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Bibliometric Analysis on Crowdfunding Research



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INTRODUCTION

Crowdfunding (CF) is an innovative way of financing that is drastically changing the approach the companies have to be funded. It consists in a series of small economical contributions coming from the “crowd”. People gets in touch with projects and supports them thanks the use of internet-based platforms (CFPs). It is sufficient to start from this definition of CF to understand how many disruptive elements characterizes this mean of financing with respect to the traditional forms. CF enables entrepreneurs to fund its company thanks to a relative large number of investors that contribute with small amount of money and without referring to financial intermediaries (Mollick, 2014). The preliminary idea of CF is to support innovative companies that, due to the high risk, are not gladly financed by other investors (such as institutional investors, banks, etc.). Innovative companies are a sub-group of start-up. In general, start-up companies are a bet for investors because they do not own assets at the beginning of their activity. For this reason, the investors do not have nothing to reclaim in case of failure of the company. CF starts to spread out after the financial crisis of 2008 with these preconditions. It is easy to understand why new forms of financing come out after financial crisis. In this particular case, the phenomenon got stronger thanks the Internet. After the banks were reluctant giving loans to SMEs (mostly to the riskier ones), the market found a new gateway to financing. People starts saving more money seeking higher yield for their investments (Paulet and Relano, 2017). This situation can be covered in part by the big spread of crowdfunding. All the steps of the CF process happens through the Internet: CFPs enables people to get in touch with projects, to follow

developments, to contribute to the cause in different ways (economic support, development of the project, giving feedbacks, etc.). CF, in fact, cannot exist without the Internet. The essential part of all this process is the crowd, and the easiest way to access to the crowd is through the Internet. As all the disruptive events, the consequences are more than what expected at the beginning; for this reason, CF nowadays is continuing developing and becoming more than a simple mean of financing. It is a method to check if the market respond to the product (Balykhin and Generalova, 2015), is a marketing instrument (Brown et al., 2018), an aid to promote arts and culture, to make information being separated from the power because, through CF, freelance journalist (with ideas against the power) can keep working (Carvajal et al., 2012), to promote social initiatives, to promote financial inclusion (Kim and De Moor, 2017) and so on. For these reasons, CF is continuously under the lens of researchers and all the parts involved in financing and business development. Economics studies (e.g., Catalini et al., 2014), management papers (e.g., Mollick 2014), computer science researchers (e.g., Zeng et al., 2016) but also information systems researches (e.g., Yuan et al., 2016) have studied CF. Most of the papers and articles, however, focus on the crowdfunding campaign (the factors of success, its process, etc.) and on the role of the actors or provide general overview of the phenomenon. That is why, at the same time, is still a new topic that needs to be studied more in deep and from various perspectives. An article published in Wired Magazine (Howe, 2006) introduced the term crowdfunding for the first time, including it in a bigger context that is *crowdsourcing*.

“Crowdsourcing takes place when a profit-oriented firm outsources specific tasks essential for the making or sale of its product to the general public (the crowd) in the form of an open call over the internet, with the intention of animating individuals to make a [voluntary] contribution to the firm's production process for free or for significantly less than that contribution is worth to the firm” (Belleflamme et al., 2014). Crowdfunding, typically, can be divided in different categories according to what the backers have in return for the financing or the way the financing is concluded: donation-based crowdfunding, equity-based crowdfunding, reward-based crowdfunding and peer-to-peer crowdfunding. Obviously, having a look at these categories, it is easy to realize that there are completely different approaches to support projects in each category and, of course, on the other hands, different way the founders act to attract funds from the crowd. The complexity of CF and its connection with so many different other disciplines enables researchers to study the subject from different point of view. The success of the CF campaign, and the prosecution of the company, are related to a plenty of factors coming from various disciplines.

The scope of the dissertation is to provide a complete overview of CF, analysing the trend the academic research is meeting and provide suggestions on possible future researches. The work is organized into three parts: the first one will present a literature review discussing in detail the CF phenomenon, its peculiarity and everything related with its use, the actors involved and the campaign. The literature review is the result of an analysis of the papers and articles published from 2010 to

May 2018. The research of these works has been conducted using the Scopus database (www.scopus.com). A complete description about the methodology of the dissertation development is discussed in the next section. In details, the structure of the literature review is the following: at the beginning is presented a discussion of CF characteristics (form, purposes, impact and regulation). Then, are discussed the CF campaign and all the studies related to it (process, determinant of success and social dynamics). Finally, the discussion about the actors involved on CF concludes the review. In fact, from the literature review came out three macro-areas on which academics focused on: Crowdfunding Characteristics, Crowdfunding Campaign and Crowdfunding Actors. The dissertation has been developed starting from this subdivision and inside each macro-theme discussing the research lines analysed by researchers in their studies. After that, will follow a bibliometric analysis that will highlight which are the main focus of the researchers, which are the trends, the interaction between academics on this topic, if there are some point of reference on the theme, geographical concentration of the researches. Finally, will be presented a conclusion of the work with a section dedicated to suggestions for future researches.

METHODOLOGY

This section describes the steps followed to expand on the topic and the methodology used to select the articles to conduct the literature review and bibliometric analysis. As above-mentioned, the articles were selected using Scopus database. The range of the publications is from 2010 at 2018 (June). The beginning of the range is set to 2010 because in this year it can be found the first significant articles for the dissertation purposes after the famous publications of Wired Magazine that mentioned Crowdfunding for the first time. One of the functions of the database enables you to find publications using keywords. The keywords used in this case have been “crowdfunding” and “crowd-funding”. The following is the query of the first extraction:

(TITLE-ABS-KEY (crowdfunding) AND TITLE-ABS-KEY (crowd-funding))

The first query extraction returned 1162 articles. Starting from this perimeter of articles, the following step was to select only the publications coming from academic journals. This subdivision gave back 633 articles in total. All the manipulations of the data followed to obtain the desired perimeter have been done using the filters Scopus database enable you to use and using Excel features. The next refinement came from taking into account title and abstract of the papers: it has been considered relevant an article that presents valid one of the following conditions:

- The title contains the word “Crowd”;
- The abstract contains the word “Funding” or “Platform”.

The conditions chosen can be justified by the following statement: main point of the dissertation is to analyse and understand this disruptive way of financing coming from the crowd, so finding this word into the title can already testify that the article deal with this topic. At the same time, the other important aspect to be considered is the technological point of view of Crowdfunding: are the platforms that make the person get in touch and finalize the deal. The word “funding” contained into the abstract of a set of articles that has been extracted using as keywords “crowdfunding” and “crowd-funding” returns, for sure, papers that deals with the theme studied here. This additional refinement reduced the number of papers at 605. After that, it has been excluded the articles that do not contain any abstract: the number of articles at this point was 573. Finally, only the Italian, English, Spanish and French articles have been taken into account. For this reason, the remaining articles were 560. After reading carefully the abstract of the articles left, 213 are the ones pertinent to the purpose of the analysis.

Initially, has been recorded into a table the following information about the papers: 1) author(s); 2) title; 3) year of publication; 4) journal; 5) country; 6) methodology; 7) type of study (i.e. literature review, quantitative analysis about the incisiveness of a campaign, role of the actors, etc.); 8) findings. After a systematic reading of all the articles, came out a clear view of the principal thematic areas studied by academics and of the research lines the researches write on. The thematic areas are the ones mentioned above: Crowdfunding Characteristics, Crowdfunding Campaign and Crowdfunding Actors. The thematic more discussed and analysed is “Crowdfunding Characteristics”: it takes around the 54% of the publications taken

into account. After it, the Crowdfunding Campaign with 33% of publication and, at the end, the articles talking about the roles of the actors constitute the 13% of those published. The works about the crowdfunding characteristics take a bigger portion of researches because they involve a bigger spectrum of research lines. The ones highlighted in this study are the following: 1) forms of crowdfunding; 2) purpose and usage; 3) impacts; 4) regulation. It is clear from the labels given to the research lines that they deal with themes that can address lots of different aspects. In the case of Crowdfunding Campaign, the research lines that emerged are: 1) process characteristics; 2) success determinants; 3) social dynamics. In these papers, the hypothesis are analysed using quantitative and qualitative models. Lastly, the role of the actors presents the following research lines: 1) role; 2) motivation.

It turns out from the research that crowdfunding is still a relative new topic in the academic environment. Despite it went beyond the first decade of life, there are so many aspects to be discovered and deepen. The reason behind is that crowdfunding is not only a simple way of financing but can be applied for several motives. So, it turns out that at the beginning the researchers focused on Crowdfunding Characteristics and tried to have a clear overview of the topic. After that they went more in deep on the Crowdfunding Campaign issue, studying mostly the determinant of success of the campaign, in order to have, from a managerial point of view, a clear image of the main aspects that determine the success of a project. At the same time, it is very important to understand which is the role of the actors involved. That is why a part of the researches are focused on the figure of the funders, the creators and the intermediary role of the platforms.

STATISTICS AND TREND

Another important aspect that induce academics to continue studying the subject is the enormous growth is having during the years. In 2012, the amount of dollars invested in crowdfunding projects was around \$3 billion (\$1.5 billion in 2011); in 2014, crowdfunding accumulated \$ 16 billion, with an increase of more than 330% in two years (data from Statista.com). Until now, CF raised \$ 34 billion and is becoming one of the most common way to raise money for the individuals (data from Fundly.com). CF is continuously increasing its market share and is becoming a leading player on financing market. The most successful method, so far, is peer-to-peer crowdfunding with \$ 25 billion. According to the projections presented on the web-pages Fundly.com, the industry of crowdfunding is expected to raise up to \$ 300 billion by 2025. Forbes (2012) is braver and forecasts crowdfunding reaching \$1000 trillion by 2020.

It is nonsense to do a comparison with the amount of money granted by banks to business: for example in France, in the first half of 2014, the banks granted €689.9 billion to business (Attuel-Mendes, 2017). However, the extreme importance of this way of financing is the number of companies it enables to rise. The loans granted by banks are often given to companies already in the market, because less risky.

United States and Asia (mostly China) are the major player in this relative new industry, but also Europe is doing well. The data presented below are updated at the beginning of May 2018.

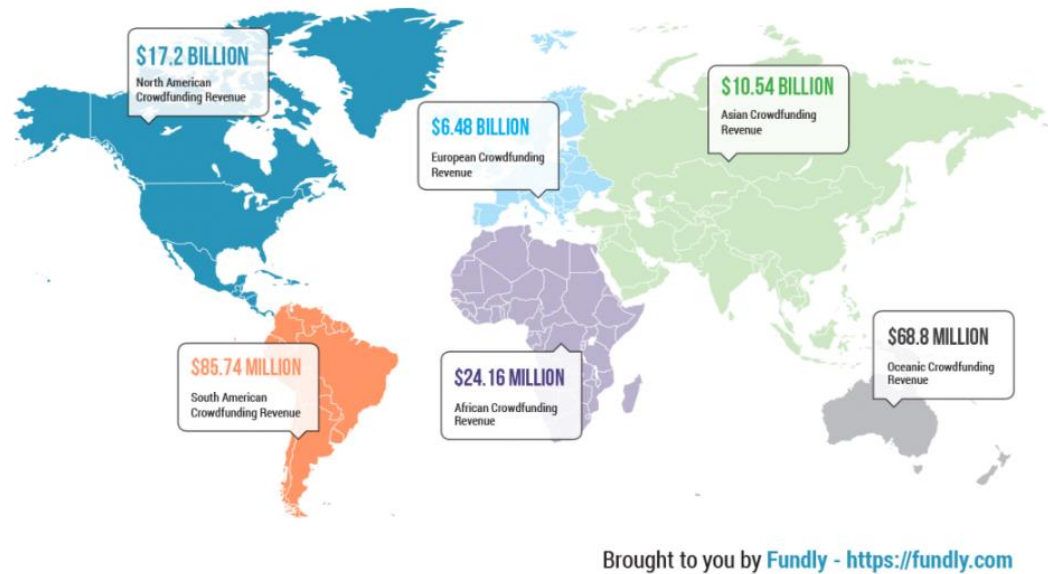


Figure 1 - Crowdfunding in the world

In the creative industry Film and Video, Games, Music and Publishing are the categories more in vogue. If we have a look at the statistics presented by Kickstarter, one of the most famous CFPs in the world, we realize that the categories mentioned above are the ones that present the major number of projects funded.

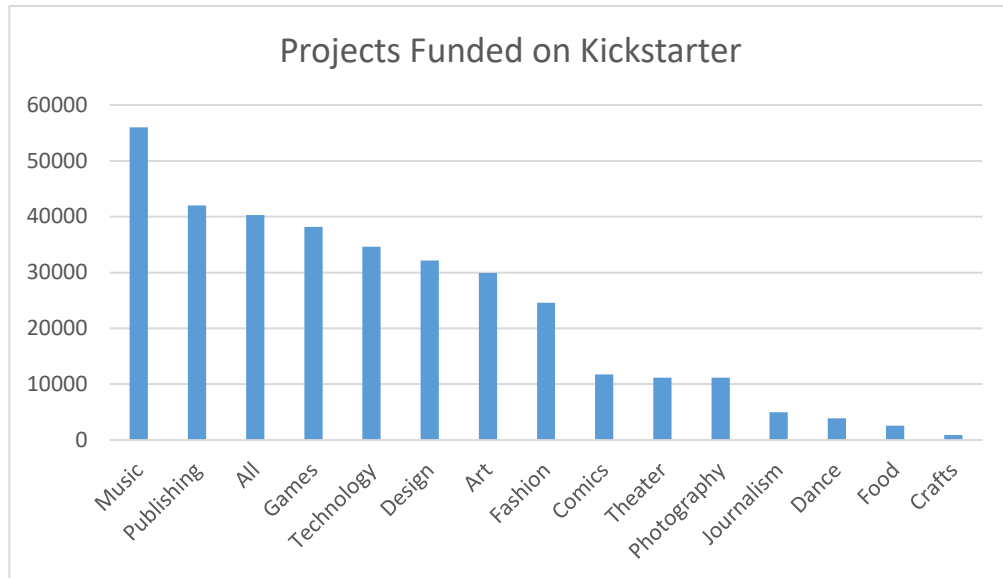


Figure 2 - Kickstarter Statistics

The Figure 2 above highlights the number of projects funded through Kickstarter. An important consideration to be taken into account is that the total amount of money raised is not proportional to the number of project funded for each category. This means that, for instance, even if Music category is the one with the major number of project funded through Kickstarter not necessary has to be the one with the bigger total amount raised. In fact, if it is considered the total amount of dollars raised through the campaign the situation is different. In this case, Games is at the first position with \$827.57 million raised, follow Design with \$785.85 million and Technology with \$731.17 million.

This data suggests the importance CF has on creative industry that is one of the riskiest market because the result of the project can be seen only after it is

completed. CF helps creators to check “real-time” customers’ expectations and opinions.

CrowdRise provides a platform for charitable projects. During the years, it had had a significant raise. From 2010 to 2016, the number of charitable projects increase by around 800% and from 2015 to 2016 around 130% (Yu et al., 2017). This demonstrate the immense impact of CF not only from a profit point of view but also from a non-profit and charitable side.

CROWDFUNDING OVERVIEW

CF is a phenomenon that spread out around ten years ago and seems not knowing an end. It is constantly growing and the projections are very optimistic. The initial drivers of CF have been the financial crisis, the Web 2.0 and the crowdsourcing (Agrawal et al., 2011), but its subsequent success is due to an increasing quantity of value added for the customers. First of all, the Internet enables people getting in touch with each other. Platforms are as intermediaries that give the possibility to the parts to interact together (Giudici et al., 2013). All the forms of crowdfunding have the same channel to reach the crowd but have different working principles. Basically, the only thing they have in common is the form they advertise their project: using videos, pictures and updates on the platform and social networks. The typologies in which CF is usually differentiated are: Reward-based crowdfunding, Peer-to-peer crowdfunding, Equity crowdfunding and Donation-based crowdfunding. Reward-based crowdfunding is a finance mean that enables individuals or companies to raise money promising in exchange a non-financial “reward” if the target goal is reached. Peer-to-peer crowdfunding is a system based on micro-loans provided by people through CFPs with a given interest rates (fixed by the platform itself). Equity-based crowdfunding gives the possibility to the crowd to buy small shares of the company with returns based on the future profits. Finally, donation-based crowdfunding is the most charitable form: it does not establish, normally, any kind of remuneration. Sometimes the philanthropic backers are gratified publishing their name for example on the webpage of the funded company. The main difference between equity crowdfunding and non-equity

crowdfunding is that in the second one the objective of the campaign is not only to fund the company but also to create it (Agrawal et al., 2014).

Three are the actors involved in crowdfunding: founders, backers and platforms. Founders and backers can represent different profiles depending on what they are looking for using crowdfunding. The founder can be individuals, registered charities, enterprises, social enterprises, start-up, etc. Backers can chose to support creators for many different reasons: there are philanthropists, fans that wants to finance the new album of their star, people that feels involved in a project and wants to see it completed. Others support the cause just to have the product before entering the market or at a lower price. For these reasons, the platform's role is essential: it has the task to make sure people meets the right counterpart and to provide exactly the service those people wants. In facts, exists thousands of CFPs but they do not provide the same service. They can adopt essentially two different business models: the all-or-nothing model or the keep-it-all. With the first one, the creators can access to the funds only if the target goal is entirely achieved whereas, in the keep-it-all model the founders can collect their level of financing as it is after the closure of the campaign. Another important task the CFPs have to fulfil is the correct implementation of the legal structure required by regulators (Beaulieu et al., 2015). The most known platform is Kickstarter.com that raised, so far, more than \$3 billion. This platform does not accept charitable and humanitarian projects and acts only with the all-or-nothing model. Indiegogo.com is another famous CFPs: in this case, pro-social projects are accepted and the creators have the possibility to take the funds even if they do not reach their target goal. In Italy, for example, the most

famous are Eppela.com (a reward-based crowdfunding platform) and Ulule.com (a reward-based CFP born in France). In some cases, CFPs provides their intermediary role only for a single sector: for example, musicraiser.it that is dedicated only to music industry or sport supporter.it for sport projects.

Considered the premises, everyone can now realize the enormous power CF has and is developing thanks to its disruptive concept and thanks to the favourable post-crisis background.

CHAPTER 1: LITERATURE REVIEW

1.1 CROWDFUNDING CHARACTERISTICS

The following section contains a general overview of crowdfunding characteristics. The paragraph enables the reader to contextualize the phenomenon. To pursue the goal of clearness and completeness, the paragraph is divided into sub-paragraphs: the forms of crowdfunding constitute the first part. After that, the purposes and usages of CF are described, in order to illustrate in which ways this mean of financing is exploited by entrepreneurs and society. It is important also to focus on the impact crowdfunding has on the society taking into account different perspectives. That is why an ad-hoc sub-paragraph is dedicated to this theme. Finally, an overview on the regulations introduced in the last years all over the world is presented.

Crowdfunding can be defined as “*an open call, essentially through the Internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes*” (Lambert, 2010). Its origins can be connected to micro-finance (Weinstein, 2013): people can contribute to the cause with small amount of money. Investors, in the meantime, have also the possibility to follow directly the development of the projects and give their own suggests if necessary. As mentioned before, CF is considered part of a bigger phenomenon called crowdsourcing. This model enables external resources (not necessarily being part of the shareholders) contributing in different ways to meet the goals the creator wants to reach. These

different forms of contributions can be, for instance, suggestions that people provides to develop the business. Open innovation is another model that is spreading out during the years. The big difference with this model has been highlighted by academics in their studies. Open innovation, in fact, is based on external contributions. The difference is that in crowdsourcing, potentially, everyone can give a contribution to the cause, whereas, in the case of open innovation, only a network of expert is taken into account (Freund, 2010). This is one reason why CF is considered so disruptive; it is more extreme than other new business model that are rising after the financial crisis. Researchers focus also on another important characteristic of CF: its function in democratizing the innovation (Mollick and Robb, 2016). Innovation has not ever been so accessible to the crowd, CF makes sure the innovation is commercialized and distributed. The increase of the spread of innovation granted by the crowd, however, is not accompanied by a reduction of the quality of the companies founded. In fact, researchers (e.g. Mollick and Nanda, 2016) demonstrates that the crowd evaluation is at the same level of the expert's one, and in the arts field they contribute even more to discover new promising artists. The democratic effect is made easier by some advantages the Internet provides: the search costs are much lower thanks to the platforms that easily make backers and founders meet and communications costs are close to zero (Agrawal et al., 2014). Furthermore, the risk is reduced because the dimension of the investment the backer does is not so much exaggerated.

The process founders follow to try to fund their enterprise is similar to the typical financing attempt (Meyskens and Bird, 2015), but the peculiarity is that everything

is done online and the amount of money is largely distributed over the people. Basically, creators develop a campaign, promote it through the Internet and collect the money. Once the campaign is closed, the founders distribute the rewards to the backers, if are expected, other forms of remuneration or even nothing.

Crowdfunding, nowadays, is one form as another to finance an entrepreneurship project. For this reason is important to evaluate all the positive aspects related to it and not only the ways to have success in the campaign. That is why some academics started analysing the aspects of the post campaign and the consequences that crowdfunding has on the future life of the founded company. Stanko and Henard (2017) took into account the after campaign consequences from the point of view of how much important is the contribution of the backers and the number of them that support the cause. He comes to the conclusion that the amount of money raised through a reward-based crowdfunding campaign is not relevant on the future success of the product. What is important is the number of backers. Pledging a high amount is important from another point of view. It grants the company to attract a higher number of professional investors after the company is constituted and is on the market. The positive effect, however, is subordinated to the presence of patent of the new product and a consistent social capital (Roma et al., 2017). Another important aid crowdfunding gives to the company is the possibility to exploit the networks created during the campaign (Di Pietro et al., 2018). This gives the company the possibility to exploit their knowledge and their feedback for marketing and strategical purposes. Essentially, the main result of the study suggests the crowd

must be considered as an asset of the company and a correct exploitation of this asset can ensure a competitive advantage.

The researches started focusing also on another aspect related to crowdfunding: crowdfunding risks. Stack et al. (2017) identified four types of risks:

- **Fraud:** it is referred to the case in which the projects is a fake aimed only to gather money from well-intentioned investors.
- **Intellectual Property Theft:** sharing his own idea on the Internet needs to be managed carefully. Investors could be interested in stealing ideas more than investing on the good ones.
- **Money Laundering:** this is a risk that can happen if both founder and backer are ill-intentioned.
- **“Failure by Success”:** the author forges this term to indicate the failure due to an overfunding of the project when it cause delays in delivering the final product.

The risk of fraud is the one that can affect the most the entire crowdfunding system and its credibility because it hits directly the real engine of crowdfunding: the crowd. Actually, the case of fraud are very limited and the CFPs usually have team in charge of granting the correct use of the platforms. Fraudulent behaviour can be detected also analysing the language and the content used to describe and promote the project. Mixing static and dynamic communication analysis can help to identify frauds (Siering et al., 2016). Finally, there are some crowdfunding forms that prevent fraudulent behaviours. All-or-nothing campaigns for example can prevent

this attitude because the founders can take the funds only if they met the target goal (Tomczak and Brem, 2013).

1.1.1 FORMS OF CROWDFUNDING

CF is a complex phenomenon that involves different economy sectors. It is usually divided into different models: Reward-based crowdfunding, Peer-to-peer crowdfunding, Equity-based crowdfunding and Donation-based crowdfunding. Some of them are financial (or commercial) models others non-financial (or non-commercial) ones according what is given in exchange the contribution of the investors. Equity-based and peer-to-peer crowdfunding are financial models. In fact, the first one enables backers to buy shares of the company financed and, in return, obtain portions of the future profits of the enterprise founded. This form of crowdfunding is having even more influence and importance with the years thanks to regulations that grant a bigger diffusion of this model. Peer-to-peer lending is a form of micro-loan that gives the possibility to the people to borrow money at a given interest rate. The interest rate is set by the platform. This financing mean, from a legal point of view, is *“a loan agreement (debt) which contains the lender’s credit claim to receive interest and redemption payments in the future”* (Lenz, 2016). The procedure is the following: borrowers present their offer to the platforms indicating the amount of financing they need and the maturity. The platforms analyse the case and set an interest rate if the loan fills with their credit policy. After that, starts the usual campaign. Peer-to-peer crowdfunding is the most diffused form of crowdfunding, in 2015 it represented the 75% of the CF market in UK and more than 50% in the rest of Europe (Lenz, 2016). The non-financial models are

reward-based and donation-based crowdfunding. They are considered non-commercial models because there is no economical remuneration for the contribution they give. In reward-based CF, backers receive in exchange benefits or the final product (object of the campaign) after the contribution. Most of the time people invest in reward-based crowdfunding to have in exclusive the product or at a lower price. In fact, in these cases the product is something very innovative. In other situations, the backers are fans (if they are supporting a singer or a movie director) or can be people that wants the project rise and simply empathize with the creators. That is why, sometimes reward-based campaigns do not establish any rewards but a simply “thanks to the backers” with their names specified somehow. Donation-based crowdfunding does not presume financial or non-financial returns. Philanthropists and supporters of a specific cause limit their contribution to mere help, without expecting nothing back. The founders usually mention their names on the webpage of the project or on material that can be consulted by the community.

The different models of CF are significant for both backers and founders. The type of remuneration is kind of interesting for backers’ choices, but also founders have to consider which model adopt for their campaign. Meyskens and Bird (2015), for instance, proposed an interesting framework that suggests which model use according to the type of value generated by social ventures. Social ventures generate two kind of values: economic and social values. The first one is the one related with the generation of wealth for the population. Social value is related to the positive impact the venture has on society and/or environment. The lower is the economic value the higher is the benefit founders can have using a non-commercial model

and vice versa. In case of low economic value, if the social value is low then is better to choose a reward-based crowdfunding because philanthropist accept to invest on a project based on the social impact it has.

1.1.2 PURPOSE AND USAGE

It should be clear, so far, that crowdfunding grew at the beginning to help innovative companies to rise. The financial crisis, and the difficult years after 2008, have triggered the natural instinct of the market looking for alternatives rather than collapsing. The consequent spread, however, is due to a series of different purposes CF has been used. First of all, people started using crowdfunding also for social initiatives. Social entrepreneurship is a form of entrepreneurship that has as ultimate scope generating benefit for the community and/or try to solve problems that affects the society. Crowdfunding can be a good partner of social entrepreneurship because the main stakeholders (and shareholders in some cases) have a double positive effect: they can take advantages from the social impacts the company generates and from a stricter economical point of view. For this reason, they should be pushed investing in this mean of financing. Crowdfunding, in this field, is still relatively unknown. It needs to be promoted better in order to be exploited by social entrepreneurs in a more incisive way (Bergamini et al., 2017). Odzemir et al. (2015) suggests as one of the purposes of crowdfunding can be also philanthropism. Many studies, furthermore, take into account the important contribution crowdfunding can give if places side by side with Venture Capital (VC). Before the rise of crowdfunding, VC was living a happier period. Entrepreneurs have a relatively easy access to crowd financing because everything is done through the Internet.

Moreover, the likelihood of being funded by crowdfunding is higher even if the amount raised usually is lower. The importance of cooperation between these two forms of financing emerges in the post-campaign phase, when the company is already founded. In fact, a peculiarity of VC is that they are available to support economically and to give suggestions to the company after the launch. For this reason, even if during the period in which the company is raising seed capital the two financing means can be considered substitutes after that phase, it could be helpful having them complements (D'Ambrosio and Gianfrate, 2016). It is clear that VC cannot appear directly during the post-campaign phase. In fact, one of its characteristic is that these investors want to seat on board of the company. It is unthinkable that a company is founded only through CF and then VC comes to save the company if is needed. A strong point that can help realizing that VC and CF could be complements also during the seed phase is that the crowd knows better the local demand and the local market than VC (Liu and Wang, 2018). For this reason, it could be astute for VC to support projects that the crowd is willing to support. In fact, as demonstrated by Sorenson et al. (2016), crowdfunding attract VC in regions that normally have been excluded. Another reason why crowdfunding has been exploited so much by companies during the years is because it can be used to test the market, to test an idea and even as a marketing mean. Many companies already founded use to launch a crowdfunding campaign to promote their new product or simply the company itself. The use of big data and of the Internet (social networks at the first place) is having an important impact on the behaviour the company assume moving into the market. Crowdfunding can be a sneaky way to do it because

apparently the purpose is another one. The backers, most of the times, are involved into the project in many ways: the relationship company/customer in this case is different (Gallego, 2011). They are part of the success of the campaign and they feel part of the project itself. For this reason, thanks to the platforms and social networks, this relationship is strengthened. Through the Internet, the development of the project can be followed real-time, and the customer can contribute and suggest every time they want. On the other hand, the company can test the idea real-time and change the directions the project is taking real-time. Furthermore, thanks to these channels the founders can promote the nascent company and exploiting the power of marketing for future success. Sheldon and Kupp (2017) even suggests a six-part market testing method based on CF.

The diffusion of crowdfunding took also to a myriad of usages of this mean of financing. The first distinction that can be done of the crowdfunding initiatives are the for-profit and no-profit ones. This distinction is important regarding the further discussion about the determinant of success of a crowdfunding campaign contained in the next section. Despite the principal financed sector remains technological and innovative industry, crowdfunding is applied to a series of alternative fields. It is used for example by academics to finance their researches. Marshall (2013), for instance, presents some examples and tips regarding “kickstarting” scientific researches. Journalism has known a new renaissance somehow thanks to crowdfunding. In fact, the possibility of the freelance journalist to finance their works through the crowd gives them the opportunity to write about what they want (Carvajal et al., 2012). They are completely detached from the influences of

institutional and economic powers. Kind of the same is happening to music: the artists can fund by their own their new albums thank to the support of their fans. This enables them to increase their profits and to be more free and independent (Gamble et al., 2016). Another form crowdfunding manifested is the civic crowdfunding. Civic crowdfunding is “crowdfunded projects that provides services to communities” (Davies, 2014).

Even if Davies (2015) highlights some cons of civic crowdfunding such as that, sometimes, the crowd decision is limited only to decide to support the project or not, without the possibility to suggest changes or improvements, civic crowdfunding can strengthen the relationship public/institutions and governments, helping communities getting more involved into the public sphere. Another usage of crowdfunding is the real estate financing. People can contribute with relatively small contributions to build or simply to manage buildings, resorts, hotels and so on, taking a return from its rent or sell. For example, Walliance is a platform that gives the user the possibility to invest on different real estate projects all over the world. To conclude a quick view of the usages crowdfunding can have, can be mentioned that CF has been used even to fund personal projects such as marriages, graduation gifts, travels, etc. For instance, the web page plumfund.com offers these kinds of services.

1.1.3 IMPACTS

The disruptive characteristic of crowdfunding has its main impact on the way entrepreneurs bring the product into the market. CF changed this way: the introduction of a product follow a new approach. The market is consulted during

the development of the product until the commercialization. This new model is son of two intrinsic characteristics of crowdfunding: openness of the market and backers as predictors of market performance (Stanko and Henard, 2016). The market in a crowdfunding context is open; the organizations can take ideas from inside or outside the organization itself. This facilitate the founders choosing crowdfunding to finance their projects. Another important factor that ensure the organizations to introduce to the market their product through crowdfunding is the role of the backers. They are important predictor of the future market's signals. What is an important predictor is the number of backers that support the campaign and not the amount of money every backer decide to invest. Younkin and Kashkooli (2016) identified four main problems CF addresses that are determinant for the success of a campaign and for the promotion and commercialization of a new product: coordination, gatekeeping, patronage and inexperience. Every platform try to face one or more than one of these problems.

- **Coordination:** is related to the networks founders need to get in touch with the right customers. This problem is addressed by some platforms coordinating existent networks or generating new ones.
- **Gatekeeping:** the problem of access to pools of capital normally not accessible.
- **Patronage:** is related to the contributions coming from donors with normally non-financial purpose.
- **Inexperience:** sometimes the creators are inexpert managing a business. This happens mostly for the first-time founders.

The relevant fact is that these problems are addressed by CFPs without any payment required back. This is a noteworthy impact crowdfunding has on companies that are looking for a successful project: they can save money that in other situation could be required.

Gleasure and Feller (2016), instead, focused on the impacts every form of crowdfunding generate. For example, he suggests how peer-to-peer crowdfunding put pressure on financial institutions because of this new form of granting credit, becoming new financial institutions for the ones do not have access to the traditional financing means. Moreover, founders become borrowers and financial benefactors at the same time. Equity-based crowdfunding create a new way SMEs have to finance. The bigger impact donation-based crowdfunding has is that raise the likelihood a project that does not promise any remuneration is founded. This happens because platforms enlarge the accessibility to communities of donors. The same happens for the reward-based crowdfunding. Another significant impact of crowdfunding is that supports the fast-expanding markets (FEMs). These markets are the ones with a high rate of growth during the first years (15%) and that have an important impact on the economic activities and policies. Crowdfunding helps FEMs developing because it enables creating shared values. Shared value is very important in fast-expanding markets (Baumgardner et al., 2017). In fact, it promote developing new business from unmet needs, improve efficiency and productivity thanks to the exchange of information between all the stakeholders, connect business to local communities.

As aforementioned, crowdfunding put pressure to financial institutions. The subprime mortgage crisis of 2008, put financial institutions in bad light. People's opinion about banks was never so good but, after the crisis, everything amplified. Crowdfunding spread out also exploiting this situation and, right now, financial institutions should start collaborating with CFPs for essentially three main reasons: to improve their image, to seek profit and to generate loyalty and clients (Attuel-Mendes, 2017). It seems that banks understood the situation and they are starting creating partnership with some CFPs. For instance, they can facilitate opening accounts for parts related with the CF world or even creating their own platform or promoting some particular platforms. One important consequence of being involved in CF is that the bank reduces the likelihood to lose potential profitable new companies as new clients. In fact, people are always more frequently using crowdfunding to start innovative and disruptive firms and the traditional financing environment risks to stay out if it does not react correctly.

1.1.4 REGULATION

As discussed previously exists different forms of crowdfunding. Equity crowdfunding is the one that has a strong impact on regulations all over the world. It consists in granting shares to the crowd in exchange to a future return based on the profits of the company is going to rise. The main economies in the world have a well-regulated securities market considered the exaggerated impact financial crisis have on the so-called "real economy". For this reason, equity crowdfunding at the beginning found particular difficulties to spread in this environment. After all, it was important to regulate it for at least two reasons: crowdfunding was

growing exponentially during the years (and it is continuing to grow) and it was (and is) used essentially by SMEs, mostly the ones do not have other forms of financing. So, considered the enormous impact it has on the economy of the States, each Nation intervened as required. Just as an example, the following is a list presented by De La Vina and Black (2018) of positive influences regulating equity crowdfunding in USA has had: increasing the rate of business start-ups, encompassing a wider range of potential projects and founding goals, slowing the small business failure rate, creating more job creation, increasing business funding outside of major urban areas or innovations hubs and offering non-financial benefits. In general, regulations of equity crowdfunding make more flexible and accessible the investment process and at the same time try to protect the investors imposing duties and responsibility to platforms that act as brokers (Yeoh, 2014). In fact, obviously, as highlighted by Cumming and Johan (2013) the founders would prefer the least strict regulations with lower disclosure duties and flexible in order to raise as most capital they can. Platforms would prefer less disclosure and stringent rules and, finally, investors are on the side of the maximum control and regulatory rigidity in order to feel themselves protected.

USA, UK and Italy are the first countries that introduced forms of regulations in their jurisprudence. USA through the JOBS Act Title III (the so-called Crowdfund Act) fixed a series of quantitative limits to the investment and issues. Issuer can raise in a 12-month period maximum \$ 1,000,000 without registering at SEC. They have to respect some disclosure rules: if the issue is more than \$ 100,000 but less than \$ 500,000, they have to provide financial statements reviewed by a public

accountant. If the issue is bigger than \$ 500,000, they have to present audited financial statements. Investors have different limits in relation with their annual income or net worth. If they have annual income or net worth less than \$ 100,000, they can invest on the market maximum \$ 2000 or 5% of their income. In the case is bigger than \$ 100,000, they can invest 10% of their annual income or net worth up to \$ 100,000. Italy ensure the issuers to release up to € 5,000,000 without registering a prospectus. United Kingdom regulation fixes the limit to 10% of the net investible asset of a potential investor. They decided to introduce this form of border because they want to give access to the market to all the people that are able to understand the potential risk related to investing in start-ups and in unlisted shares. Another important part involved into the crowdfunding market, in addition to investors and issuers, is CFPs. They are considered as brokers or intermediaries between the other two parts involved. In USA, for instance, platforms that want to be eligible for the exemption to the registration as brokers have to be registered to a national securities association registered under the Exchange Act. The latter is the Financial Intermediary Regulatory Authority.

1.2 CROWDFUNDING CAMPAIGN

In this section are discussed the main topics that deal with crowdfunding campaign. The campaign is the most important step for the success of the project, because it is like the “show” the crowd attends through the Internet (that is the communication channel) and makes the crowd get in touch with the project. It is, for these aspects, an essential part of the entire crowdfunding process that cannot be undervalued.

First of all, the following paragraph describes the crowdfunding business process: are discussed all the parts constitute a crowdfunding’s business process, the crowdfunding campaign and the elements influence the campaign. After that, the section contains a discussion about the determinant of success of a crowdfunding campaigns. In fact, what determines the success of a project are factors that come from different fields. The success is affected by geographical position of backers, the more or less disclosure and so on. Finally, are discussed the social dynamics that influences the parts involved into the campaign (backers and founders). In fact, social networks, signals, psychological aspects impact on the way founders decide to base their campaign and the approach the backers have supporting the projects.

1.2.1 PROCESS CHARACTERISTICS

An important characteristic of crowdfunding is that, in general, it finances a company that needs seed capital to be founded. This aspect is important because is the starting point of the crowdfunding campaign process. If the financing was required to raise capital when the company was already on the market, the setting of the process should be different to be successful from different perspectives

(marketing side, language used, channels used, investor target and so on). Crowdfunding can be considered a two-sided market (Tomczak and Brem, 2013). In fact, it links two users using a network and CFPs are the intermediaries. Seed capital financing and two-sided market are the two principal aspects to take into account to contextualize the further discussion about the process of the crowdfunding campaign. Tomczak and Brem (2013) are the first ones that developed a flowchart of the crowdfunding business process.

He divides the process into 5 parts:

- **Type of crowdfunding:** the first step a founder has to do is to choose the type of crowdfunding: direct or indirect. Direct if he owns a platform or a webpage in which he asks for funds, indirect if he makes use of a platform he does not own.
- **Funding model:** ex post facto or ex ante. After choosing the type of crowdfunding the founder has to choose if offering the product once the financing is completed (ex post facto) or starting the campaign and the financing when a project is work-in-progress (ex ante). This choice is done, of course, taking in consideration the purpose of the future company. If the company is rising because it is going to offer a very innovative product, the only choice could be the ex post facto. Ex ante, instead, works better if there are project with a mutual interest of founders and backers to conclude it fine. For instance, social project with an impact on the environment or on the city in which is proposed.

- **Reward modes:** the first two parts were in charge of the founders. This part is in charge of the platform because it refers to the different modes a platform offers to the creators to be financed. There are essentially four ways: all-or-nothing mode that consists in fixing a target goal and taking the money only if this target is met. The all-and-more that gives you the possibility to gather the money you can even if the target found is not met or passed. The holding mode ensure the founders to rise a holding company and then selling the shares he owns to the crowd. Finally, the club membership mode is creating a small club of investors from the crowd that invest on a specific project. The first two modes are the ones more in vogue and used nowadays in crowdfunding. The principal platforms, in fact, adopt one of the two models or even both of them.
- **Type of investment:** this part is important because it determines the further development of the campaign and determines if the business process ends or not. There are many forms of investments: three of them are well defined (active, passive and donation) and then can be implemented others. If the investment is passive (reward-based crowdfunding) or is a donation the business process ends. The same happens in the others different forms of investment but the active investment (equity-based crowdfunding, profit sharing, etc.).
- **Securities determination:** last step in case of there is to determine the partition of securities among the parts or other form of shared returns.

After a quick review of the crowdfunding's business process is now clear that there are a lots of factors that can influence the development of the campaign. In order to continue this descriptive part of the processes of crowdfunding, below is presented a discussion about the crowdfunding campaign steps and the main elements involved in the campaign:

- **Choosing a platform:** this is the first step to do to fund a project. The choice is determined by the type of crowdfunding chosen (direct or indirect) but also by the typology of the project. The most important distinction in this case is between profit and no-profit projects.
- **Setting a target goal and a time limit:** these aspects are strongly influenced by the reward mode and the type of investment. It is important to set the right target and deadline from a strategical point of view. In fact, contributions increases if the funds are close to the funding goal, instead, decrease if the goal is already reached. Furthermore, if the campaign is close to its deadline the contribution increases too (Kuppuswamy and Bayus, 2017).
- **Developing and launching the campaign:** based on the previous choices, it must be developed and launched the campaign, that is to say the video, updates of the progress, interacting with the network through social media and so on. In this sense, it is very important to consider which information the founders ensure to the crowd and the rewards they choose for them. Around these two themes, there are different studies that focus on the correlation between success and rewards menu or information disclosure.

The purpose of this paragraph was to give a structure to the crowdfunding process in general and of its main important element, the campaign, in order to give to the reader the possibility to contextualize the structure of the phenomenon and better understand the following paragraphs.

1.2.2 SUCCESS DETERMINANTS

There is an extended literature that deals with the determinants of success of a crowdfunding campaign. Academics analysed this topic from different perspectives and methods. Lots of factors can influence the effectiveness of the campaign and, most of the time, creators have to take into account the type of project and the different situations to make the right choice. Taking into account the type of the project means considering for which market is addressed and which is the demand target. Obviously, every sector has its characteristics and for this reason does not exist a general rules that can be implemented in each sector. On the other hands, the principal different situation the creator has to take into account are the following ones:

- The **reward modes** influence the decisions, mainly, all-or-nothing or keep-it-all models. They are based on different criteria and they fit in with different type of project.
- The **form of crowdfunding** (e.g. equity-based crowdfunding, peer-to-peer lending, reward-based crowdfunding and donation-based crowdfunding). In fact, backers have different investment intention and the form of crowdfunding is the first mean to understand it.

- If the output of the project is a **new product** or a **service**.
- The **nature of the project** (profit or no-profit).

In the following lines are described the principal success determinants considered by researchers in their papers. The purpose of this paragraph, in fact, is to give a complete overview of the possible aspects can influence the campaign in order to enable the reader to have a clear view of the factors to take into account starting a crowdfunding campaign.

Pricing Decision and Minimum Investment. The study conducted by Hu et al. (2015) is interesting because enable to understand pricing decisions when a crowdfunding campaign is launched in all-or-nothing mode and the output is a new product. In fact, it emerges that, when the potential backers are heterogeneous, the founders should offer different product lines with different quality levels to optimize the backers base. On the other hand, it is important to consider another factor: the minimum investment. In fact, the larger is the minimum investment required the smaller is the attraction of potential backers (Lukkarinen et al., 2016).

Internal and External Social Capital. This form of capital is a resource in crowdfunding. The social capital represents the set of contacts of an individual, an organization or a group that can be exploited, in this case, to get in touch with the right crowd. Social Capital is the base of success of CF. As highlighted by Lehner (2014), social capital interact with many other type of capital that all contribute to increase the likelihood of developing of new entrepreneurial opportunities. The external social capital can contribute to the success of the campaign thanks to the

support of the famous FFF (Fools, Family and Friends). This aspect has been underlined since the beginning of crowdfunding development, when almost no one imagined the enormous spread CF could have. For instance, Agrawal et al. (2011) already focused on these aspects. The internal social capital is an interesting theme underlined by Colombo et al. (2015). In fact, he states that the members of the crowdfunding community can help each other. The support of other community member's project can help to raise funds the very first days of the campaign.

Geographical Position. As expected, the location of the founders can be a key point for the success of the project. It is determinant for projects that have an impact on the territory but is not for the projects with other purposes. In fact, the Internet reduces the perception of the distances and enable people to feel closer. Agrawal et al. (2015) highlights how the distance is scarcely important in the art sector.

Number of Backers, Target Amount and Duration of the Campaign. These factors are strongly related and it is important to take into account them to develop a successful crowdfunding campaign. The number of backers can be helpful or not to determine the success of the campaign. Their influence is mainly due to the way networks of potential backers are exploited. In some cases, a high number of backers introduce noisier signals that are bad for the campaign (Devaraj and Patel, 2016). The target amount may be positive correlated with the number of backers and so fixing it higher could help gathering more supporters (Lukkarinen et al., 2016) but this result is not in line with what stated by Zheng et al. (2014) and Mollick (2014). They highlights the negative correlation between the target amount and the success of a reward-based crowdfunding campaign. Finally, a shorter

duration of the crowdfunding campaign helps to the success of the project (Devaraj and Patel, 2016).

Amount of Funds Raised the first week. There are evidences that there is a correlation between the success of the campaign and the amount of money raised the first days of the campaign. In fact, Petitjean (2017) demonstrates that the funds raised on the first weeks are positively correlated with the likelihood of success. It confirms previous results such as Colombo et al.'s results (2015).

Project Involvement and Anchor Values. Crowdfunding is a particular mean of financing. In fact, investors willing to invest is amplified if they feel involved into the project. Backers that feel more involved into a project care more about the project results (Colistra and Duvall, 2017). Anchor values play an important role regarding the emotional involvement of backers: values that unite communities of founders (and backers) help the success of campaigns anchoring them to specific projects (Gleasure and Feller, 2016).

Guilt Appeals, Utilitarian Product Type, Emotional Message Frame and Reward Ties. Chen et al. (2016) focused on these particular aspects. He found that guilt appeals, the responsibility to contribute that backers may feel in some particular cases, work fine for donation-based crowdfunding. From the point of view of the product type, utilitarian type is more determinant than the hedonic one for the success of the campaign. Utilitarian type refers to products that have practical, functional and instrumental benefits. On the other hand, emotional message frames that highlight more the hedonic part of the product are more

effective. Finally, a small number of reward levels is more appreciated by the potential backers and helpful achieving good results in the campaign.

Provision of Financials. Giving a signal of disclosure can be helpful to support the project. The positive effect is not very significant and related with the number of investors deciding to support the project and not to the amount of money raised (Lukkarinen et al., 2016).

Project Description. It is a fundamental part of the crowdfunding campaign because it is the presentation card of the project. The project description can be analysed taking different variables into account. For instance, its length, the tone, the readability, duration and so on. Zhou et al. (2016) studied the impact of project description on the success of crowdfunding campaign coming to the result that is an important determinant. Another relevant aspect of the project description is that, since it is prepared before the launch of the campaign, working fine on it can provide a preliminary prediction on the result of the campaign. If the project description is a failure, it is very difficult to succeed.

1.2.3 SOCIAL DYNAMICS

The determinants of the success of a project can be many as seen before but crowdfunding and the Internet enable to get in touch in the easiest way with people and this is the most important thing to exploit. The idea of crowdfunding is based on contributions among the people and, for this reason, is important knowing exactly how act toward to the crowd to meet a successful campaign. The Internet provides an environment to develop communities and thanks to them social

interactions can proliferate. People in their decision tend to take into account the choices of the other people (Thies et al., 2016). There are essentially two types of online social interactions identified by researches: an opinion-based and a behaviour-based online social interaction. The opinion-based one is also known as eWOM (Electronic Word-of-mouth) communication. This social interaction is the one generated by a cascade of opinions expressed by consumers that spread out through the crowd. The other form of social interaction is related to practical behaviour of other consumers (for example, people induced to download something because already downloaded by a large number of people). The importance of social interactions is essentially due to the herd effect they can generate. The consequence of amplifying the outcomes coming from social interactions can be positive or negative. If decision-makers know how to address social interaction issues, they can obtain an important aid from the herd effect. According to signalling theory “decision-makers will make use of observable cues (indices) as well as manipulable signals from the other party to justify assumptions about non-observable outcomes” (Clauss et al., 2017). The fact that the founder knows information about the project that the crowd does not know is an advantage if is correctly managed. The founder can send positive signals to the potential clients in order to reduce information asymmetries but also direct the crowd. In fact, information asymmetries should be eliminated to grant the market working fine. They can alter market mechanism and taking to market failures. Courtney et al. (2017) demonstrates that signals coming from start-ups and third-party endorsement can mitigate information asymmetry and contribute to the success of a crowdfunding campaign. The main way to

divulgate signals nowadays is the use of social networks. They are a powerful tool on the hand of founders that can give a great aid to them. The use of social networks enables founders to enlarge their net of people they can ask for support. In fact, with the use of Internet the geographical borders are overcome and the physical contact too. Social networks can contribute to the spread of information about the project and the way the creators do it can influence backers in different ways. Kromidha and Robson (2016) in their paper take into account if founders and backers that identified with the project had had a help for the success of the campaign. The result is positive: if people feels being part of a group they act as the group act according to the social identity theory. On the other hands, social networks can contribute to spread out fake information. It is interesting to understand if using social networks to promote fake information can help founders to collect more money for their project. Wessel et al. (2016) come to the result that exploiting social networks to divulgate fake information is not an aid to the cause and does not increase the fund gathered. Essentially, the use of social networks to support the projects consists in posting updates and promoting it in the webpages and CFPs. What is important is knowing which kind of post should be published in a specific social network. For example, solicitation works better in Facebook and informative messages more in Twitter because of the nature of the social networks (Borst et al., 2017). At the same time, updates about the project are more appreciated if posted in CFPs rather than in Twitter.

Other important aspects related with social interaction and crowdfunding success are backers' funding intentions. In fact, understanding their intentions is essential

to implement a successful campaign promoting social interactions. Social exchange theory (SET) highlights how important is the value perceived by the counterparties during social interactions in order to increase the benefit everyone can extract from the other part. For this reason, if founders are able to meet backers' funding intentions, the likelihood of success of their project increases because the backers perceive a higher value by their side. Zhao et al. (2017) demonstrates how trust, commitment and perceived risk are three important factors that affect funding intentions and, according to SET, these aspects are something to be taken into account by founders if they want to maximize the investment of the backers.

Finally, social interactions from one side can help founders to realize how to direct the crowd but on the other side, there are psychological aspects that are noteworthy in this sense. The most important is the co-ownership perception the backers could have when they decide to support a project. The other one that is worth to mention is the sentiment influence on the description of the project. Co-ownership is the consequences of co-creation (Zheng et al., 2018). Co-creation gives the backer a perceived control of the project, an intimate knowing of it and he feels to know how to ponder his contribution. All these things trigger a psychological sense of ownership.

The sentiment orientations' impact on CF are studies by Wang et al. (2017). His study is an interesting quantitative analysis of the impacts sentiment as on the success of a crowdfunding campaign considering the use of the language on the text description. The results suggest how an attentive use of the language using sentimental factors can increase backers' attraction to fund.

1.3 ACTORS

The literature review is concluded with a section dedicated to actors involved in crowdfunding. It is important to talk about the actors in a separated section because they are fundamental part of the entire process of crowdfunding. They are the main characters that put in practise CF process and are subjects to the changes crowdfunding takes. For this reason, in this section are described the roles the parts have into the crowdfunding environment and the motivations push them to get involved into this new way of financing. These aspects are highlighted because, as it should be clear after the previous analysis, crowdfunding is not only a way of financing: is having important impact on the possibility start-ups have to rise and changing the way people think developing an innovative and disruptive project.

1.3.1 ROLE

This paragraph describes the principal roles can be conferred to each actor that take part to the crowdfunding process.

Fundraiser. They perform an essential role because they ensure crowdfunding system to exist. In fact, they give rise to crowdfunding campaigns (Butticè et al., 2017). The founders can be distinguished in three different categories: profit or no-profit, male or female and fundraisers' social capital. Each one of these categories dress a different role according to the main purposes of fundraisers. For example, no-profit founders usually promote humanitarian initiatives or with social impacts having a key role on the community. Profit ones promote innovative start-ups and so on. In general, the easy way the fundraisers have to access to financing enables

this people to have a support for their project whatever the subject is. So, they can perform different role and have different impacts according to the nature and purposes of the project.

Backers. They are the supporters of the projects and enable them to rise. Backers can be considered not only the fundamental element for a project to rise but also an important treasure for founders. In fact, they are tester of the market, are the first sample to test the demand, they can be exploited for marketing purposes and to improve the product with their suggestions and co-creation. In some particular cases, they have a key role also in helping breakthrough coming to life. In fact, as demonstrated in some studies, usually crowd invests in projects experts do not want and in this way enable new innovative start-ups to rise in many different sectors or geographical areas. It is also demonstrated that the crowd is a very attentive judge as the expert are (Mollick and Nanda, 2016) and, for this reason, they cannot be considered simply fool investors. As highlighted before, crowdfunding is not only a mere financing method: it changes also the perspective of financing. So, the role of backers cannot be seen just as a distant investor with the purpose of a return.

Platforms. Finally, CFPs give the possibility to the two main characters of CF to execute their actions. They grant the parts to meet their purposes providing them the infrastructure they need. Another important role of platforms is that they enable creating communities and networks of people that have the same interests in a specific sector. This is an important contribution in the promotion of the progress.

1.3.2 MOTIVATION

Everyone when decides to do something has his own motivation or purpose. In a variegated environment, as the crowdfunding one, these motivations can be different. Fundraisers, for instance, decide to enter crowdfunding market to try to satisfy personal need that are still unresolved (Brem et al., 2017) or to promote social projects. In general, founders can have a lots of different reasons why using crowdfunding to promote his own project. Backers' motivations have been structured more in details by academics. Understanding backers' motivation is very relevant from a business and managerial point of view. In fact, is at the basis of strategic planning knowing the demand and the crowd in crowdfunding is not only how provide the funds but most of the times the final client. So, creators that have to launch a campaign need to consider the motivations push potential backers to invest on the project in order to plan a successful campaign. Furthermore, every project has different purposes and it is addressed to different portions of crowd. For this reason, is essential to know which section of crowd intercept and which are the reasons they decide to support projects. Backers drivers to investment also can be variegated. For instance, Mohammadi and Shafi (2018) found that female investors are more risk averse and so driven by cautious behaviours. According to Ryu and Kim (2016) the backers' motivation is influences by essentially three factors that then determine the backers' behaviour: sponsor personality, sponsor demographic factors and project characteristics. These aspects led to two different categories of motivation: intrinsic vs. extrinsic and self-oriented vs. other-oriented. Now, having

in mind this framework can be presented a list of backers' motivations (Ryu and Kim, 2016, Buttice et al., 2017):

- **Philanthropy:** backers moved by this motivation have an intrinsic reason to support a particular project or more than one and other-oriented perspective. They are moved by altruism and they clearly are willing to support causes that deal with social themes and that generate a positive effect on the community.
- **Economic Reward:** backers that are looking for an economic return. They are, for sure, self-oriented. This kind of backers uses to support reward-based and equity-based crowdfunding projects.
- **Sense of Community Belonging:** these backers supports project in which they feel involved somehow. They feel part of a community and take care the project can receive the adequate support.
- **Social Recognition:** backers with an extrinsic motivation and self-oriented are driven by this investment purpose. Sometimes they want to be recognized as the first investors that believe in the potential of an innovative idea.
- **Formalization of Contracts:** this happens when people close to the founders (usually friends and family) wants to formalize the contribution they are giving to the cause.

Finally, Ryu and Kim (2016) in their paper came out with a diversification of backers into four categories:

- **Angelic Backer:** with a high degree of philanthropic motivation and almost nothing of reward motivation.
- **Reward Hunter:** this type of backer is exactly the opposite of the first one. He has a high degree of economic reward motivation and is not driven by philanthropism.
- **Avid Fan:** this backer is driven by all types of motivations listed above. The reward motivation is the less important in this case. The avid fan is also the more active of the backers.
- **Tasteful Hermit:** even if this backer has the same active attitude of the avid fan, he is moved by less extrinsic and other-oriented motivation than the former. He is a shy figure with disagreeable traits.

CHAPTER 2: BIBLIOMETRIC ANALYSIS

2.1 GENERAL OVERVIEW

In this section is described the entire process followed to develop the analysis and all the information needed to completely understand and contextualize the research. As mentioned before, the perimeter of the publication taken into account is extracted by Scopus database. The time span considered is from 2010 to 2018 (June). The identification of all the articles in this particular time span took place using the key-words “crowdfunding” and “crowd-funding”. After the first list of results, the articles have been selected according to the methodology explained at the beginning of the dissertation in the dedicated paragraph. Applying the selection criteria set for the purposes of the research, the perimeter reduced from more than 1000 articles to 213. Next step was to read all the article in order to have a clear view of the topics related to crowdfunding. Deepen all the article enabled to identify thematic areas and research lines. Actually, the entire set of information selected is the following one: 1) author(s); 2) title; 3) year of publication; 4) journal; 5) country; 6) methodology; 7) type of study (i.e. literature review, quantitative analysis about the incisiveness of a campaign, role of the actors, etc.); 8) findings. Furthermore, for each paper, has been downloaded the set of backward citations (references) and forward citations, the institutions in which the authors work and the Scopus category. Purpose of the collection of the information was to have a structured database in order to clearly identify the actual state of the research about crowdfunding and to have a clear view about what has been done and what is

needed to be done. The bibliometric analysis ensures a complete overview of the collaborations among countries and institutions and an overview of the people involved into this field, granting to know where and to whom refer in case of necessity. So, the first classification done was about the thematic areas: what emerged is that the papers can be divided into three main thematic areas (Crowdfunding Characteristics, Crowdfunding Campaign and Actor). Crowdfunding Characteristic is the most populated category: it contains 116 articles out of 213. Crowdfunding Campaign is the second category with 70 papers and finally, Actor category with 27.

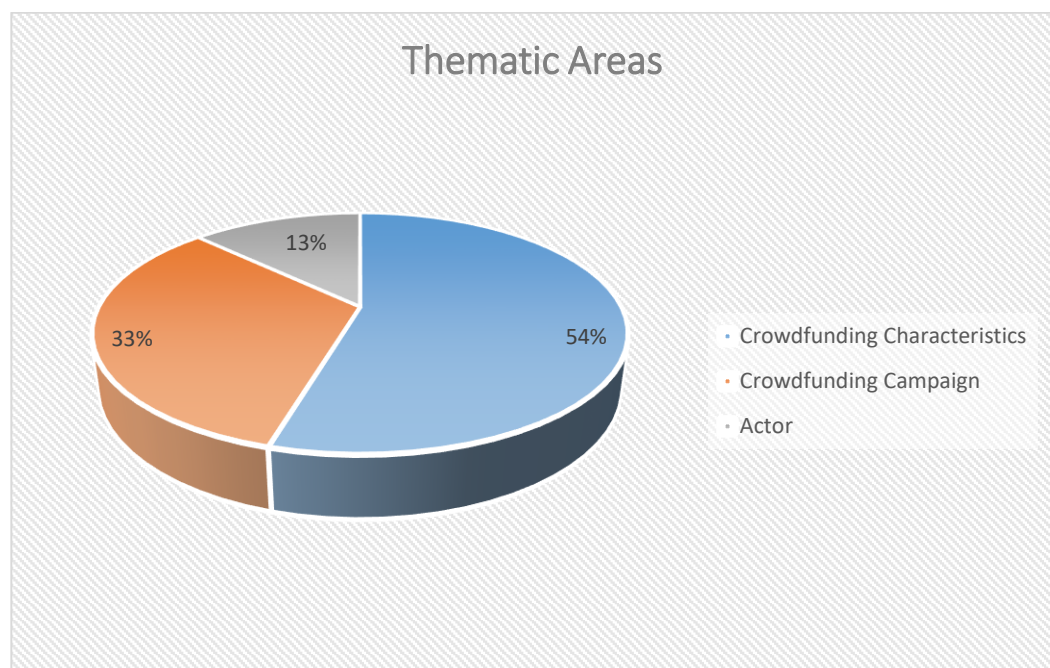


Figure 3. Pie Chart of the thematic areas

As it can be seen in the pie chart above, the most important part of the publication is related to the characteristics of crowdfunding and after that to the crowdfunding

campaign. To better understand this subdivision is necessary to go in deep analysing the sample. This topic is object of the next paragraph.

Finally, in the following lines there is a description of the software used to develop the analysis. Microsoft Excel 2013¹ has been the most used software for the data elaboration, creation of the database and analysis of the sample. From a graphical point of view, the software used to generate plots has been Microsoft Excel 2013 too but to generate and visualize bibliometric networks (co-authorship network, institution collaboration network and countries collaboration network) has been used VOSviewer software² (Van Eck and Waltman, 2010).

2.2 RESULTS

This section contains the results of the bibliometric analysis. The following part is divided into sub-paragraphs in order to better present the results of the research. At first, it is presented the sample and explained more in deep the nature of the papers and it is analysed the reason why some thematic areas are more studied than others, in which years, etc. Then, it will follow an analysis of sources and publishers to understand the relationship between these topics and journals and publishers. After that, it comes the in-depth analysis of the institutions involved and the countries in which crowdfunding researches are more alive. After this paragraph, the analysis will focus on the authors and the papers: in fact, there will be a paragraph about

¹ <http://www.microsoft.com/>

² <http://www.vosviewer.com/>

forward citations, another one about authors and co-authors and, finally, a backward citations analysis.

2.2.1 PRESENTATION OF THE SAMPLE

The sample is composed by 213 articles selected from Scopus database. The whole set of papers has been divided into thematic areas and research lines in order to structure the sample and properly analyse all the aspects related to crowdfunding researches. As stated before, the thematic areas are: Crowdfunding Characteristics, Crowdfunding Campaign and Actor. Each one of the thematic area contains more than one sub-category that represents the research lines. The sample has been divided into research lines in order to improve the quality organization and enable going more in deep into the analysis. Crowdfunding Characteristics thematic area include the following research lines: Form of Crowdfunding, Impact, Purpose and Usage, Regulation. Crowdfunding Campaign, instead, is composed by three research lines: Process Characteristics, Success Determinants and Social Dynamics. Finally, Actor thematic area is divided into Motivation and Role research lines. Below is presented a table that describe the percentage of the articles within the different categories.

Table 1 Percentage of the articles within the different categories

THEMATIC AREAS	RESEARCH LINES	Tot Articles	Relative %	Total %
Crowdfunding Characteristics	Form of Crowdfunding	29	25%	14%
	Impact	31	27%	15%
	Purpose and Usage	49	42%	23%
	Regulation	7	6%	3%
	Tot	116	100%	54%
Crowdfunding Campaign	Process Characteristics	10	14%	5%
	Success Determinants	37	53%	17%
	Social Dynamics	23	33%	11%
	Tot	70	100%	33%
Actor	Motivation	15	56%	7%
	Role	12	44%	6%
	Tot	27	100%	13%
Grand Total		213		100%

More than 50% of the publications deal with the Crowdfunding Characteristics; inside this thematic area there is a kind of equilibrium among the research lines with an exception for the Regulation topic. Many researchers focused on Crowdfunding Characteristics in order to explore the crowdfunding thematic since it was a new topic. In fact, there are many papers that simply focus on the usage and purposes of crowdfunding or that explain the impact crowdfunding can have on the society.

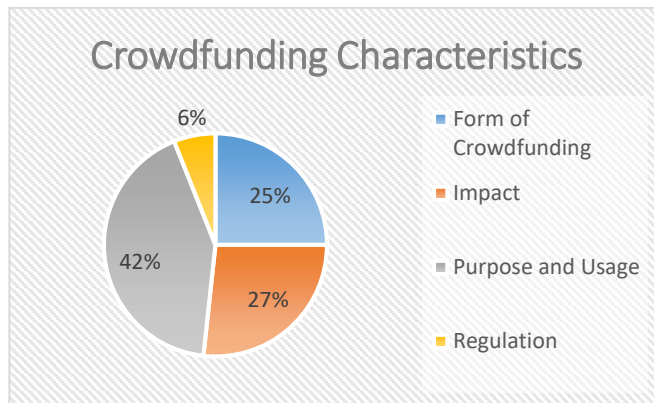


Figure 4 - Crowdfunding Characteristics partition in research lines

The situation is different for the Crowdfunding Campaign topic: in this case, the biggest part subject of interest of the academics is what determine the success of a campaign. This topic has a very important management and administrative impact and, for this reason, researches, after a preliminary focus on defining the process characteristics of the campaign, decided to move on identifying the success determinants. In fact, 53% of the 70 publications about Crowdfunding Campaign deal with the determinants of success of the campaign.

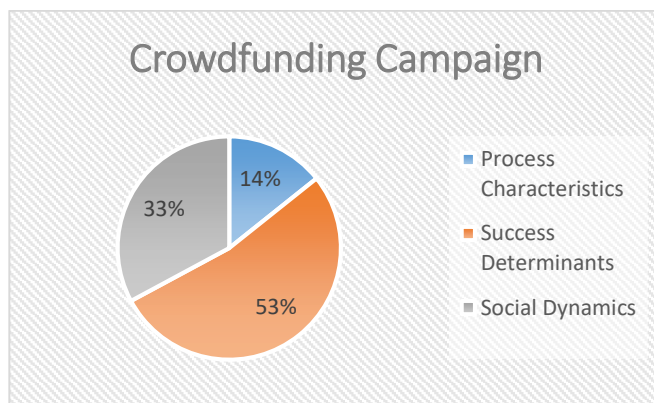


Figure 5 - Crowdfunding Campaign partition in research lines

Finally, the Actor subject is more balanced than the others: in this case, Motivation and Role of the actors are studied almost in the same percentage. Motivation is taken a little bit more into account by academics than the role of the actors because the contents of the papers can be exploited more by people wanted to start a company using crowdfunding. In fact, the main purpose of the researchers, in most of the cases, is to give advice and help founders that want to successfully start an innovative company.

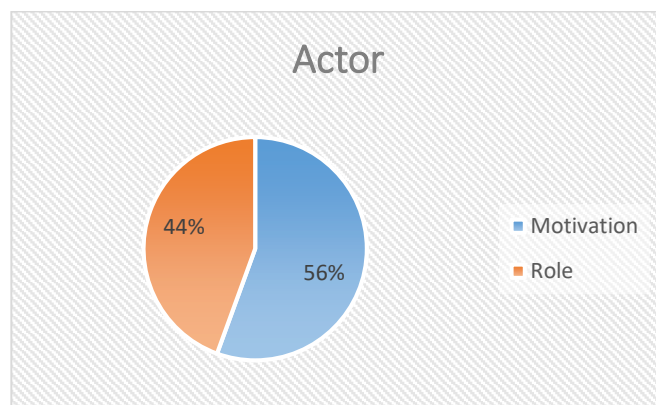


Figure 6 - Actor partition in research lines

An important aspect to consider to understand the evolution of crowdfunding and the research about crowdfunding is the distribution over the years of the publications and considering when academics started talking about a particular topic. In fact, research gives a great help to the evolution of crowdfunding and, at the same time, crowdfunding give great opportunity to researchers to deepen the topic and understand the dynamics is involved.

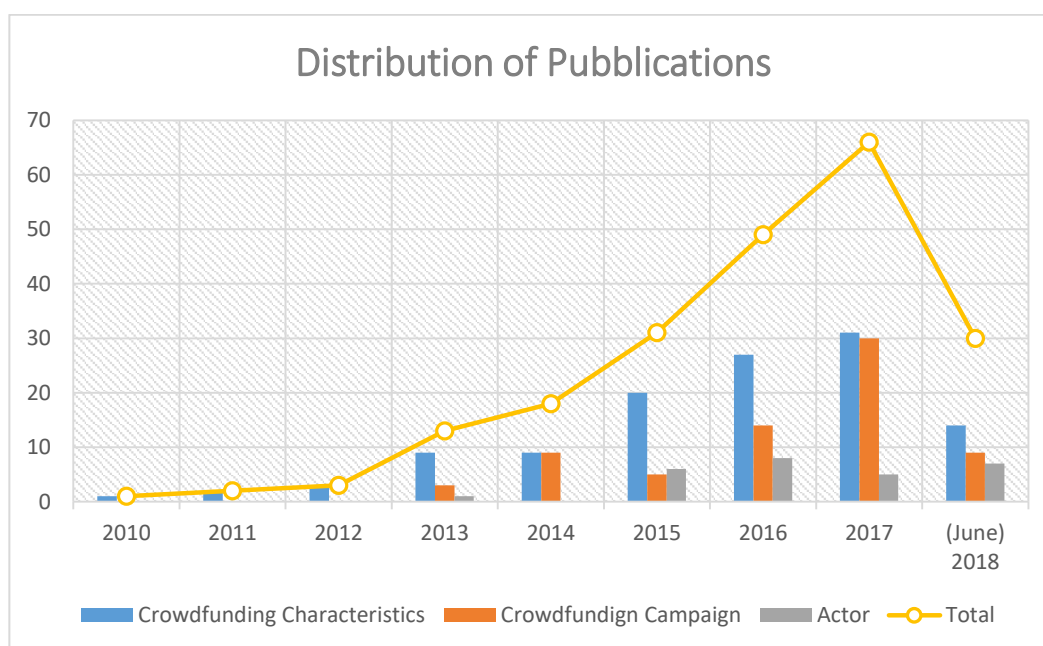


Figure 7 - Distribution of publications over the years for each thematic area

Crowdfunding started coming to life around 2008; in 2010 it was still a new topic for the entire world of academics. In fact, as can be noticed taking a look to the Figure 5, the first years taken into account for the bibliometric analysis are characterized by publications that deal with Crowdfunding Characteristics. Even if these aspects of crowdfunding continued remaining predominant over the years, Crowdfunding Campaign topic started increasing. As aforementioned, these factors of crowdfunding are extremely important to be incisive and gain the result and, for this reason, the contribution of researchers in this sense is continuously increasing.

Table 2 - Year of first publication by research lines

THEMATIC AREA	RESEARCH LINES	Year of the first publication
Crowdfunding Characteristics	Form of Crowdfunding	2012
	Impact	2010
	Purpose and Usage	2011
	Regulation	2013
Crowdfunding Campaign	Process Characteristics	2013
	Success Determinants	2013
	Social Dynamics	2014
Actor	Motivation	2013
	Role	2015

The evolution over the years of the topic analysed by researchers is confirmed by the table above. In fact, Crowdfunding Characteristics first publication date back to 2010, whereas Crowdfunding Campaign and Actor appear in 2013.

Crowdfunding has multiple impacts on different areas: it has generated a disruptive change in financing area but also in business administration. That is why is important to consider in which subject areas the publications are focused on. This task has been done considering the Scopus classification into subject areas.

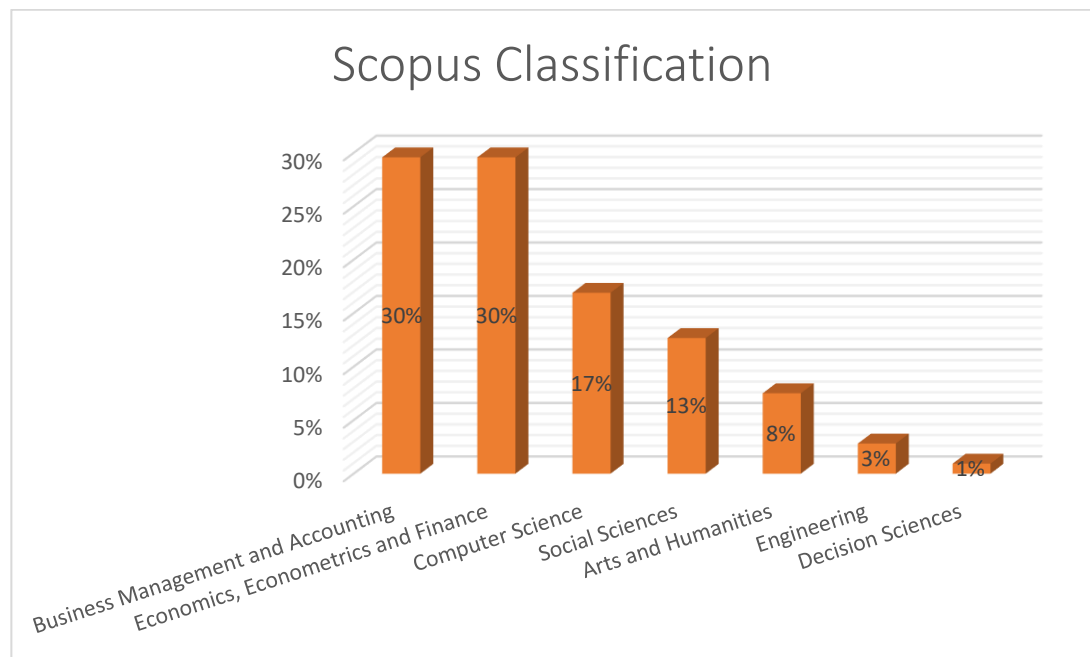


Figure 8 - Scopus Classification of the publications into subject areas

60% of the publications are included into Business Management and Economics areas. The biggest impact is on these categories. The publications being part of the aforementioned subject areas are the ones being part of Crowdfunding Characteristics thematic area (that is also the most numerous). It is important to consider the 30% represented by Computer Science and Social Sciences: in fact, these categories include mostly the publications about Success Determinants that are becoming being important on the crowdfunding panorama.

Another aspect to visualize in order to understand the impact researchers are giving to the evolution of crowdfunding is the type of study of the publications. Below the table summarize this information by thematic areas. The most part of the papers are quantitative studies: in most of the cases academics apply model to test their hypothesis and analyse the results. Crowdfunding Campaign and Actor thematic

areas are characterized mainly by this type of study. The percentage in the Crowdfunding Characteristic area is lower because there exist lots of theoretical studies in which are applied and explained theories crowdfunding adopts.

Table 3 - Publications type of study by thematic areas

Type of Study	Crowdfunding Characteristics	Crowdfunding Campaign	Actor	Sample
Quantitative	40 (34%)	60 (86%)	20 (74%)	120 (56%)
Qualitative	19 (16%)	8 (11%)	4 (15%)	31 (15%)
Theoretical	50 (43%)	2 (3%)	3 (11%)	55 (26%)
Literature Review	5 (4%)	0 (0%)	0 (0%)	5 (2%)
Interview	2 (2%)	0 (0%)	0 (0%)	2 (1%)
Grand Total	116	70	27	213

Below just a recap of the publication type of study of the whole sample. It is clear as the quantitative format of the papers is quite predominant.

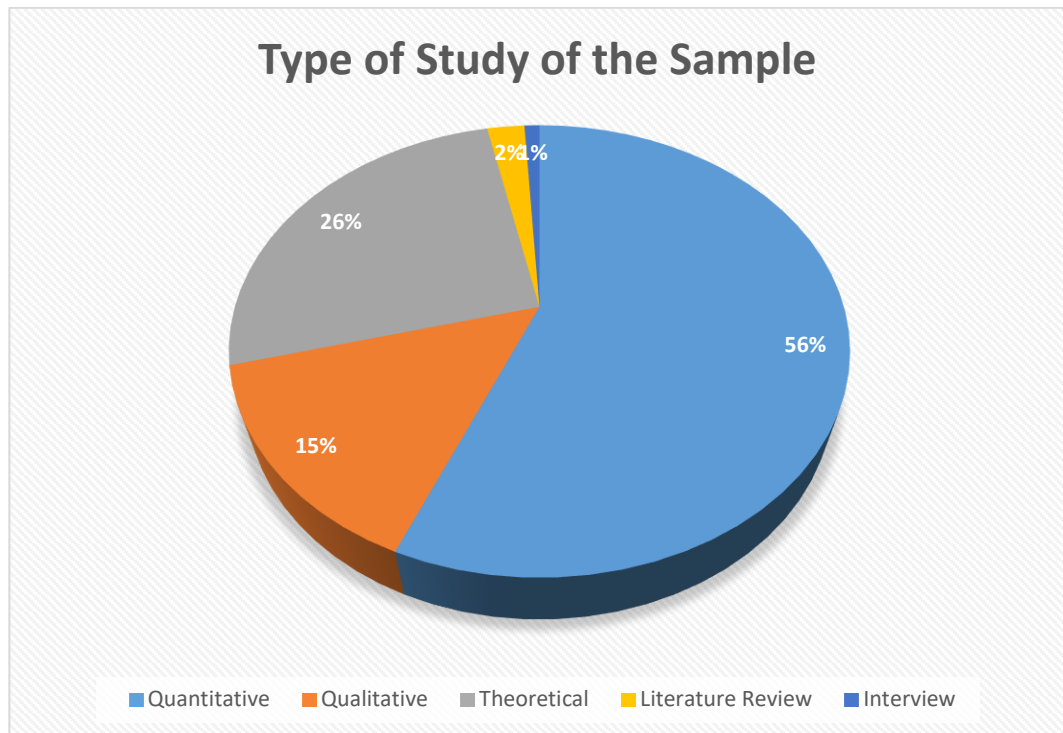


Figure 9 - Publications type of study of the sample

Finally, to conclude the overview of the sample, it is interesting to analyse the most frequent words used in the titles: "Crowdfunding" (170), "Innovation" (11), "Capital" (16), "Crowd" (27), "Social" (29), "Equity" (26), "Reward" (17), "Peer-to-peer" (7), "Lending" (13), "Donation" (2), "Financing" (5). As highlighted before, the main aspect underlined by researchers is the innovation crowdfunding took from a business management and financial point of view. These aspects emerge also in the titles. A part "Crowdfunding", in fact, "Crowd" and "Equity" are very used words, to underline the mean a start-up can be funded. "Social" is another worthy word to take in consideration: the impact on society and community of crowdfunding is quite important among the researches.

2.2.2 SOURCES AND PUBLISHERS

In this paragraph are analysed the sources in which the papers are published. All the sources included in the perimeter of articles selected for the bibliometric analysis are journals. Table 4 below contains the list of the sources with more than 4 publications among the ones object of the analysis. The table contains the information about the articles (number of articles published for every source, total number of citations, the citations per article) but also the information about the journal (ranking, category and area). In this way, it is possible to analyse the top sources in two different perspectives: it is possible to verify the incidence of the single journal on the topic of crowdfunding (considering how many articles are published in each journal) but also the considering if crowdfunding is debated in large scale or in a niche environment (analysing in details the ranking of the journals). In general, the articles taken into account have been published in 144 different sources. In fact, less than 30% of the publications considered in the analysis are included into these sources.

Table 4 - Top 11 Sources

Source	N. of Articles	N. of Citations	CPA	Rank	Category	Area
Small Business Economics	10	37	3,7	#8/195	Business, Management and Accounting	General Business, Management and Accounting
				#38/564	Economics, Econometrics and Finance	Economics and Econometrics
Journal of Business Venturing	8	742	92,8	#1/169	Business, Management and Accounting	Management of technology and Innovation
				#2/340		Business and International Management
Entrepreneurship: Theory and Practice	7	314	44,9	#7/564	Economics, Econometrics and Finance	Economics and Econometrics
				#9/340	Business, Management and Accounting	Business and International Management
Venture Capital	6	153	25,5	#55/226	Economics, Econometrics and Finance	Finance
Strategic Change	5	8	1,6	#106/195	Business, Management and Accounting	General Business, Management and Accounting
				#129/226	Economics, Econometrics and Finance	Finance
Management Science	5	82	16,4	#7/137	Decision Sciences	Management Science and Operations Research
				#22/370	Business, Management and Accounting	Strategy and Management

New Media and Society	4	40	10,0	#4/285	Social Sciences	Communication
				#21/1028		Sociology and Political Science
Journal of Business Research	4	33	8,3	#19/157	Business, Management and Accounting	Marketing
Decision Support Systems	4	17	4,3	#3/249	Arts and Humanities	Arts and Humanities (miscellaneous)
				#8/283	Psychology	Developmental and Educational Psychology
				#6/76	Business, Management and Accounting	Management Information Systems
				#21/251	Computer Science	Information Systems
				#10/81	Decision Sciences	Information Systems and Management
California Management Review	4	25	6,3	#20/370	Business, Management and Accounting	Strategy and Management
Research Policy	4	4	1,0	#1/137	Decision Sciences	Management Science and Operations Research
				#8/370	Business, Management and Accounting	Strategy and Management
				#6/169	Business, Management and Accounting	Management of technology and Innovation

Crowdfunding, for sure, is a relevant topic: the first 3 rows of the table demonstrate it. These three journals include 25 articles (11.7% of the total) and collect more than 1000 citations. The three journals are top sources considering their ranking. “Journal of Business Venturing” is a top journal, in the first and second position according to its category and areas of reference. The nature of the sources demonstrates again that the most relevant characteristic of crowdfunding is its disruptive impact on business management and financing. In fact, the journals are part of these categories (“Business, Management and Accounting” and “Economics, Econometrics and Finance”).

The top sources published in total 61 articles out of 213. The other sources contribute on the publications with less than 4 articles each source and for this reason are considered not relevant for the analysis. The publishers’ overview focuses on the top sources. The main publishers are 7: Taylor & Francis, Elsevier, SAGE, Wiley-Blackwell, Institute for Operations Research and the Management Sciences, Springer Nature and University of California Press. Table 5 resumes the overview of the main publishers. Elsevier covers 33% of the publications of the top sources and after that Wiley-Blackwell follows with 20%. Together the two publishers overcome 50% of the coverage.

Table 5 - Publishers' overview

Publisher	N. of Articles	% of Articles
Elsevier	20	33%
Wiley-Blackwell	12	20%
Springer Nature	10	16%
Taylor & Francis	6	10%
Institute for Operations Research and the Management Sciences	5	8%
SAGE	4	7%
University of California Press	4	7%
Grand Total	61	100%

2.2.3 COUNTRIES AND INSTITUTIONS

In the following lines will follow an analysis of the countries and territories involved in crowdfunding themes and, of course, the institutions hosted in these countries. In total, the institutions that dealt with crowdfunding over the time span considered for the analysis are 230. The most part of the institutions are settled in Europe and United States, but an important influence is determined also by Chinese institutions. The analysis below underlines these aspects and deepens the situation of the crowdfunding research among the different countries and institutions.

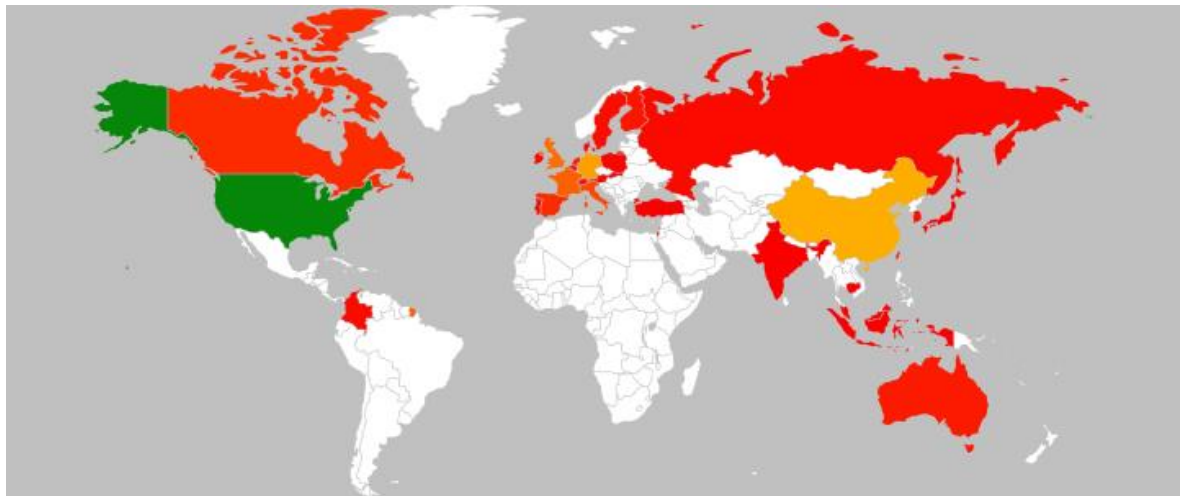


Figure 10 - Article Density Map

As can be verified having a look to Figure 8, the most part of the articles involves authors that come from United States. The green colour demonstrates a high concentration, the red a low one. The articles, of course, can involve authors from different countries, in these cases the contribution goes to increase both the countries in term of density in the map above. United States counts 123 papers in which they are involved with their authors. Follow China (with 41) and Germany (38). This view demonstrates that USA covers alone 57.7 % of publications, even if parts of the papers involve also other countries. China contribute to the cause with a 19% and almost the same is for Germany. After having taken into account the influence the single countries have on the topic, it is interesting to consider the network of collaboration among countries.

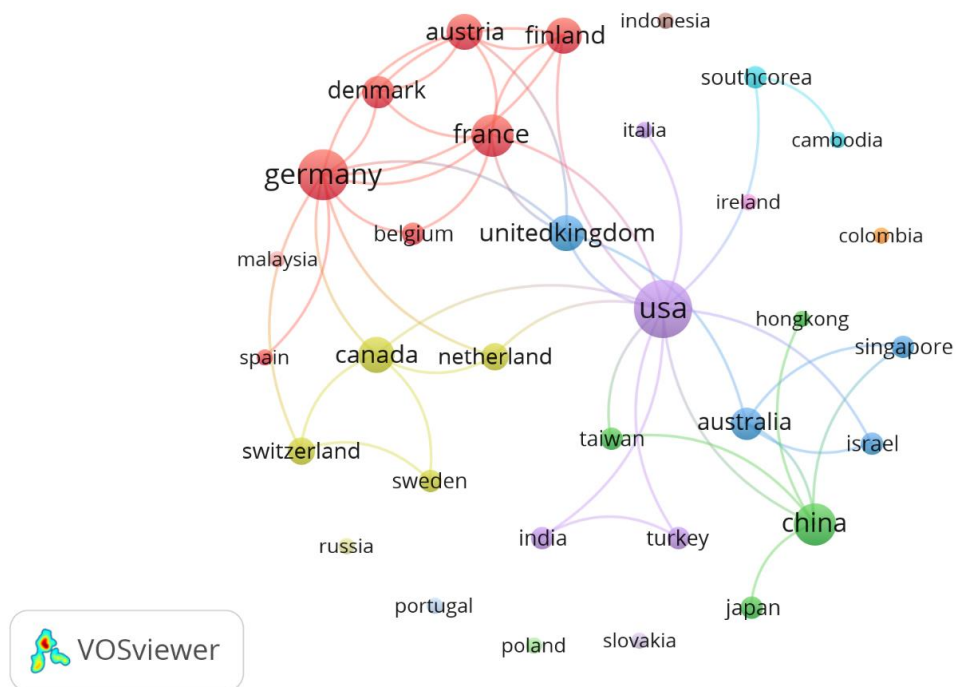


Figure 11 - Cooperation Network among countries

USA, China and Germany have an intense network around them and their clusters are interconnected. Germany covers the European territory, USA speaks with almost all the Continents, having mostly United Kingdom as principal reference in Europe. Finally, China takes part of Asia, but mostly works inside the country. Only six countries are isolated from the others. These are cases of sporadic publications with no influence on the whole panorama.

The overview of the countries can go more in deep moving to the institutions analysis. Below there is a map of the locations of the institutions involved into the crowdfunding research.



Figure 12 - Geographic Location of the Institutions

Table 5 highlights the top 5 Institutions in term of number of articles published. Southwestern University of Finance and Economics and University of Minnesota are at the first position by number of articles. The University of Minnesota, however, is the first by number of authors and citations. It is noteworthy that all the institutions are located in USA with one exception (the Southwestern University that is located in China). The total number of articles published by the top 5 institutions is 29 (13.6% of all the articles). This demonstrates a certain dispersion among countries and institutions, for this reason can be concluded that the interest on this topic is relatively variegated.

Table 6 - Top 5 Institutions

Institution	#Articles	#Authors	#Citations	#CPA
Southwestern University of Finance and Economics, China	7	3	89	12,71
University of Minnesota, USA	7	5	326	46,57
University of California, USA	5	7	12	2,40
University of North Carolina, USA	5	5	28	5,60
University of Pennsylvania, USA	5	2	487	97,40

Before concluding the analysis of countries and institutions is important to highlight the collaboration network among institutions. Figure 11 does not include all the institutions, because lots of them are not interconnected (as stated before the dispersion is high). But it is noteworthy to put in evidence some clusters. University of California cooperate with some Asiatic universities such as National Taiwan Normal University or Tonji University. University of Minnesota is an important reference in USA but communicates also with Asia. Finally, University of Pennsylvania has a harm also in Europe, in particular United Kingdom and Italy.

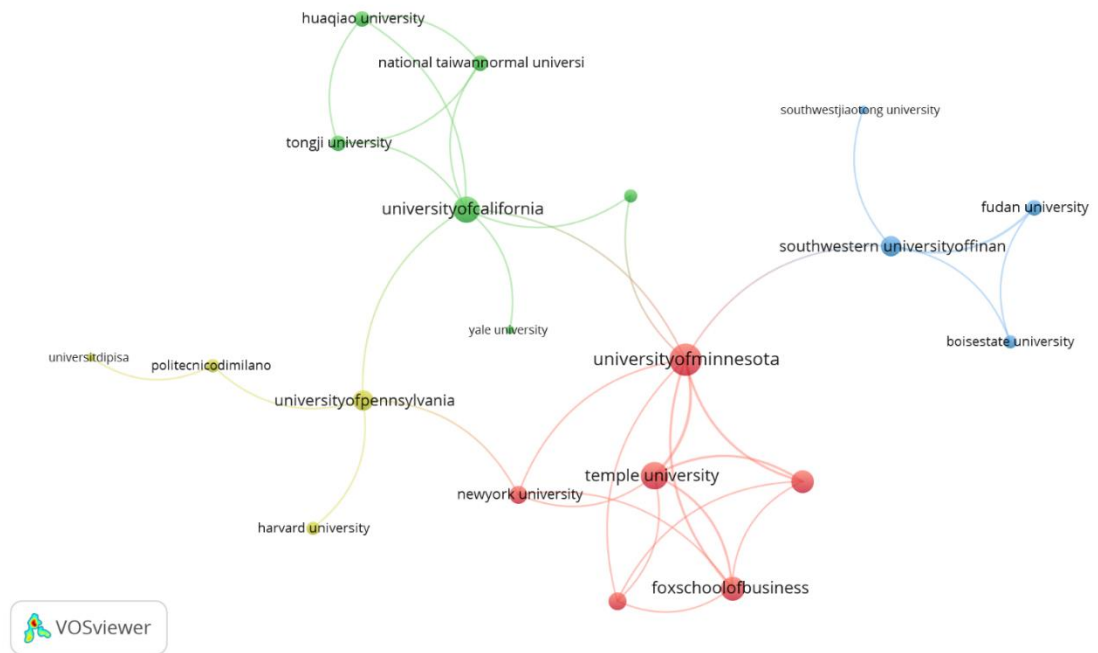


Figure 13 - Cooperation Network among institutions

2.2.4 FORWARD CITATIONS ANALYSIS

In this analysis the number of forward citations is relatively low: three article exceeds 150 forward citations and 1 exceed 100. Unfortunately, the information about forward citations is available for only 132 out of 213 articles but, in any case, this sample is sufficient to recap the situation. Almost 50% of the papers have less than 50 forward citations. The forward citations average of the selected papers is 12.12 (ranging between 0 and 436). The values remain low because of a high number of papers that have no forward citations. Taking into account the thematic areas Crowdfunding Campaign overcome the average with 21.91 forward citations on average. This confirm the prevalence of this theme on the crowdfunding research

over the years. Crowdfunding Characteristics thematic area average is 6.98. Finally, Actor thematic area is the less cited: the average is 9.33. It is interesting considering the forward citations by type of study. In this case 2 out of 5 are the categories that overcome the average: Qualitative studies with an average of 19 and Quantitative with 13.75. The results clearly confirm the predominant relevance of these types of studies on the other categories such as Literature Review (2.8), Theoretical studies (5.8) and Interview (4.5).

The table 6 summarizes all the information about forward citations. So, to conclude, few are the article that have a considerable influence among the academics. In fact, the most part of the articles have less than 50 forward citations.

Table 7 - Overview of the forward citations

Number of Forward Citations	Number of Articles	% of Articles
>= 150	3	2%
>= 100	1	1%
>= 50	10	8%
< 50	118	89%
Grand Total	132	100%

Figure 12 highlights a very strange trend of forward citations in crowdfunding panorama: the CPY increase until 2014 and then decrease. This aspect is very evident in Crowdfunding Campaign thematic area. The situation described above demonstrates that until 2014, academics were anchored to some precedent studies but after this period the researches went beyond. In fact, the number of publications

increased over the years and the interest on crowdfunding too. Taking a first look to Figure 12, the idea could be that the attractiveness about the topic collapse in 2014, but, a more in-depth analysis, let us realize that academics started studying also other aspects of crowdfunding, that were not yet dealt.

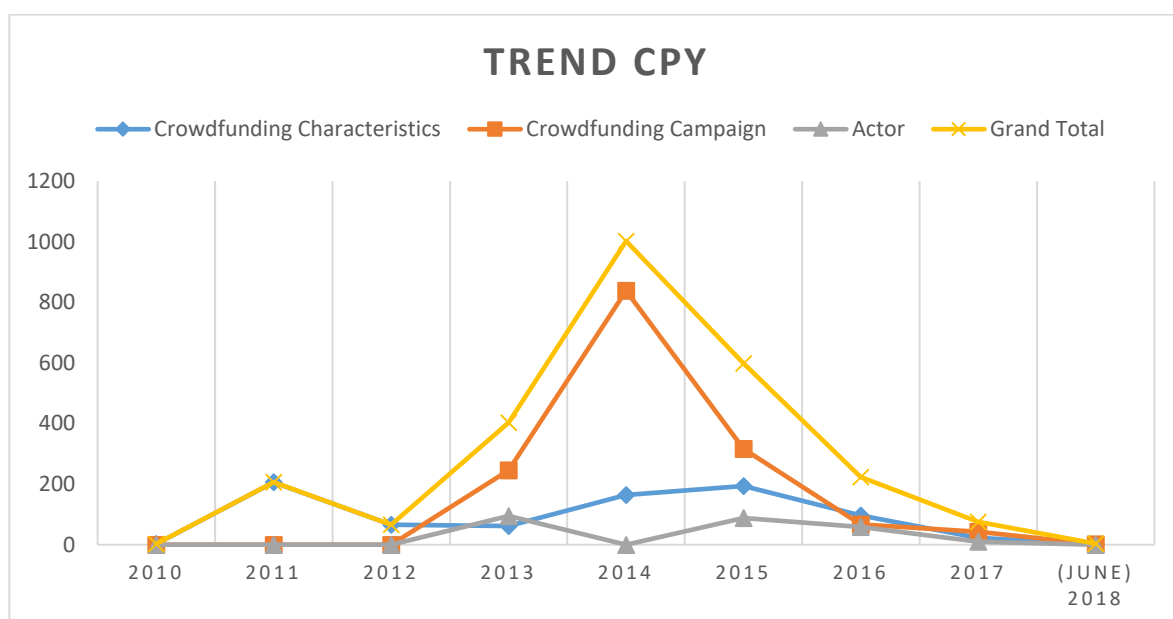


Figure 14 - Trend Citations per Year by thematic area

What stated before is confirmed also by Table 7 that contains the top 20 articles for number of Forward Citations. The first two (Mollick, E. and Belleflamme, P., Lambert, T., Schwienbacher, A.) have been both published on 2014 and together count 726 Forward Citations, almost 40% of all FWD Citations of the top 20 articles. The other relevant articles do not go beyond 2015 as year of publication.

Table 8 - Top 20 Articles for number Forward Citations

Article	Year	N. of FWD Citations	CPY
Mollick, E.	2014	436	87,2
Belleflamme, P., Lambert, T., Schwienbacher, A.	2014	290	58,0
Ordanini, A., Miceli, L., Pizzetti, M., Parasuraman, A.	2011	206	25,8
Burtch, G., Ghose, A., Wattal, S.	2013	144	24,0
Ahlers, G.K.C., Cumming, D., Günther, C., Schweizer, D.	2015	97	24,3
Gerber, E.M., Hui, J.	2013	95	15,8
Colombo, M.G., Franzoni, C., Rossi- Lamastra, C.	2015	93	23,3
Agrawal, A., Catalini, C., Goldfarb, A.	2015	66	16,5
Belleflamme, P., Lambert, T., Schwienbacher, A.	2013	63	10,5
Zheng, H., Li, D., Wu, J., Xu, Y.	2014	62	12,4
Burtch, G., Ghose, A., Wattal, S.	2014	59	11,8
Bruton, G., Khavul, S., Siegel, D., Wright, M.	2015	59	14,8
Agrawal, A., Catalini, C., Goldfarb, A.	2014	57	11,4
Allison, T.H., Davis, B.C., Short, J.C., Webb, J.W.	2015	50	12,5
Burtch, G., Ghose, A., Wattal, S.	2015	43	10,8
Tomczak, A., Brem, A.	2013	39	6,5
Carvajal, M., García-Avilés, J.A., González, J.L.	2012	35	5,0
Mollick, E., Nanda, R.	2016	30	10,0
Lehner, O.M., Nicholls, A.	2014	29	5,8
Vismara, S.	2016	29	9,7

The top 20 articles presented above partially maintains their positions if the Citations Weighted Index is taken into account. In fact, the CPY does not take in consideration if an article is published in January rather than December of the same

year. For this reason, the results can be in a certain way distorted. If we take into account the number of days from the publication to the target date (the end of June 2018, day in which has been set the end of the article collection) and calculate the Citations Weighted Index ($\#Citations/\#Days$ from the publication) the situations changes a little bit. As can be verified in the table below, the first two positions remains the same, whereas the others changes. Ordanini et al. (2011) switch with Ahlers et al. (2015). Gerber and Hui (2013) lose positions and even the last of the list changes. Despite the changes, the general results emerged in this paragraph remain the same. The discussion presented before is still coherent with the result of the Table 9.

Table 9 - Top 20 Articles by Citations Weighted Index

Article	Year	N. of FWD Citations	First Publication Day	#DayPublication	CW
Mollick, E.	2014	436	01/01/2014	1641	0,27
Belleflamme, P., Lambert, T., Schwienbacher, A.	2014	290	01/01/2014	1641	0,18
Ahlers, G.K.C., Cumming, D., Günther, C., Schweizer, D.	2015	97	01/07/2015	1095	0,09
Burtch, G., Ghose, A., Wattal, S.	2013	144	01/09/2013	1763	0,08

Ordanini, A., Miceli, L., Pizzetti, M., Parasuraman, A.	2011	206	01/03/2011	2678	0,08
Colombo, M.G., Franzoni, C., Rossi-Lamastra, C.	2015	93	01/01/2015	1276	0,07
Agrawal, A., Catalini, C., Goldfarb, A.	2015	66	01/07/2015	1095	0,06
Gerber, E.M., Hui, J.	2013	95	01/12/2013	1672	0,06
Bruton, G., Khavul, S., Siegel, D., Wright, M.	2015	59	01/01/2015	1276	0,05
Burtch, G., Ghose, A., Wattal, S.	2014	59	01/09/2014	1398	0,04
Zheng, H., Li, D., Wu, J., Xu, Y.	2014	62	27/03/2014	1556	0,04
Mollick, E., Nanda, R.	2016	30	01/06/2016	759	0,04
Allison, T.H., Davis, B.C., Short, J.C., Webb, J.W.	2015	50	01/01/2015	1276	0,04
Burtch, G., Ghose, A., Wattal, S.	2015	43	01/05/2015	1156	0,04
Agrawal, A., Catalini, C., Goldfarb, A.	2014	57	01/01/2014	1641	0,03
Belleflamme, P., Lambert, T., Schwienbacher, A.	2013	63	03/05/2013	1884	0,03
Vismara, S.	2016	29	12/02/2016	869	0,03
Tomczak, A., Brem, A.	2013	39	25/10/2013	1709	0,02

Lehner, O.M., Nicholls, A.	2014	29	16/07/2014	1445	0,02
Carvajal, M., García-Avilés, J.A., González, J.L.	2012	35	30/03/2012	2283	0,02

2.2.5 AUTHORS AND CO-AUTHORS

The total number of author involved in the publications taken into account in this research is 430. The average number of authors per paper is 2.48 with a peak of 7 for Zhu et al. (2017). Considering every thematic area the situations remain almost the same: Crowdfunding Characteristics registers the lowest average with 2.22 authors per article, whereas Crowdfunding Campaign has an average of 2.83 (overcoming the general average). Finally, Actor average is of 2.70 authors per article, above the general average too.

Table 8 considers the correlation between the number of articles and the number of co-authors: 164 articles have more than 1 author. So, almost a quarter of all the publications has been published only by one author. The majority of the papers count 2 or 3 co-authors. The interesting thing is that the CPA and the number of co-authors seems not to be correlated. In fact, the highest CPA is reached by 4 co-authors, even if the number of co-authors is not the highest one and the number of articles neither.

Table 10 - Number of articles correlated with the number of co-authors

N. Co-Authors	N. of Articles	CPA
7	1	1,0
6	3	0,3
5	7	3,1
4	25	21,3
3	57	17,0
2	71	5,5

Another very interesting thing to consider are the Top 10 authors. In fact, analysing this aspect together with the analysis about countries and institutions, it is possible to have a complete view about the situation of crowdfunding research all over the world. China and USA demonstrated to be predominant in terms of institutions. This situation is not so evident in terms of authors: 5 out of 10 are the top authors for number of articles published. Zheng, H stands in the first place with 7 articles but with a CPA of only 12.4. Follow Irish and Italians authors for the other 3 positions with Gleasure, R, Rossi-Lamastra, C and Feller, J. with 6, 5 and 4 publications respectively. But it is again an American the one with a bigger impact on the scene of crowdfunding: Mollick, E, in fact, with only 4 publications collects 476 forward citations, earning 119 CPA. So, to conclude, there is a certain vitality also in other countries, but, as demonstrated also into the countries and institutions section, USA and China have a predominant position in the crowdfunding background. Other European countries, for example, that demonstrates a great

dynamism (see Germany), have not the same influence in terms of authors as USA and China.

Table 11 - Top 10 Authors

Author	Country	Institution	N. of Articles	N. of Forward Citations	CPA
Zheng, H	China	Southwest University of Finance and Economics	7	87	12,4
Gleasure, R	Ireland	University College Cork	6	24	4,0
Rossi-Lamastra, C	Italy	Politecnico di Milano	5	110	22,0
Feller, J	Ireland	University College Cork	4	13	3,3
Mollick, E	USA	University of Pennsylvania	4	476	119,0
Ghose, A	USA	Stern School of Business	4	247	61,8
Schwienbacher, A	France	Université Côte d'Azur	4	359	89,8
Vismara, S	Italy	Università degli Studi di Bergamo	4	39	9,8
Wang, T	China	Southwest University of Finance and Economics	4	19	4,8
Burtch, G	USA	University of Minnesota	4	247	61,8

Below it is presented the co-authorship network of the most relevant co-authors relations. Due to the exaggerated number of authors the clusters analysed are the ones that contain 5 or more authors. In total, the number of clusters with these features is 16. Every node of the map is associated to an author: the author can be identified on a specific node by the surname and the first letter of his name put all together in one word (for example Alexander Brem is identified with “*brema*”). The graphical representation of the networks is divided into three parts because of the big number of clusters to visualize, that is why below there are three different figures (Figure 15, Figure 16 and Figure 17). The total number of authors included into the 16 clusters is 127. The biggest cluster is composed by 14 authors: they are European authors, mainly from Germany, that widely collaborates. The cluster composed by 13 authors is the one of the Asiatic authors (Chinese); this cluster, however, does not contains the most prolific Chinese author, Zheng, that is part of the cluster composed by 11 elements. Also in this case, the cluster is the expression of the collaboration of the Chinese authors. The second most prolific author, Gleasure, is not part of a cluster, so his publications are mostly not co-authored. Rossi-Lamastra represents the opposite of Gleasure’s situation: this author is the third most prolific but her articles taken into account are all co-authored.

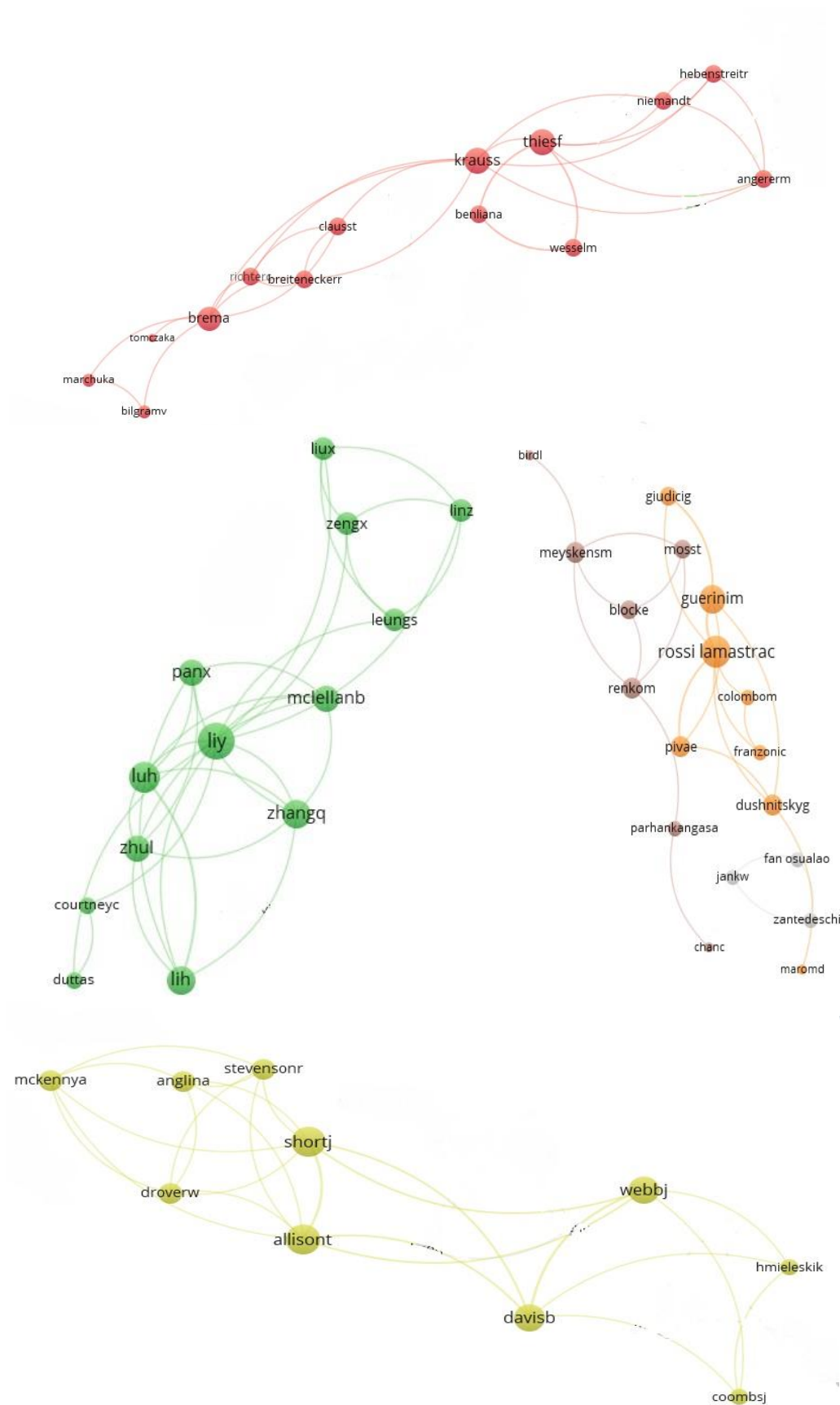


Figure 15 - Co-Author Network (Pt. 1)

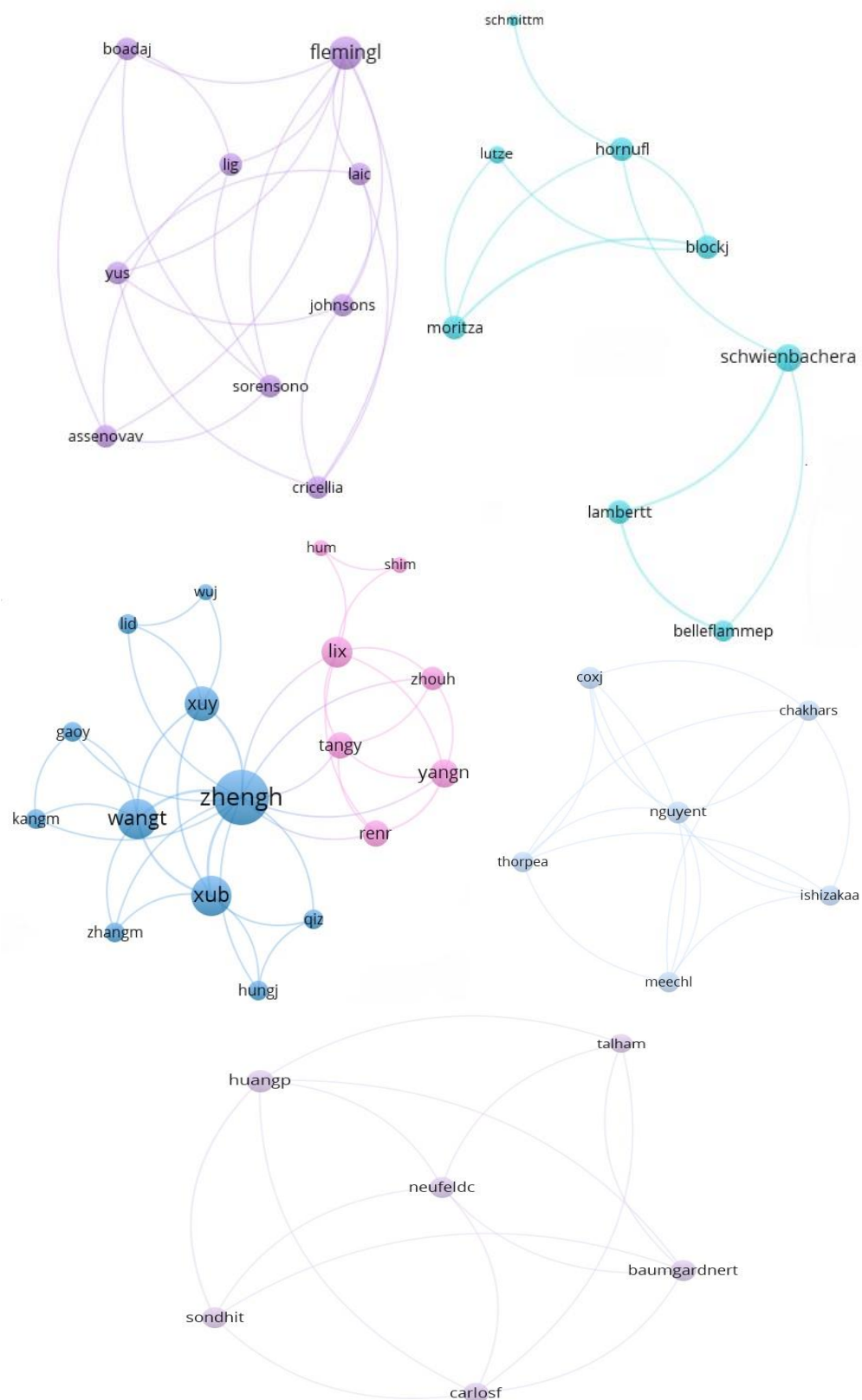


Figure 16 - Co-Author Network (Pt. 2)

2.2.6 BACKWARD CITATIONS ANALYSIS

The selection of the papers presents an average of 44.08 references. The maximum number of references is 159 and the minimum is 0. In this case, the information are available only for 183 papers out of 213. According to the previous results, Crowdfunding Campaign is the thematic area which has the biggest impact on the researchers. In fact, the average number of references reach 52.5, overcoming the average. Crowdfunding Characteristics positions itself around the average (40.21). Actor thematic area, finally, does not lie so distant with an average number of references of 36.56. The overview of average number of references by type of study confirms the expectations: Qualitative and Quantitative analysis are the one most relevant with respectively 56.12 and 47.08 on average. Theoretical studies lie at the third position with an average of 33.07. Literature Review and Interview typology close the list with 23.67 and 0.5 respectively.

The overview of the backward citations presented in the Table 10 below strengthen the aforementioned discussion done about the forward citations: just a small number of articles have an incisive impact on the academics.

Table 11 goes more in deep into this analysis revealing the information of the backward citations by thematic area. For each thematic area, more than 50% of the articles have a number of backward citations lower than 50 or equal to 0. Crowdfunding Characteristics thematic area is the only one that presents more than 150 backward citations.

Table 12 - Overview of the Backward Citations

Number of Backward Citations	Number of Articles	% of Articles
>= 150	1	1%
>= 100	13	7%
>= 50	60	33%
< 50	90	49%
0	19	10%
Grand Total	183	100%

Table 13 - Overview of the Backward Citations by thematic area

Number of Backward Citations	Thematic Area			Grand Total
	Crowdfunding Characteristics	Crowdfunding Campaign	Actor	
>= 150	1 1,1%	0 0%	0 0%	1 1%
>= 100	3 3%	9 14%	1 4%	13 7%
>= 50	30 32%	21 33%	9 36%	60 33%
< 50	52 55%	28 44%	10 40%	90 49%
0	8 9%	6 9%	5 20%	19 10%
Grand Total	94 100%	64 100%	25 100%	183 100%

CONCLUSIONS

History teaches that the biggest changes emerge during transition periods: the change is possible if there is a large demand ready to face this change. In the business environment, in general, every improvement starts from this preliminary condition. Crowdfunding, at the beginning considered as a disruptive way of financing innovative projects, leveraged financial crisis to spread out all over the world. The 2008 gave the chance to develop new methods of funding projects without necessary referring to banks or financial institutions and, from this point on, many things changed. In fact, Crowdfunding was at the beginning an important aid for start-ups and innovative companies that needed for financing but during the years it turned into something more. Main scope of the dissertation was to analyse and deepen the Crowdfunding transformation during the years, discovering its trends and studying how the research is dealing with the topic. Starting from a deep analysis of the current literature it has been possible to have a clear view about the entire Crowdfunding panorama and explore it. It turns out, from a preliminary review, that the literature can be divided into 3 main categories: “Crowdfunding Characteristics”, “Crowdfunding Campaign” and “Actor”. This division in macro-areas helped to realize that the academics started studying Crowdfunding at first taking into account its characteristics in order to understand what the phenomenon was. After that, started to deepen its process, moving into the Crowdfunding campaign that is the crucial point of the entire process of funding a project. Finally, they understood that an important topic to study was the role of the actors involved

into Crowdfunding. It emerges from the bibliometric analysis that the researchers followed this path: in fact, from a chronological point of view, the first articles to be published were the ones dealing with the “Crowdfunding Characteristics” theme. Furthermore, this topic is predominant with respect the others because Crowdfunding is a relative young phenomenon, so the academics took some years to deeply analyse the subject in order to have a very clear idea about it. For this reason, researchers started analysing the forms of Crowdfunding, the impacts on the society and economy, the purposes and usages and its regulation. It turns out that it started as a way to finance innovative projects or disruptive projects that hardly could be funded by banks to finally turn also into a way to test a new product, to create a preliminary customer base or to implement marketing campaigns. In fact, the topic is studied by Economist and Business Management researchers but also by Computer Sciences expert, Psychologist and Sociologist. The interest on Crowdfunding spread out mainly in USA and China (the places where the most it catches on, but it is debated in Europe too). Nowadays the things changed: Crowdfunding is widely analysed and the literature began exploring more specific aspects.

To summarize the result of the analysis, it is important to highlight the transformation of Crowdfunding over the years: in fact, what clearly emerges from the analysis is that it was born as a very simple method of financing to turn, during the years, into a powerful way on the hand of the founders. They can leverage the crowd that support them to start something into they believe and with the crowd they can continue developing and growing. Another interesting aspect of

Crowdfunding is that, thanks to the crowd, the founders have the possibility to understand what they are doing correct and what they are doing wrong. The power of Crowdfunding actually is that the contribution of the crowd is not limited to a money aid. The crowd is the biggest resource the founders have and, into a customer-oriented market environment, having the crowd by your side and getting from them information for free is the most important treasure you can obtain from them. Nowadays data are essential for a company; Crowdfunding gives you the possibility to create a network to exploit in that sense and to strengthen this network thanks to the perception the crowd has to be part of the project itself. In fact, the research started studying from some years the psychological effects the launch of the campaign have on the crowd in order to exploit the most the contribution (not only economical) can come from the crowd.

Crowdfunding, in this historical period in which people can feel involved into potentially everything thanks to the social networks platforms, can be a very powerful tool for the success of a company.

SUGGESTIONS FOR FURTHER RESEARCH

During the years, Crowdfunding has been studied by academics from different points of view. At the beginning, it was essential to have a clear view of the phenomenon and visualize the entire panorama around Crowdfunding. After having completely built the structure of Crowdfunding theme, the researchers started focusing on Crowdfunding Campaign, the role of the actors involved and the fundamental impact the social networks and crowd have on the diffusion and the success of the project. It is evident that right now is necessary to figure out what happens in the post campaign: in the last years something has been done, for instance Stanko and Henard (2017), Roma et al. (2017) and Di Pietro et al. (2018) wrote about this topic. The research has to continue, for sure, following this path exploring what Crowdfunding offers after the project has been funded and which can be the advantages it takes. Another relevant point that come be deepened is the topic of the rewards as suggested by Butticiè et al. (2017). It is interesting to study more in detail which is the effect of offering different tier of rewards according to different criteria, reaching a bigger portion of potential backers. It is impossible to not mention the Big Data topic, living in this epoch, and the privacy related problems. It is important to identify which are the new tendencies of Crowdfunding and which can be the uses apart from a mere financing method. According to this aspect, it is interesting to investigate how and if the funders exploit the information they get from the crowd. Finally, continuing

analysing how financial institutions are reacting to this disruptive method is very important for the people dealing with the Business Development field.

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APPENDIX

APPENDIX 1. A SUMMARY OF THE SELECTED ARTICLES

Thematic Area	Research Line	Authors	Year	Type of Study	Findings
Crowdfunding Characteristics	Impact	Freund, R.	2010	theoretical	Crowdfunding is a way to overcome barriers between economy and sociology
Crowdfunding Characteristics	Purpose and Usage	Andrés Felipe Gallego, A.	2011	qualitative	Crowdfunding seen as financing strategy to be exploited by innovative companies
Crowdfunding Characteristics	Purpose and Usage	Ordanini, A., Miceli, L., Pizzetti, M., Parasuraman, A.	2011	qualitative	Crowdfunding transforms customers into crowdfunders. Customers decide to get into this new form of investment because of co-creation and the new role they can dress.
Crowdfunding Characteristics	Impact	Carvajal, M., García-Avilés, J.A., González, J.L.	2012	qualitative	Introduction of crowdfunding. How crowdfunding can help journalism. Journalism is living a period of crisis and freelance journalist can use this relative new type of financing to keep working.
Crowdfunding Characteristics	Form of Crowdfunding	Balnaves, M.	2012	theoretical	Peer-to-Peer lending: an overview.

Crowdfunding Characteristics	Impact	Sørensen, I.E.	2012	theoretical	Documentary budget is decreasing over the years. Crowdfunding is a new way to address this trend. This helps the film-makers to be free in doing their own documentary but for the less famous one is more difficult to promote his own documentary. They have to exploit their social network channels better than they can.
Crowdfunding Characteristics	Purpose and Usage	Weigmann, K.	2013	theoretical	Crowdfunding was born to fund creative industry, now start to be used also to fund scientific researches.
Crowdfunding Campaign	Success Determinants	Burtch, G., Ghose, A., Wattal, S.	2013	quantitative	Crowdfunding in journalism market. Substitution effect is predominant during the campaign: it is clear a crowding-out effect as the people perceive a decrease of their marginal utility. In fact, as the contribution frequency increases the amount of the contribution amount decreases.
Crowdfunding Characteristics	Regulation	Weinstein, R.S.	2013	theoretical	Crowdfunding overview through the regulation in four countries: Italy, UK, France and USA.
Crowdfunding Characteristics	Purpose and Usage	Marshall, J.	2013	theoretical	Crowdfunding can be exploited to fund scientific researches
Crowdfunding Characteristics	Regulation	Riedl, J.	2013	theoretical	Some legal issues tips
Crowdfunding Characteristics	Purpose and Usage	Kaplan, K.	2013	theoretical	In the article are present some examples of crowdfunding projects

Crowdfunding Characteristics	Purpose and Usage	Van Staveren, I.	2013	theoretical	In the article are present some examples of crowdfunding projects
Crowdfunding Campaign	Process Characteristics	Tomczak, A., Brem, A.	2013	qualitative	The first flowchart of crowdfunding process.
Crowdfunding Campaign	Success Determinants	Belleflamme, P., Lambert, T., Schwienbacher, A.	2013	quantitative	The most of the crowdfunding projects give in exchange nonfinancial benefits (91%) then financial compensations and finally only a few part is donation based contribution. The financial initiative with a pre-ordering scheme are more than one third in the sample of this study. Non-profit initiatives are more likely to achieve their goal than profit ones. The mean of the financing reached is \$ 150,000 but the median is \$ 6,400. So the financing is relatively small.
Crowdfunding Characteristics	Regulation	Cumming, D., Johan, S.	2013	quantitative	The investors prefer to have a well-regulated market
Crowdfunding Characteristics	Impact	Giudici, G., Guerini, M., Rossi-Lamastra, C.	2013	quantitative	Crowdfunding overview in Italy
Crowdfunding Characteristics	Impact	Dushnitsky, G., Marom, D.	2013	Interview	The article highlights the importance of FFF (Friend, Family and Fools) as supporters of projects.
Actor	Motivation	Gerber, E.M., Hui, J.	2013	qualitative	The study investigates the motivations people decide to invest into crowdfunding projects. The method used is through interviews.

Crowdfunding Characteristics	Form of Crowdfunding	Agrawal, A., Catalini, C., Goldfarb, A.	2014	theoretical	A complete overview of crowdfunding. Crowdfunding is so successful in general because of lower search costs, risk exposure is reduced because of the low amount of money invested and the information costs are reduced too. The principal difference between non-equity and equity crowdfunding is that equity crowdfunding campaign goal is to meet funds not only to finance his project but also to create the company. Then are presented the principal pros and cons of using crowdfunding by the main actors involved: creators, funders and platforms. After that are presented other market factors that influence and are influenced by crowdfunding.
Crowdfunding Characteristics	Purpose and Usage	Morton, M.C.	2014	theoretical	Example of funding

Crowdfunding Campaign	Social Dynamics	Zheng, H., Li, D., Wu, J., Xu, Y.	2014	quantitative	The impacts of social network in crowdfunding. The study take into account US and Chinese market. The social network in which the creators are embedded can help to the success of the campaign. The three principal dimensions of the social network taken into account are structural dimension, relational dimension and cognitive dimension. Also the obligation to fund another entrepreneurs is very important in crowdfunding because this improve the likely that the entrepreneur financed than gives a contribution to you too. This is more important in China than in US. Another important factor is the shared meaning between the creators and the other people who support the project.
Crowdfunding Characteristics	Impact	Padgett, B.L., Rolston, C.	2014	qualitative	Crowdfunding can introduce the risk of the fraud. No one can exactly be sure that the funds raised are gonna be used only to finance his own project.
Crowdfunding Characteristics	Impact	Ho, H.-Y., Lin, P.-C., Lu, M.-H.	2014	quantitative	CF is extremely important for the perceived value of the final product and this value, for sure, is extremely important for the purchase intention.

Crowdfunding Characteristics	Purpose and Usage	Bradley, D.B., Luong, C.	2014	theoretical	An overview of crowdfunding
Crowdfunding Campaign	Success Determinants	Mollick, E.	2014	quantitative	Projects success is linked to the project quality and the high level signals. Geographic area also have an impact on the success of the campaign. Founders fulfill their obligations on the funders but most of the times in delay.
Crowdfunding Campaign	Success Determinants	English, R.	2014	theoretical	The article highlights how scientific researches can be funded through crowdfunding and the importance of FFF for the success of the campaign
Crowdfunding Campaign	Success Determinants	Belleflamme, P., Lambert, T., Schwienbacher, A.	2014	quantitative	If the contribution required is small backers prefer pre-ordering crowdfunding format, otherwise they prefer an equity-based crowdfunding in which the entrepreneur share the profit in the future with the funder.
Crowdfunding Campaign	Process Characteristics	Pitschner, S., Pitschner-Finn, S.	2014	quantitative	No-Profit campaigns
Crowdfunding Characteristics	Purpose and Usage	Lehner, O.M., Nicholls, A.	2014	qualitative	SEs and Crowdfunding
Crowdfunding Campaign	Process Characteristics	Lehner, O.M.	2014	qualitative	The process of recognition, formation and exploitation in a crowdfunding campaign are inseparables and very important for the success of the projects. In this steps in very important to understand how to exploit different type

					of capital that affects the results of the campaign: social capital, economic capital, symbolic capital and cultural capital.
Crowdfunding Characteristics	Form of Crowdfunding	Barasinska, N., Schäfer, D.	2014	quantitative	Peer-to-Peer lending: the study presents evidences that female gender has the same likelihood to be financed in peer-to-peer based crowdfunding in Germany.
Crowdfunding Campaign	Success Determinants	Burtch, G., Ghose, A., Wattal, S.	2014	quantitative	Lenders prefer culturally and geographically closer borrowers. The marginal analysis suggests that an increase of one std on the cultural difference between the parts on countries decrease of 30 lending actions. If increase the physical distance of one std the lending actions decrease of 0.23. There is also a substitution effect between cultural and geographical distance. If the distance increases of 50% there is a decrease of 30% on the effect on cultural differences.
Crowdfunding Campaign	Success Determinants	Tirdatov, I.	2014	qualitative	The success of the campaign related to the Aristotle's concepts of ethos, pathos and logos. All the projects successfully financed contains these

					elements on their campaign
Crowdfunding Characteristics	Regulation	Yeoh, P.	2014	theoretical	Regulation in USA and UK about crowdfunding. Well-balanced regulations in the middle between not very strict for small business and not very superficial
Crowdfunding Characteristics	Purpose and Usage	Sagall, R., Vega, S.B.	2014	theoretical	Crowdfunding can be applied also in the healthcare.
Crowdfunding Campaign	Process Characteristics	Parker, S.C.	2014	quantitative	Correlation between number of bad projects in a platform and number of good projects funded. A complete information not always bring to fund more good projects
Crowdfunding Characteristics	Form of Crowdfunding	Beaulieu, T.Y., Sarker, S., Sarker, S.	2015	theoretical	Overview of crowdfunding: actors, models, literature review.
Crowdfunding Characteristics	Form of Crowdfunding	Borello, G., de Crescenzo, V., Pichler, F.	2015	theoretical	Overview of crowdfunding highlighting that p2p and equity crowdfunding could be very important for the future development of crowdfunding and for the help that this gives to the start of new companies
Actor	Motivation	Liao, C., Zhu, Y., Liao, X.	2015	quantitative	Internal and external social capital influences on funding projects

Actor	Role	Quero, M.J., Ventura, R.	2015	qualitative	Co-creation on Spanish creative industry. The balance between the actors involved in a crowdfunding project. Crowdfunding leads to a new type of equilibrium, not anymore a customer-oriented centricity but a balanced centricity in which each actor involved in the project contribute to the stability
Crowdfunding Campaign	Process Characteristics	Hu, M., Li, X., Shi, M.	2015	quantitative	Product and Pricing decisions in a crowdfunding campaign all-or-nothing: these factors depends on the characteristics of the market. If the number of investors is huge and differentiated the creator should offer a different line of products with different quality levels and of course with different prices. In general is better a line of products than a single product.
Crowdfunding Characteristics	Purpose and Usage	Davies, R.	2015	theoretical	Civic Crowdfunding, pros and cons
Crowdfunding Characteristics	Impact	Hörisch, J.	2015	quantitative	Impact of crowdfunding on environmental ventures.
Crowdfunding Characteristics	Purpose and Usage	Stiver, A., Barroca, L., Minocha, S., Richards, M., Roberts, D.	2015	theoretical	Civic Crowdfunding: an overview and an agenda for future researches.
Actor	Motivation	Gleasure, R.	2015	qualitative	Impression Management and Resistance Model explaining the reluctance of entrepreneurs to use crowdfunding linked

					to their fear of disclosure, failures and fear of projecting desperation
Actor	Role	Hills, M.	2015	theoretical	Affective Economics: Impacts on crowdfunders and funding projects. The backers that is part of the project and get involved in the development of something that he feels close to him
Crowdfunding Characteristics	Purpose and Usage	Balykhin, M.G., Generalova, A.V.	2015	qualitative	Crowdfunding is not only a way of financing but also to test an idea.
Actor	Motivation	Allison, T.H., Davis, B.C., Short, J.C., Webb, J.W.	2015	quantitative	Cognitive Analysis to understand the impacts of intrinsic and extrinsic motivating cues
Crowdfunding Campaign	Success Determinants	Colombo, M.G., Franzoni, C., Rossi-Lamastra, C.	2015	quantitative	The level of contributions gathered the first days of the campaign is a determinant factor for the success of the campaign. The internal social capital is also essential because the first aid in general comes from people being part of his own network or family and friends.
Crowdfunding Characteristics	Form of Crowdfunding	Macht, S.A., Weatherston, J.	2015	Literature Review	An overview of crowdfunding
Crowdfunding Campaign	Success Determinants	Burtch, G., Ghose, A., Wattal, S.	2015	quantitative	Reducing access to information controls increase the fund raised.
Crowdfunding Characteristics	Purpose and Usage	Bruton, G., Khavul, S., Siegel, D., Wright, M.	2015	theoretical	New forms of financing. Discussion about the background that granted this development and suggestions about future research.

Crowdfunding Campaign	Success Determinants	Agrawal, A., Catalini, C., Goldfarb, A.	2015	quantitative	<p>The study demonstrates that backers are more likely to invest if the cumulated capital raised increases. Local funders deviate from this pattern: they are more likely to invest in the earlier stages of the campaign, this aspect is determined by the presence of FF. The offline interactions of this FF don't affect likelihood of the funds raised. Finally, the authors state that geographical distance is not so determinant as other studies demonstrate. In fact they demonstrate that the offline interactions don't affect the campaign and that the amount raised increases as the cumulated amount increase independently from the distance.</p>
Crowdfunding Characteristics	Form of Crowdfunding	Li, P., Chen, L., Li, Q., Feng, Y., Zhao, H.-J.	2015	theoretical	Overview of Crowdfunding

Crowdfunding Campaign	Success Determinants	Ahlers, G.K.C., Cumming, D., Günther, C., Schweizer, D.	2015	qualitative	Equity-based crowdfunding: the determinant factors for the success of the rise of the start-up. Relevant are the level of education of the board members, a good network. The company that seek an exit by IPO or trade sale are more likely to be successful. Companies that provides financial forecasts and that are in general more transparent are more appreciated by the investors. The same can be said for the companies that looked for prior financing. What is not relevant is if the company has external certifications such as patents and governments grants.
Actor	Motivation	Scott, S.	2015	theoretical	Moral economy and the fan-ancing. Backers as a part of the projects, they don't give just an economic support to the cause
Crowdfunding Characteristics	Impact	Lehner, O.M., Grabmann, E., Ennsgraber, C.	2015	qualitative	Non-financial consequences of crowdfunding on companies.

Crowdfunding Characteristics	Impact	Farajian, M., Alexandra, J.L., Cui, Q.	2015	qualitative	An overview of crowdfunding in US: analysis SWOT on crowdfunding. The main results are the following: The strengths are equal investment opportunities, return on equity, enhanced stakeholder support, and increased transparency. The weaknesses are induced complexity, administrative and accounting challenges, third-party confidential information, and social equity. The opportunities are enhanced prioritization and idea exchange. The threats are business failure, potential for fraud, and possible misconceptions. Future research will be needed for further development and study of the implications and implementation of an enhanced PPP model that uses crowdfunding.
Crowdfunding Characteristics	Form of Crowdfunding	Han, J., Zhang, S.	2015	quantitative	P2P lending: overview and model to analyse the impacts of variables on the loans
Crowdfunding Characteristics	Form of Crowdfunding	Everett, C.R.	2015	quantitative	Peer-to-Peer lending and the hold up problem.
Crowdfunding Characteristics	Purpose and Usage	Groves, J.	2015	Interview	Trillion Fund platform. Founder's interview speaking about her platform and her point of view. The platform is used to crowd fund renewable energy projects

Crowdfunding Characteristics	Impact	Özdemir, V., Faris, J., Srivastava, S.	2015	theoretical	Crowdfunding in disruptive innovation. New idea of crowdfunding and angel investors linked together to fund disruptive innovative projects
Crowdfunding Characteristics	Form of Crowdfunding	Meyskens, M., Bird, L.	2015	theoretical	How to choose the best crowdfunding type according to the type of value generated by the social venture. Proposal of a theoretical framework
Crowdfunding Characteristics	Form of Crowdfunding	Kshetri, N.	2015	qualitative	The article discusses the characteristics of each form of crowdfunding
Crowdfunding Characteristics	Form of Crowdfunding	Moritz, A., Block, J., Lutz, E.	2015	quantitative	Equity-based crowdfunding: the importance of communication. The perception that the investors have on creators is important to reduce the information asymmetry perceived. For this reason, giving an impression of sympathy openness and trustworthiness is very important. This can be done through the use of videos, investor relation channels and social media. The opinion of other investors is also determinant on the success of the campaign.
Crowdfunding Characteristics	Form of Crowdfunding	Morse, A.	2015	quantitative	Peer-to-Peer lending: an overview. The paper's main focus is to analyse if P2P is so disruptive as it is considered. The answer is yes but the author emphasizes

					also the possible platform risk and the lack of adequate regulations.
Crowdfunding Characteristics	Purpose and Usage	Profatilov, D.A., Bykova, O.N., Olkhovskaya, M.O.	2015	qualitative	Advantages to use crowdfunding to finance her own project
Crowdfunding Characteristics	Purpose and Usage	Farajian, M., Ross, B.	2016	theoretical	Crowd-financed Public-Private Partnership (P3) model: how to implement it.
Crowdfunding Characteristics	Form of Crowdfunding	Pelizzon, L., Riedel, M., Tasca, P.	2016	theoretical	P2P lending and Equity Crowdfunding: an overview
Crowdfunding Characteristics	Purpose and Usage	Salomon, V.	2016	theoretical	An overview of crowdfunding.
Crowdfunding Characteristics	Impact	Blaseg, D., Koetter, M.	2016	theoretical	New ventures are more likely to fund its projects with crowdfunding then stressed banks. But at the same time these ventures are riskier and opaque.
Crowdfunding Characteristics	Impact	Šoltés, M., Štofa, T.	2016	quantitative	The article presents a discussion about crowdfunding in Slovakia and Czech Republic
Crowdfunding Campaign	Success Determinants	Devaraj, S., Patel, P.C.	2016	quantitative	This study is bucking with respect to the other ones about this topic: in fact, its results suggest that an higher number of backer reduces the likelihood of achieving the funding goal and an higher goal amount increase the likelihood but related with a shorter duration of the campaign.

Crowdfunding Characteristics	Form of Crowdfunding	Davidson, R., Poor, N.	2016	quantitative	Reward-based crowdfunding: variables that influence this method. Large number of small backers, exceeding the goal target and large number of backers are good factors.
Actor	Role	Vismara, S.	2016	quantitative	The importance of the public profile of an investor: it is demonstrated in this paper that the investors that have a public profile for the word-of-mouth effect and information cascades help the campaign to raise money. Another result is that the early days of the campaign are crucial for the success of the campaign.
Actor	Motivation	Kang, M., Gao, Y., Wang, T., Zheng, H.	2016	quantitative	Determinants of funders' investment intention. Calculus trust and relationship trust affect the investment intention but are not a structural assurance to investment intention
Crowdfunding Campaign	Social Dynamics	Gleasure, R., Feller, J.	2016	qualitative	This study demonstrates the importance of anchor values in crowdfunding. These values help building and reinforce the relation between Founders, Backers and Platforms. The backers wants to be identified with the project and/or the product, that's why the founders have to be careful changing what affect these

					anchor values, such as community, product development or others.
Crowdfunding Campaign	Social Dynamics	Burtch, G., Ghose, A., Wattal, S.	2016	quantitative	Study of the effect of hiding information and contributions. It has negative effects on the campaign
Actor	Motivation	Bernardino, S., Santos, J.F.	2016	quantitative	Consciousness is the main personal trait of the entrepreneur personality that affects the campaign
Crowdfunding Characteristics	Form of Crowdfunding	Lenz, R.	2016	theoretical	Peer-to-Peer lending: it will be probably a predominant way to access to credit. For this reason it is important to have a regulated framework. For both borrowers and lenders this model is convenient because of less transaction cost, higher return, 24/7 access to the platform. Even if for borrowers is less likely to know if they are going to rise all the money they need.
Crowdfunding Characteristics	Purpose and Usage	Langley, P.	2016	theoretical	Crowdfunding overview in UK
Crowdfunding Characteristics	Purpose and Usage	Gamble, J.R., Brennan, M., McAdam, R.	2016	qualitative	Crowdfunding in music industry: it is a revolution for thhis business. It enables artists to be more free and improve their financial returns. On the other hands, labels are trying to find new

					ways to follow this trend for example offering pre-selling services similar to crowdfunding solutions.
Crowdfunding Characteristics	Purpose and Usage	Xu, B., Zheng, H., Xu, Y., Wang, T.	2016	quantitative	The study reveal that asymmetric analysis can be used to evaluate sponsor satisfaction.
Actor	Motivation	Zheng, H., Hung, J.-L., Qi, Z., Xu, B.	2016	quantitative	How trust management influences funders: entrepreneurs interaction is stronger than entrepreneurs creditworthiness
Actor	Motivation	Ryu, S., Kim, Y.-G.	2016	quantitative	Sponsor motivation and behaviour: the paper identify after the analysis four types of backers. Angelic backers, avid fans, tasteful hermits and reward hunters.
Crowdfunding Campaign	Success Determinants	Chen, S., Thomas, S., Kohli, C.	2016	quantitative	Factors that impacts on a successful campaign: guilt appeal, utilitarian product type, emotional message frame and reward tiers well-studied are determinant factors
Crowdfunding Characteristics	Impact	Stanko, M.A., Henard, D.H.	2016	theoretical	Which crowdfunding factors can have an impact on an innovative entrepreneurs
Crowdfunding Campaign	Success Determinants	Vismara, S.	2016	quantitative	Factors that impacts on a successful campaign in equity crowdfunding: selling small portion of the company and having a consistent social capital portion is determinant. An overview of the

					regulations all over the world
Crowdfunding Characteristics	Purpose and Usage	Blanchard, A., Sabuncu, E.	2016	theoretical	IRD and CCDE first position about crowdfunding in scientific research in France
Crowdfunding Characteristics	Purpose and Usage	Palacios, M., Martinez-Corral, A., Nisar, A., Grijalvo, M.	2016	Literature Review	Literature review: the main research fields related to crowdfunding
Crowdfunding Characteristics	Form of Crowdfunding	Hornuf, L., Schmitt, M.	2016	theoretical	Equity Crowdfunding characteristics in UK and Germany
Crowdfunding Campaign	Success Determinants	Vulkan, N., Åstebro, T., Sierra, M.F.	2016	quantitative	Equity Crowdfunding: determinants of success. Principal differences between a reward-based successful campaign and an equity-based successful one
Actor	Role	Mollick, E., Nanda, R.	2016	quantitative	Experts and crowd what's the differences or points in common between this parts when they have to decide funding projects. Results suggest that good projects are financed by both and some riskier projects but successful are funded by the crowd
Crowdfunding Campaign	Success Determinants	Lukkarinen, A., Teich, J.E., Wallenius, H., Wallenius, J.	2016	quantitative	Determinants of a successful equity crowdfunding campaign
Crowdfunding Characteristics	Form of Crowdfunding	Hauge, J.A., Chimahusky, S.	2016	quantitative	The study demonstrates that in reward-based crowdfunding rewards are often delivered late.
Crowdfunding Campaign	Social Dynamics	Thies, F., Wessel, M., Benlian, A.	2016	quantitative	eWOM and PI as important

					determinants for a successful crowdfunding campaign
Crowdfunding Campaign	Social Dynamics	Li, X., Tang, Y., Yang, N., Ren, R., Zheng, H., Zhou, H.	2016	quantitative	The importance of the information disclosure in a crowdfunding campaign: information about the team, entrepreneur behaviour, updates about the project, are all determinant factors
Crowdfunding Characteristics	Form of Crowdfunding	Roig Hernando, J.	2016	quantitative	Loan-Based Crowdfunding: a convenient way to diversify and reduce the risk in a portfolio. It helps to optimize the portfolio
Crowdfunding Campaign	Social Dynamics	Liu, J., Deng, L.	2016	qualitative	Crowdfunding lexical features. The paper identify 6 typical moves and discusses about them. It is clear that for the success of the campaign the languages and lexical features are essential.
Crowdfunding Characteristics	Form of Crowdfunding	Gleasure, R., Feller, J.	2016	quantitative	Drivers of Charitable Crowdfunding backers
Crowdfunding Campaign	Social Dynamics	Wessel, M., Thies, F., Benlian, A.	2016	quantitative	Fake Social Information impacts on a successful crowdfunding campaign
Crowdfunding Campaign	Social Dynamics	Kromidha, E., Robson, P.	2016	quantitative	Social Identity and signalling success factors through social networks: how and how much these factor helps creators to success. Creators that identify themselves with the project affect in a positive way the campaign

Crowdfunding Characteristics	Form of Crowdfunding	Fasshauer, I.	2016	theoretical	An overview of equity crowdfunding
Crowdfunding Characteristics	Purpose and Usage	Calmé, I., Onnée, S., Zoukous, É.-A.	2016	theoretical	Why CFPs and founders decide to collaborate? The study put in evidence that the these actors decide to collaborate because in this way they improve their business model. Entrepreneurs because can have access to an alternative financing mean and the paltforms because improve their value proposition, helping people making real their projects.
Crowdfunding Characteristics	Purpose and Usage	Erdenebileg, Z.	2016	theoretical	Crowdfunding in China: an overview
Crowdfunding Campaign	Social Dynamics	Yuan, H., Lau, R.Y.K., Xu, W.	2016	quantitative	Semantic text analysis can support and make understand to the creators the potential success of their projects
Actor	Role	Maier, E.	2016	quantitative	How to attract Founders, Backers and Platforms using crowdfunding platforms
Crowdfunding Characteristics	Impact	Younkin, P., Kashkooli, K.	2016	quantitative	Which problems CF tries to solve: gatekeeping, coordination, patronage and inexperience. CF gives access to financing to people that doesn't have a network or a good one (gatekeeping), provide coordination to people that has a network but does not know how to exploit it, gives support to projects (patronage) and gives the possibility to inexperienced people

					to understand how to use their money. The study tries also to understand which CFPs tries to overcome which one of these specific problems.
Crowdfunding Characteristics	Purpose and Usage	Dushnitsky, G., Guerini, M., Piva, E., Rossi-Lamastra, C.	2016	quantitative	The study is focused on crowdfunding in EU. It demonstrates that there are different factors that affects the rising of CFPs in the European states. First CF is not influenced only by the economical situation of a Nation but also by his regulation and cultural traits. For this reason the different model of CF are not equally distributed in Europe through the CFPs. The article provides some statistics of this trends in Europe.
Crowdfunding Characteristics	Purpose and Usage	D'Ambrosio, M., Gianfrate, G.	2016	quantitative	The role of CF and VC. CF is a substitute of VC for the seed capital but is a complement in the other rounds of financing.
Crowdfunding Characteristics	Impact	Gleasure, R., Feller, J.	2016	qualitative	Impacts and use of crowdfunding according to the main 4 categories in which is usually divided into.

Crowdfunding Characteristics	Impact	Mollick, E., Robb, A.	2016	qualitative	Funders vs experts choices to understand the quality of the projects funded. Evaluation on how much more crowdfunding makes the market democratic and open. Results coherent with the previous studies
Crowdfunding Characteristics	Purpose and Usage	Vealey, K.P., Gerding, J.M.	2016	qualitative	The study highlights how important is to teach crowdfunding to the student because is a new site of technical and professional communication
Crowdfunding Campaign	Success Determinants	Zhou, M.J., Lu, B., Fan, W.P., Wang, G.A.	2016	quantitative	Impact of the project description on the success of a crowdfunding campaign
Actor	Motivation	Zeng, X., Li, Y., Leung, S.C.H., Lin, Z., Liu, X.	2016	quantitative	The paper is focused on the development and demonstration of an investor prediction model. The study reveals that this model helps companies to understand investors' behaviour
Crowdfunding Characteristics	Purpose and Usage	Sorenson, O., Assenova, V., Li, G.-C., Boada, J., Fleming, L.	2016	theoretical	Crowdfunding as a driver to promote innovation financing from VC
Crowdfunding Characteristics	Purpose and Usage	Sheldon, R.C., Kupp, M.	2017	theoretical	Crowdfunding as a basis for market testing. It is fundamental to understand if a product has a market and can attract clients
Crowdfunding Campaign	Success Determinants	Petitjean, M.	2017	quantitative	Determinants of a successful reward-based crowdfunding campaign

Crowdfunding Characteristics	Purpose and Usage	Lowies, B., Viljoen, C., McGreal, S.	2017	quantitative	Real estate crowdfunding in Australia: an overview from the investors point of view. The female investors use to invest more in liquid properties than male, they have more cash in their portfolios. The younger investors invest more than older and on medium-long investment; the older ones prefer to invest on cash and liquid properties.
Crowdfunding Campaign	Process Characteristics	Deng, B., Zhao, Z.	2017	quantitative	The main result indicates that the key factor influencing the selection mechanism of reward-based crowdfunding contains the following five dimensions: entrepreneurs' demand for financing, crowdfunding platform service rates, service efficiency of the crowdfunding platform, opportunity cost of the crowdfunding platform to provide high quality services and government regulation of the reward-based crowdfunding market.
Actor	Motivation	Zheng, H., Xu, B., Wang, T., Xu, Y.	2017	quantitative	Reward-based crowdfunding: determinant factors that influence backers' satisfaction
Actor	Role	Brem, A., Bilgram, V., Marchuk, A.	2017	theoretical	User innovation and Crowdfunding: how and why CF platforms help

					innovative projects to born
Crowdfunding Characteristics	Purpose and Usage	Rusdin, M.F., Ghazali, M., Razak, S.A.	2017	Literature Review	How to use crowdfunding to fund academic research. Literature review underlying the main ways, pros and cons to fund academic research using online CFPs
Crowdfunding Characteristics	Purpose and Usage	Steigenberger, N.	2017	quantitative	Why people finance in a reward-based crowdfunding project: analysis based on video games market
Crowdfunding Campaign	Process Characteristics	Gleasure, R., Morgan, L.	2017	qualitative	The paper is focused on the self-hosted crowdfunding, a way to fund his own project without the aids that could a platform gives you. The study suggests that with Activity Theories and Social Capital Theories some good results can be reached too.
Crowdfunding Characteristics	Purpose and Usage	Marom, S.	2017	quantitative	How to measure CSR in CFPs environment
Crowdfunding Campaign	Success Determinants	Bao, Z., Huang, T.	2017	quantitative	Reward-based crowdfunding: how the external supports contribute to a successful campaign. Reward support, impression support and relationship support have a positive impact on video and film projects
Crowdfunding Campaign	Social Dynamics	Ceballos, R., Hou, W., Levitas, E., Price, S.M.	2017	theoretical	Signaling theory in crowdfunding. The article describes how to exploit this theory to secure crowdfunding.

Crowdfunding Characteristics	Purpose and Usage	Zhu, L., Zhang, Q., Lu, H., Li, H., Li, Y., McLellan, B., Pan, X.	2017	quantitative	How crowdfunding can improve the diffusion of the Electric Vehicles in China: demonstration through a three-level Stackelberg game
Crowdfunding Campaign	Success Determinants	Kuppuswamy, V., Bayus, B.L.	2017	quantitative	Contributions increases if the funds are close to the funding goal, instead decrease if the goal is already reached. If the campaign is close to its deadline the contribution increases too.
Crowdfunding Characteristics	Purpose and Usage	Lacan, C., Desmet, P.	2017	quantitative	CFPs' influences on the use of crowdfunding as a financing method
Crowdfunding Characteristics	Impact	Baumgardner, T., Neufeld, C., Huang, P.C.-T., Sondhi, T., Carlos, F., Talha, M.A.	2017	theoretical	Crowdfunding as a support for Fast-Expanding Markets
Crowdfunding Campaign	Success Determinants	Greenberg, J., Mollick, E.	2017	quantitative	The paper is focused on the success of crowdfunding campaign of projects coming from people being part of a underrepresented group, taking as an example women. Women are more likely to succeed than man in crowdfunding campaign because they want to address the problem of inferiority with respect to men. And the research put in evidence also that they have more success where they are least represented.
Crowdfunding Campaign	Success Determinants	Davis, B.C., Hmieleski, K.M., Webb, J.W., Coombs, J.E.	2017	quantitative	How affective events affect the success of a campaign

Crowdfunding Characteristics	Purpose and Usage	Signori, A., Vismara, S.	2017	quantitative	Results come from a dataset of the biggest CFP in UK Crowdcube: 18% of these firms failed, while 35% pursued one or more seasoned equity offerings in the form of either private equity injection (9%) or follow-on crowdfunding offering (25%), while three firms were acquired. Among the determinants of the post-campaign scenarios, we find that the degree of investor participation in the initial offering plays a relevant role. In particular, firms with more dispersed ownership are less likely to issue further equity, while those that reach the target capital more quickly are more likely to launch a follow-on offering. Further, none of the companies initially backed by qualified investors subsequently failed.
Crowdfunding Campaign	Social Dynamics	Moss, T.W., Renko, M., Block, E., Meyskens, M.	2017	quantitative	Hybrid Organizations: the inefficiency of using hybrid language in a crowdfunding campaign to promote her own project if a person want to start an Economic and Social company
Crowdfunding Campaign	Success Determinants	Borst, I., Moser, C., Ferguson, J.	2017	quantitative	How much social media and platforms activities affect the success of a campaign

Crowdfunding Campaign	Social Dynamics	Bi, S., Liu, Z., Usman, K.	2017	quantitative	Impacts of social information on successful campaigns
Crowdfunding Campaign	Social Dynamics	Zhao, Q., Chen, C.-D., Wang, J.-L., Chen, P.-C.	2017	quantitative	Social Exchange Theory explains what are the determinants of backer's funding intention
Crowdfunding Characteristics	Form of Crowdfunding	Paravisini, D., Rappoport, V., Ravina, E.	2017	quantitative	Risk Aversion in P2P lending: wealthier investors have lower Absolute Risk Aversion and higher relative Risk Aversion. The RA is heterogeneous among the investors because of the difference in risk preferences.
Crowdfunding Characteristics	Impact	Kim, H., De Moor, L.	2017	qualitative	Crowdfunding can contribute to financial inclusion, that is an objective many nations want to reach
Crowdfunding Characteristics	Purpose and Usage	Paulet, E., Relano, F.	2017	theoretical	European panorama of the financial institution situation: the recent crisis and the new regulatory framework induce SMEs to look for new form of financing.
Crowdfunding Characteristics	Impact	Attuel-Mendès, L.	2017	theoretical	Banks have to invest in crowdfunding because is a not yet mature market but it is definitely a new predominant way of financing for SMEs
Crowdfunding Characteristics	Purpose and Usage	Brown, T.E., Boon, E., Pitt, L.F.	2017	theoretical	Crowdfunding can be used also as a marketing tool for companies that are not born through a crowdfunding campaign. But they have to have a product for wich the "crowd" is ready to prepay and they must be ready to dedicate

					to these platforms a lot of effort
Crowdfunding Campaign	Success Determinants	Chan, C.S.R., Parhankangas, A.	2017	quantitative	Impacts of incremental innovativeness and Radical Innovativeness on a successful campaign. The incremental one boost the odds of success; on the other hands, radical innovativeness reduce this odds but the effect can be mitigated be the use of a campaign's incremental innovativeness
Crowdfunding Campaign	Social Dynamics	Parhankangas, A., Renko, M.	2017	quantitative	Linguistic Style Role: it is fundamental for new ventures (social entrepreneurs) but it almost doesn't matter for commercial entrepreneurs
Crowdfunding Campaign	Social Dynamics	Courtney, C., Dutta, S., Li, Y.	2017	quantitative	Signals through creators actions on social media and crowdfunding experience can mitigate the limit of information asymmetry in crowdfunding. Endorsement from third-parts increase the positive effect of signals generated by the start-up creators

Actor	Motivation	Hildebrand, T., Puri, M., Rocholl, J.	2017	quantitative	Group Leader in CFPs: the perverse influence of this figure on a crowdfunding campaign. The group leader bid can determine a distorted acknowledge of the listing. Expert investors can take advantage over inexperienced investors through crowdfunding
Crowdfunding Characteristics	Purpose and Usage	Turi, A.N., Domingo-Ferrer, J., Sánchez, D., Osmani, D.	2017	quantitative	The paper analyses the relationship between co-utility and crowdfunding. It results that crowdfunding is co-utility but it is affected by two key factors: fear and trust. The imperfection of the market (mostly information asymmetry) makes the optimal point more difficult to reach.
Crowdfunding Characteristics	Purpose and Usage	Hossain, M., Oparaocha, G.O.	2017	theoretical	An overview of crowdfunding
Crowdfunding Characteristics	Purpose and Usage	Flanigan, S.T.	2017	theoretical	Crowdfunding and Diaspora Philanthropy as two aspects with many similar characteristics and in some cases complementary among each other.
Crowdfunding Characteristics	Purpose and Usage	Bergamini, T.P., Navarro, C.L.-C., Hilliard, I.	2017	quantitative	Crowdfunding is still a not-well-known mean of financing among social entrepreneurs because of its lack of information. It is also not used very much because many social entrepreneurs don't know how it works or because there are

					other financing means that offer the similar things.
Crowdfunding Characteristics	Regulation	Hornuf, L., Schwienbacher, A.	2017	quantitative	Discussion over the main regulation about crowdfunding all over the world. Theoretical framework in which the main result achieved is that a strict set of laws that protects big investors is an harm for SMEs mostly in countries where the presence of VC or BA is scarce.
Crowdfunding Characteristics	Form of Crowdfunding	Xu, D., Ge, M.	2017	theoretical	Equity Crowdfunding in China: suggestions to overcome the lack of a regulation
Crowdfunding Campaign	Success Determinants	Stanko, M.A., Henard, D.H.	2017	quantitative	The amount of funds raised during the campaign doesn't affect significantly the performance of the product once on the market. Instead, the number of backers supporting the projects is positively related with the success of the product on the market
Crowdfunding Characteristics	Purpose and Usage	Langley, P., Leyshon, A.	2017	theoretical	An overview of crowdfunding considering its disruptive, democratic and alternative role in financing means.

Crowdfunding Campaign	Social Dynamics	Manning, S., Bejarano, T.A.	2017	qualitative	Storytelling style of the campaign: ongoing journey vs result-in-progress. Which style is used basically is determined by three characteristics of the project: rate of tangibility, rate of technologic sophistication and social orientation. Low rate of the first two and high social orientation are connected with the ongoing journey style. The other style is related to the vice versa situation.
Crowdfunding Characteristics	Purpose and Usage	Strausz, R.	2017	quantitative	CF and moral hazard: this paper highlights how using deferred payment can help reducing this risk.
Crowdfunding Characteristics	Form of Crowdfunding	Feller, J., Gleasure, R., Treacy, S.	2017	quantitative	Peer-to-Peer lending is characterized by a strong importance of social information more than financial information in most of the cases.
Crowdfunding Characteristics	Purpose and Usage	Lin, L.	2017	theoretical	Equity-based crowdfunding in China: the main risks are not faced in the country because of the lack of a regulation. The risks are the uncertainty of the commercialization of the idea, information asymmetry (higher agency costs), lack of start-up assets and lack of secondary market for pricing, liquidation and exit

Actor	Role	Kim, T., Por, M.H., Yang, S.-B.	2017	quantitative	Founders features are relevant for a successful campaign: identity disclosure and prior experiences are relevant. The projects characteristics are important too: for example the number of updates and the number of comments are positive correlated with the success of the campaign. The duration of the campaign is not correlated significantly
Crowdfunding Campaign	Social Dynamics	Kunz, M.M., Bretschneider, U., Erler, M., Leimeister, J.M.	2017	quantitative	Signals are very important for the success of the campaign both in pre-funding phase and in funding phase. As the reward levels increase the odds of success increase too. All the other hypothesis tested are in line what studied before.
Crowdfunding Campaign	Success Determinants	Colistra, R., Duvall, K.	2017	quantitative	Which factors are important for backers? Geographical location is unimportant, that they get involved on the project is important. They would share the project on their social media after supporting it. 54% of the sample consider reward important or somehow very important.
Crowdfunding Characteristics	Form of Crowdfunding	Nehme, M.	2017	theoretical	Equity-based crowdfunding: an overview. The states are trying with regulation to find a

					right balance between investors protection and entrepreneurship.
Crowdfunding Campaign	Process Characteristics	Genevsky, A., Yoon, C., Knutson, B.	2017	quantitative	Neural study to understand if it is possible to predict crowdfunding choices. The study reveals that some kind of prediction could be done. So, it can be used at a market level
Crowdfunding Campaign	Social Dynamics	Wang, W., Zhu, K., Wang, H., Wu, Y.-C.J.	2017	quantitative	The author studies from a sentimental point of view the textual description of the project and comes with the conclusion that a positive and sentimental description helps for the success of the campaign
Crowdfunding Campaign	Success Determinants	Hoegen, A., Steininger, D.M., Veit, D.	2017	quantitative	Literature review: after scanning 68 articles the authors produce a framework to underline the principal categories that affect investment decisions. These are: Financials and campaign statistics, Project and Product quality, Founder perception and attributes, Social communities and 3rd parties, Context, investors characteristics
Crowdfunding Campaign	Success Determinants	Allison, T.H., Davis, B.C., Webb, J.W., Short, J.C.	2017	quantitative	Successful reward-based crowdfunding campaign: entrepreneurs-specific and product-specific issues are important for the crowdfunding campaign performance. The

					peripheral cues such as portraying the project as a personal dream and so on are also relevant
Crowdfunding Campaign	Success Determinants	Wang, X., He, Q., Quan, J.	2017	quantitative	The determinants of success of crowdfunding campaign. A quantitative analysis through a repeated game.
Crowdfunding Characteristics	Regulation	Tuomi, K., Harrison, R.T.	2017	theoretical	Regulation in USA, UK, Sweden and Canada about equity crowdfunding
Crowdfunding Campaign	Success Determinants	Roma, P., Messeni Petruzzelli, A., Perrone, G.	2017	quantitative	New technological-based projects pledging more in crowdfunding have the possibility to attract higher rate of professional investors. This effect is amplified if these companies have patents granted for the new products ideas.
Crowdfunding Campaign	Social Dynamics	Clauss, T., Breitenecker, R.J., Kraus, S., Brem, A., Richter, C.	2017	quantitative	The importance of social interactions during a crowdfunding campaign: the study suggests that social interactions improve campaign performance. Positive comments, interaction between Founders, Backers and Platforms are some of the most important aspects
Crowdfunding Campaign	Success Determinants	Piva, E., Rossi-Lamastra, C.	2017	quantitative	Success in equity crowdfunding campaigns: entrepreneurs education and experiences are the most relevant factors

					to attract backers and achieve trust from them
Crowdfunding Characteristics	Impact	Huang, T., Zhao, Y.	2017	Literature Review	Equity crowdfunding development is taking governments to introduce new laws to regulate this new expanding market
Crowdfunding Campaign	Success Determinants	André, K., Bureau, S., Gautier, A., Rubel, O.	2017	quantitative	Reward-based crowdfunding campaign is more successful if the reward is based on reciprocal giving rather than a simple transaction or a non-reciprocal giving. This because the reciprocal giving makes the parts get involved in a relationship that is more that a single exchange of reward and money.
Actor	Motivation	Bretschneider, U., Leimeister, J.M.	2017	quantitative	Why backers decide to support projects: the study is in line with the previous ones. People make their investments because of a personal return, for their image, because moved by social motivations or for the herd effect
Crowdfunding Characteristics	Purpose and Usage	Yu, S., Johnson, S., Lai, C., Cricelli, A., Fleming, L.	2017	theoretical	Descriptive statistics and data for researchers. The paper presents also a description of databases created by data from the principal CFPs
Crowdfunding Campaign	Success Determinants	Barbi, M., Bigelli, M.	2017	quantitative	Principal drivers of a successful crowdfunding campaign: the study is in line with the previous researches

Crowdfunding Characteristics	Form of Crowdfunding	Wei, Z., Lin, M.	2017	quantitative	P2P crowdfunding: auction vs posted prices. According to this study posted prices are more convenient for both lenders and borrowers even if the interest rate is a little bit higher than the auction situation; for this reason is the borrower that has to pay more.
Crowdfunding Campaign	Success Determinants	Cecere, G., Le Guel, F., Rochelandet, F.	2017	quantitative	Crowdfunding campaigns in creative projects such as films and documentaries are successful if not linked to monetary rewards. The main driver is altruism
Crowdfunding Characteristics	Form of Crowdfunding	Käfer, B.	2017	theoretical	P2P crowdfunding: risk perspective analysis. Moral hazard and adverse selection could be higher in P2P lending for the asymmetric information. Herding could be dangerous from a financial risk point of view. The risk of the platform default can threaten the repayment of loans. (Credit Risk before). The liquidity risk is higher mostly for the lack of a secondary market. The entering of institutional investors on the market could mitigate the liquidity risk or reduce it.

Crowdfunding Characteristics	Form of Crowdfunding	Schwienbacher, A.	2017	quantitative	Reward-based crowdfunding risks: risk to set an exaggerate money target for the campaign, risk to see her own idea replicated by others. The presence of a small group of professional investors is a good aspects because they can provide incremental funds after the campaign if needed. And the crowd is important because they are a market test before entering in the market itself
Crowdfunding Campaign	Social Dynamics	Zheng, H., Xu, B., Zhang, M., Wang, T.	2018	quantitative	Reward-based crowdfunding campaign: psychological ownership is an important factor for a successful campaign. It is strengthened by co-creation.
Crowdfunding Characteristics	Impact	Rijanto, A.	2018	quantitative	Crowdfunding and Corporate Social Responsibility in Asia. The study demonstrates the synergy that can rise between donation-based CF and CSR. The target amount reached at the very first days is related with the success of the campaign and also arts and culture projects are more likely to be funded as CSR projects.

Crowdfunding Characteristics	Purpose and Usage	Mamonov, S., Malaga, R.	2018	quantitative	The paper analyses the relationship between non-professional investors and equity crowdfunding after the Title III enabled these investors to enter in equity market. They consider the three main risk agency, market and execution but with some differences.
Crowdfunding Characteristics	Impact	Cox, J., Nguyen, T.	2018	quantitative	Reward-based crowdfunding: business projects are less funded than creative projects such as dance and music ones. Only 4-5% of the business project are fully financed and this demonstrate that the result is in line with the financing of BA. For this reasons the authors suggests that reward-based crowdfunding is not able to overcome the gap that the SMEs have to face to find funds for their business. They suggest to launch a campaign during the Spring and Autumn periods
Actor	Role	Brown, R., Mawson, S., Rowe, A.	2018	qualitative	The role of FFF in an equity-based crowdfunding campaign. It can be divided in three phases. The pre-crowdfunding phase is highly influenced by the strong interaction with FFF. The active crowdfunding is characterized by the research of new

					business partner to increase the base but the relationship with FFF remains and during the Post-Crowdfunding phase the situation is almost the same.
Crowdfunding Campaign	Social Dynamics	Block, J., Hornuf, L., Moritz, A.	2018	quantitative	Effects of updates on an equity-based crowdfunding campaign. They are positive and their effects are effective after some days. It is important to use a simple and direct language. The effect loses of value with the increasing of the updates. Information about business and project innovations have a positive impact. The updates about the team in this study don't have a significant effect
Crowdfunding Campaign	Process Characteristics	Fan-Osuala, O., Zantedeschi, D., Jank, W.	2018	quantitative	The paper contains the discussion and demonstration of a forecasting model based on historical data of crowdfunding campaigns.
Actor	Motivation	Zhao, Y., Qin, Y., Zhao, X., Shi, L.	2018	quantitative	Entrepreneurial motivation and crowdfunding success.

Crowdfunding Campaign	Success Determinants	Giudici, G., Guerini, M., Rossi-Lamastra, C.	2018	quantitative	Geography matters in crowdfunding. Local altruism, that's to say, people who fund a project in reward-based crowdfunding that are located close to the creators, is an important factor for the success of a reward-based crowdfunding campaign. Local altruism is related to the rate of social capital present in these areas.
Actor	Role	Polzin, F., Toxopeus, H., Stam, E.	2018	quantitative	In-crowd investors and out-crowd investors: the first ones have a stronger interpersonal relation with the creators whereas the out-crowd investors don't.
Actor	Role	Mohammadi, A., Shafi, K.	2018	quantitative	Female investors in Sweden: they are more risk adverse with respect to men and they are more likely to invest where there is a larger portion of men investments, this probably because of the biases of the woman not so able as investor.
Crowdfunding Characteristics	Impact	Guenther, C., Johan, S., Schweizer, D.	2018	quantitative	The investors inside the country are affected by the distance, the oversea investors are not affected by the distance. (The study is focused in the Australian market)

Crowdfunding Characteristics	Impact	Di Pietro, F., Prencipe, A., Majchrzak, A.	2018	qualitative	The impacts of CF on start-ups is two-fold: it helps not only to collect money but also to develop strategies and to understand what the market wants exploiting the crowd. The study reveals that a correct use of crowdfunding can help companies to develop better than start-ups don't use crowdfunding.
Crowdfunding Campaign	Process Characteristics	Zvilichovsky, D., Danziger, S., Steinhart, Y.	2018	quantitative	The impact of the make-it-happen theory on the reward-based crowdfunding: the theory that the crowd cares more about the rise of the product than the achieving of the economical goal of the founders is true. The all-or-nothing mechanism induce this type of consequences on the crowd. And also the campaign is likely to be funded when the collection has reached almost the funding goal.
Actor	Role	Jancenelle, V.E., Javalgi, R.R.G., Cavusgil, E.	2018	quantitative	Prosocial lenders seem to follow a donation-based logic more than an investment-based logic. For example they lend less to borrowers that demonstrate an economic goal.
Crowdfunding Campaign	Success Determinants	Niemand, T., Angerer, M., Thies, F., Kraus, S., Hebenstreit, R.	2018	quantitative	Equity Crowdfunding is influenced by geographical factors: investors are more likely to invest in project closer from them.

Crowdfunding Characteristics	Form of Crowdfunding	Estrin, S., Gozman, D., Khavul, S.	2018	qualitative	Equity-based crowdfunding in UK: evolution and consideration. It is important to highlight that from the paper emerges the fact that investors know what is the level of risk they are facing.
Crowdfunding Characteristics	Impact	Kshetri, N.	2018	qualitative	Informal institutions' impacts on equity crowdfunding. They invite investors to trust more in financing and projects' creators more willing to start a campaign because it makes the market more mature and with rules.
Crowdfunding Characteristics	Impact	Rossi, A., Vismara, S.	2018	quantitative	Post-campaign services have a significant impact on future successful campaign; whereas, pre and on-going campaign services have no impact on the success of a campaign
Crowdfunding Characteristics	Regulation	de la Viña, L.Y., Black, S.L.	2018	theoretical	Discussion about regulation of equity crowdfunding
Crowdfunding Characteristics	Purpose and Usage	Marchegiani, L.	2018	quantitative	Crowdfunding in creative sector is still growing. The donation-based crowdfunding is the most used, than there is the reward-based and finally the social lending.
Actor	Role	Davidson, R., Poor, N.	2018	quantitative	The importance of CFPs to reinforce spatial proximity.

Crowdfunding Characteristics	Impact	Liu, H., Wang, Y.	2018	quantitative	Crowdfunding is an optimal solution not only to fund a project when it has to born but also once is launched. This because the crowd that invest in this project usually knows the local market better than VC that knows aggregate information about different markets in which he wants to invest.
Actor	Motivation	Cox, J., Nguyen, T., Thorpe, A., Ishizaka, A., Chakhar, S., Meech, L.	2018	quantitative	Lenders decide to invest in prosocial projects also because of they can enhance their image. The paper demonstrates that the visible and public activities increase the likelihood of investment by these people.
Crowdfunding Characteristics	Impact	Lu Y., Chang R., Lim S.	2018	quantitative	Applications of Crowdfunding into the photovoltaics market
Crowdfunding Campaign	Success Determinants	Crosetto P., Regner T.	2018	quantitative	The study demonstrates that the path is not always so essential as stated by previous researches.
Crowdfunding Campaign	Social Dynamics	Anglin A.H., Short J.C., Drover W., Stevenson R.M., McKenny A.F., Allison T.H.	2018	quantitative	The study highlights from a psychological point of view some important aspects for a successful campaign: positivity, resilience, hope, optimism and confidence.
Crowdfunding Campaign	Social Dynamics	Xiao S., Yue Q.	2018	quantitative	The study focus on the existence of Inertia Behaviour of investors. It influences the choice of investment and the timing.

Crowdfunding Characteristics	Impact	Carè S., Trotta A., Carè R., Rizzello A.	2018	qualitative	Civic Crowdfunding for the development of smart cities.
Crowdfunding Characteristics	Impact	Martínez-Climent C., Zorio-Grima A., Ribeiro-Soriano D.	2018	Literature Review	Literature review and bibliometric analysis of crowdfunding

APPENDIX 2. THE RATIONALE FOR THE INCLUSION AND EXCLUSION CRITERIA

As described into the paragraph dedicated to the methodology the following are the criteria that took to the perimeter selected for the analysis:

- Publications from 2010 to 2018 (June);
- Keywords “Crowdfunding” and “Crowd-funding”;
- Publications coming from academic journals;
- Articles containing in the title the word “Crowd” or in the abstract one or both this words “Funding” and “Platform”;
- Articles written in Italian, English, Spanish or French.

Applying this logic, the set of articles that came out enabled to focus on the theme of Crowdfunding and the main aspects related to it: its role, the way and thanks to whom it can work and the most powerful tool Crowdfunding gives to the people, that is to say, the Crowdfunding Campaign. As stated before, main point of the dissertation is to analyse and understand Crowdfunding as a disruptive way of financing coming from the crowd, so selecting articles presenting into the title and the abstract words like “crowd” and “funding” goes in this direction. At the same time, it was necessary to catch also the technological aspect of Crowdfunding and the important role and contribution that platforms have, that is why the insertion of the word “platform” on the abstract. For these reasons, it has been discarded from the original selection lots of articles and finally the set reduced to 213 articles. The exclusion criteria, of course, follows the same path. The 560 articles left after applying the filters described above have been discarded for the following reasons:

- 40 % of them mention Crowdfunding just as part of the financing methods but the main focus is on describing the project or the results of the project;
- 11% of them were articles talking about different ways of financing mentioning, among the others, Crowdfunding;
- 49% of the articles had as main subject Crowdsourcing or a completely different topic.