%
Green Energy Storage	Italy	Yes	615	2.200.000,00 €	435%
H2ydrogen Solutions	Germany	Yes	423	1.552.365,00 €	162%
Hyre	Germany	Yes	265	373.839,00 €	125%
Injeq	Finland	Yes	508	2.000.367,00 €	500%
Karhia Pro	Finland	Yes	152	207.318,00 €	207%
Keesy	Italy	Yes	303	595.051,00 €	100%
Kippy	Italy	Yes	244	1.100.000,00 €	220%
Mama Clean	Italy	Yes	248	944.030,00 €	189%
Midori	Italy	Yes	50	176.950,00 €	118%
Myssyfarmi	Finland	Yes	488	432.547,00 €	216%
Notizie.it	Italy	Yes	150	431.459,00 €	431%
Orapesce	Italy	Yes	117	399.995,00 €	500%
Papu	Finland	Yes	519	499.001,00 €	333%
Playwood	Italy	Yes	95	296.236,00 €	148%
Powau	Finland	Yes	229	357.263,00 €	179%
Pryntd	UK	Yes	141	91.830,00 €	99%
Rekki	Finland	Yes	206	253.870,00 €	169%
Skoot	UK	Yes	260	461.121,00 €	132%

Solar Water Solutions	Finland	Yes	662	1.200.001,00 €	480%
Sortflow	UK	Yes	406	367.126,00 €	132%
Storie Libere	Italy	Yes	81	181.880,00 €	182%
Stratiphy	UK	Yes	707	514.261,00 €	221%
Switch Ltd	UK	Yes	659	1.394.958,00 €	109%
Teyuto	Italy	Yes	39	115.247,00 €	144%
Thermulon	UK	Yes	1087	1.104.958,00 €	211%
Veen	Finland	Yes	161	544.305,00 €	121%
Wello	Finland	Yes	706	1.709.333,00 €	171%
Xircles	Germany	Yes	416	1.693.940,00 €	169%

The average amount of capital raised was used in order to carry out a comparative analysis between the sample and a benchmark campaign represented by the European average values. This type of research is valuable in determining whether there is any evidence that the success of an equity crowdfunding campaign influences positively professional investors' decisions to invest or not in a startup.

To conduct the analysis, the sample mean was calculated with respect to the variable through the following formula:

$$\text{Average amount collected} = \frac{\Sigma \text{Amount collected}}{\Sigma \text{Number of projects}}$$

The value obtained was 809.320,70 € and it was compared with the European average value of the period (including United Kingdom) considered in the analysis (2019-2020).

The reference values taken into consideration for the calculation of the benchmark are 308.250,85 € in 2019 and 257.155,73 € in 2020.^{81 82 83}

The final average value, which has to be considered in the analysis, is therefore €282,710.09. The difference between the startups that obtained additional capital from professional investors and the average European values is immediately apparent. In fact, we can see that the campaigns in the database receive an average of € 526,610.60 more than the European Benchmark (+187%).

⁸¹ Statista: <https://www.statista.com/statistics/412460/europe-alternative-finance-transaction-value-equity-crowdfunding/>

⁸² Statista: <https://www.statista.com/statistics/797673/equity-based-crowdfunding-uk/>

⁸³ As we could not find any European data including the United Kingdom, we obtained the total volumes by adding the values relative to Europe and those relative to the United Kingdom.

If we look at the sample distribution, we can also observe that 78% of businesses have raised more money than the average amount.

These findings are explained by the fact that, as discussed in the second chapter, equity crowdfunding's current function in the field of startup finance is based on its capacity to demonstrate in practice that what the firm does is of interest to a large audience.

Professional investors choose to invest in firms that have been significantly more successful than average in terms of fundraising while also receiving a relatively low average level of investment, according to the numbers.

As a result, they get a favorable signal about market traction on the one hand, and on the other side, they invest in companies that allow them to have a larger ownership and hence more decision-making authority in the company.

Then, by calculating the average overfunding percentage of the sample taken into consideration, we will try to understand whether this also influences the decision of professional investors to make the investment.

Overfunding is a key variable for a successful crowdfunding campaign. It occurs when a campaign reaches an amount of money that is above the project goal.

When a campaign falls into overfunding in equity crowdfunding, the project initiator has two options: the first is to close the campaign and collect the funds; the second one, however, is to keep it open and raise additional capital.

In the second scenario, the company sells more equity; as a result, the investor receives a lower percentage of equity but owns shares in a higher-valued company.

According to the data analyzed from the table above (Table 5), firms that got additional money from professional investors had completed equity crowdfunding campaigns with an average of 208% overfunding.

This shows that professional investors prefer to invest in firms that have raised at least twice⁸⁴ the original capital required, and that a higher overfunding rate is also associated with increased professional investor interest.

⁸⁴ Even if the calculated percentage indicates that the capital has been tripled, it is better to make the consideration that it has at least doubled as it is necessary to have a larger sample in order to have more accurate results. The main objective, in any case, was to demonstrate the positive correlation between overfunding and the intervention of professional investors.

We can conclude the research by stating that equity crowdfunding facilitates access to credit for startups because the high levels of risk and the limited guarantees they can offer to a bank or other traditional financial institution, does not allow them to access the funds provided by the aforementioned institutions. Equity crowdfunding makes access credit more democratic by giving the opportunity to everyone to finance its projects and ideas from the beginning. It also gives the possibility to investors to participate in the funding of projects they like by investing a small amount (sometimes only 200 euros), this is not possible using traditional channels.

Another important aspect is that through equity crowdfunding platforms it is possible to attract more investors in order to create an heterogenous pool of contributors.

It is also important to underline that a successful equity crowdfunding campaign is an excellent calling card for testing the market appreciation of a product or a concept and for obtaining funding from investors such as Venture Capital and Business Angels.

Equity crowdfunding also allows project initiators to raise more capital than the project goal and to have an overfunding.

Overfunding is a metric of how good a project is in the crowd's eye and, in addition to supporting its growth in terms of reputation and product distribution in the market, it also improves its economic growth because more money are invested on it.

From the analysis conducted in the previous pages, it is also possible to notice that overfunding is a key element for startups that want to attract the professional investors' attention, because these prefer to invest in projects that already have public backing since they are the most likely to last over time.

Conclusions

The goal of this thesis is to explore the advantages of equity crowdfunding in the early stages of a startup, as well as the relationship it has with more traditional funding sources like business angels and venture capital funds.

We intended to report a comparison between this and the models used by professional investors in order to highlight similarities and differences after dealing with the phenomena of crowdfunding, notably equity crowdfunding, from a theoretical standpoint.

As a result, empirical data were given and evaluated in the fourth chapter in order to emphasize the key elements of the relationship between these two funding methods.

The findings identified the key characteristics of businesses and the equity crowdfunding campaigns they have started, as well as the types of linkages these elements have with venture capital and business angel funding.

Looking at the data, we can see that crowdfunding and professional investors have been gradually integrating in recent years, and that they are increasingly coexisting as funding options for businesses.

Due to the digital nature of this tool and the risk sharing among the "crowd" of investors, crowdfunding is the one that most ensures entrepreneurs access to the capital they require. Crowdfunding may also surpass traditional financing channels in terms of quantity raised, as the phenomena of overfunding for valid projects is becoming more common.

Due to its heterogeneous population of investors, equity crowdfunding is not totally fit to replace professional investors. It cannot recreate the knowledge, competence, and additional resources made accessible by business angels and venture capital.

On the other side, there are advantages to employing equity crowdfunding that can only be obtained by doing so, such as keeping control, reducing ownership dilution, and using it to test the idea and market traction of the product being sold.

As a result, we can see how both instruments can complement one another, and how, in recent years, the combination of both as a source of finance has become more common.

In reality, an increasing number of platforms are changing their business models to allow and facilitate investments from both informal and institutional investors. Simultaneously, equity crowdfunding has been included into the investment strategies of certain business angels and

venture capitalists, who have begun to use the platforms to find interesting projects to invest in.

Equity crowdfunding has become a part of many investors' investing plans, and platforms are now being used to find exciting projects to invest in.

This is the case with MamaCrowd, an Italian platform that has partnered with AliCrowd, a professional investor, to allow the latter to better invest in deserving startups.

As a result, it's projected that the equity crowdfunding industry will expand in the next years, coexisting alongside traditional fundraising techniques to support more and more innovative ventures. Professional investors could use platforms to identify ideas to invest in while also receiving market feedback based on the campaign's performance. Platforms, on the other hand, would be able to address the model's inefficiencies caused by the crowd's lack of expertise.

References

- A.Scutti, *Equity crowdfunding: uno strumento all'avanguardia per la crescita delle PMI*, ANDAF magazine, 2017.
- Agrawal A., Catalini C., Goldfarb A., *Some Simple Economics of Crowdfunding*, 2013.
- Barret C., Rovnic N., *One in five UK crowdfunding investments fail*, Financial Times, 2013.
- Belleflamme P., Lambert T., Schwienbacher A., *Crowdfunding Dynamics*, 2019.
- BVCA, *Private Equity and Venture Capital Report on Investment Activity*, 2017.
- Cambridge Center for Alternative Finance, *Entrenching Innovation – The 4th UK Alternative Finance Industry Report*, 2017.
- Cambridge Center for Alternative Finance, *The Second Global Alternative Finance Market Benchmarking Report*, 2021.
- Collins L., Pierrakis Y., *The Venture Crowd*, 2012.
- Cumming D., Johan S., Zhang Y., *The Role of Due Diligence in Crowdfunding Platforms*, 2019.
- Demirgüç-Kunt A., Klapper L., Singer D., Ansar S., and Hess J, *The Global Findex Database 2017 – measuring financial inclusion and the fintech revolution*, World Bank Group, 2018.
- Dresner S., *A Guide to Raising Capital On the Internet*, Bloomberg, 2014.

- European Commission: https://ec.europa.eu/growth/access-to-finance/funding-policies/business-angels_en
- European Commission: https://ec.europa.eu/growth/access-to-finance/funding-policies/venture-capital_en
- FINANCIAL STABILITY BOARD (FSB), *Financial Stability Implications From Fintech*, 2017.
- FINANCIAL STABILITY BOARD (FSB): <https://www.fsb.org/work-of-the-fsb/financial-innovation-and-structural-change/fintech/>
- Forbes H., Schaefer D., *Guidelines for Successful Crowdfunding* 2017.
- Hakenes H. and Schlegel F., *Exploiting the Financial Wisdom of the Crowd*, 2014.
- Hazam D., Karimova D., Olsson M., *Crowdfunding as a Source for Social Enterprise Financing*, 2017.
- Hemer J., *A snapshot on crowdfunding*, 2011.
- Jenik I., Lyman T., Nava A., *Crowdfunding and Financial Inclusion*, 2017.
- Kunz M., Bretschneider U., Erler M., Leimeister J.M., *An empirical investigation of signaling in reward-based crowdfunding*, 2017.
- Kuppuswamy V., Bayus B., *The Dynamics of Project Backers in Kickstarter*, 2013.
- Li Y., Zhao L., *Crowdfunding in China: Turmoil of Global Leadership*, 2020.
- YOCABÈ: <https://www.yocabe.com/chi-siamo>

- MamaCrowd: <https://mamacrowd.com/project/alicrowd>
- MamaCrowd: <https://mamacrowd.com/project/yocabe-2>
- Mollick E., *The Dynamic of Crowdfunding: Determinants of Success and Failure*, 2012.
- Mollick E., *The dynamics of crowdfunding: An exploratory study*, 2013.
- Prive T., *10 Benefits of Crowdfunding*, Forbes, 2012.
- Puschmann T., *Fintech*, 2017.
- Rijanto A., *Donation-based crowdfunding as corporate social responsibility activities and financing*, 2018.
- Shneor R., Zhao L., Flaten B., *Advances in crowdfunding*, Palgrave Macmillan, 2020.
- STATISTA: <https://www.statista.com/statistics/797673/equity-based-crowdfunding-uk/>
- STATISTA: <https://www.statista.com/statistics/412460/europe-alternative-finance-transaction-value-equity-crowdfunding/>
- The World Bank, *Crowdfunding's Potential for developing World*, 2013.
- Yasar B., *The New Investment Landscape: Equity Crowdfunding*, 2021.