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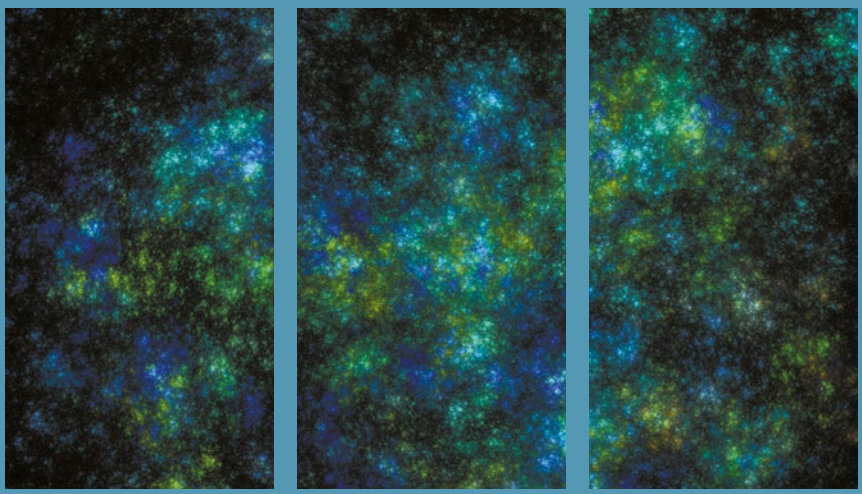
Crowdfunding for SMEs

A European Perspective



Edited by Roberto Bottiglia and Flavio Pichler

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Editors

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A European Perspective

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Abbreviations

ACA	Angel Capital Association
AFM	Autoriteit Financiële Markten
B2B	Business-to-business
B2P	Business-to-person
BAGs	Business angel groups
BANs	Business angel networks
BAs	Business angels
BASs	Business angel syndicates
CIP	Conseil en investissement participatif
DIY	Do-it-yourself
EBAN	European Trade Association for Business Angels, Seed Funds and Early Stage Market Players
ESMA	European Securities and Markets Authority
FCA	Financial Conduct Authority
FFF	Family, friends and fools
FSA	Financial Supervision Act
FSB	Financial Stability Board
GDP	Gross domestic product
HNWIs	High net worth individuals
IBAN	Italian Business Angels Network
IBO	Initial bond offering
ICT	Information and communication technology
IFP	Intermédiaire en financement participatif

IPO	Initial public offering
IRR	Internal rate of return
ISAs	Individual savings accounts
IT	Information technology
LBOs	Leveraged buy-outs
M&A	Merger and acquisition
MARF	Mercado Alternativo de Renta Fija
MBIs	Management buy-ins
M-bond	Mittelstandbond
MBOs	Management buy-outs
MiFID	Market in Financial Instruments Directive
MTFs	Multilateral trading facilities
P2B	Peer-to-business
P2P	Peer-to-Peer
PSI	Prestataire de services d'investissement
R&D	Research and development
ROSCA	Rotating Savings and Credit Association
SAS	Société par actions simplifiée
SMEs	Small and medium-sized enterprises
SPV	Special purpose vehicle
UGC	User-generated content
UKBAA	UK Business Angels Association
VCs	Venture capitalists
VeM	Venture Capital Monitor

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1

Introduction

Roberto Bottiglia and Flavio Pichler

Crowdfunding is a new phenomenon which gives people (the crowd) the opportunity to fund a project or a business idea they share an interest in using online platforms. Crowdfunding can take several forms and the aim of the book is deepening the understanding of a specific category of crowdfunding, namely financial return crowdfunding, which includes both peer-to-peer (P2P) lending and equity crowdfunding and that reveals itself as an extant, interesting and challenging topic. The theory to which financial return crowdfunding is most closely related is that of asymmetric information, which helps explain the existence of financial institutions because they reduce market imperfections (market failures), consequently avoiding defaults and enabling the transfer of money within the financial system, which is of critical importance to economic development and growth. The theory of asymmetric information also relates to another topic dealt with in the book, that of the financing gap faced by small and medium-sized enterprises (SMEs).

We believe that financial return crowdfunding may play an important role in backing firms and projects that would not be funded or only partially financed in traditional ways, that is, through the banking channel

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or financial markets, particularly in the case of SMEs. This book thus investigates whether financial return crowdfunding is capable of either reducing the funding gap of SMEs and becoming an alternative or a complementary funding channel to traditional sources of capital for those firms. In this context, policymakers play an important role by introducing adequate rules to favour financing for SMEs on one hand and protect investors on the other. Crowdfunding was born in the US and differs from the European approach in many aspects, the most evident being the advance in regulation on the part of the US. It is recognised that crowdfunding, and financial return crowdfunding in particular, should be a regulated activity because of the potential risks it carries. Focusing on the European level, regulation should be homogeneous across all European countries, to avoid regulatory arbitrage and differences in investor protection across countries. Because of the variety of business models, and the novelty of crowdfunding, it is indeed not clear which EU legislation is applicable, or potentially applicable, and how it should be applied.

Given these premises, it is clear that the analysis must involve experts in different disciplines, specifically management, finance and law, to deal with the main aspects related to crowdfunding.

The first two chapters form a basis for the analysis of financial return crowdfunding. Chap. 2 by Flavio Pichler and Ilaria Tezza introduces, defines and conceptualises the phenomenon that is named "crowdfunding." It also presents a classification of the types of crowdfunding and explores their main features. Further, it investigates the academic literature on crowdfunding that, although rapidly growing, is still in its infancy, to explore the streams of research on this particular funding model and the methodology that is typically used to assess the phenomenon. Chap. 3 by Federico Brunetti depicts the role played by the Web 2.0 technology in fostering the development of crowdfunding. The general features of Web 2.0 as a communication and interaction environment, both at an individual and a collective level, along with the features that are most relevant to crowdfunding will be considered.

The next two chapters concern P2P lending, which is one of the two categories that make up financial return crowdfunding. Chap. 4 by Roberto Bottiglia highlights the competitive frontiers of crowdfunding in terms of both potential clients and likely competitors. The former

consists mainly of SMEs and other public and/or private entities performing an economic activity; the latter relates to retail banks and other non-bank financial institutions that provide firms with funding. It is also important to determine which factors foster the success of P2P lending crowdfunding the most.

Chap. 5 by Giuliana Borello investigates the business model of a sample of European P2P lending platforms. The analysis aims at identifying the specific characteristics of this form of crowdfunding that enables it to become an alternative or complementary source of capital for SMEs.

The two chapters that follow deal with the other category of financial return crowdfunding, that of equity crowdfunding. Chap. 6 is by Vincenzo Capizzi and Emanuele Maria Carluccio explores the role of seed financing from venture capital and private equity as equity crowdfunding becomes more important. Platforms will indeed have to cope with collective-action problems, since crowd-investors have neither the ability nor the incentive to devote substantial resources to the sort of due diligence undertaken by venture capital and private equity funds. Chap. 7 by Veronica De Crescenzo takes on the business models of equity crowdfunding platforms with a twofold objective. It first aims at identifying the main features of platforms, target companies and investors. Second, it attempts to point out the key success factors of funding rounds posted on a sample of European equity crowdfunding platforms.

Finally, given the risks that pledgers/investors to a crowdfunding campaign face, the role of regulation should be considered. Chap. 8 by Paolo Butturini gives an insight into the regulation of crowdfunding in Europe, both at a domestic and a supranational level. Indeed, some European countries have already set up specific rules relating to financial return crowdfunding; however, the definition and implementation of a set of agreed, common rules at the European level are still in their infancy.

2

Crowdfunding as a New Phenomenon: Origins, Features and Literature Review

Flavio Pichler and Ilaria Tezza

2.1 Introduction

Crowdfunding is a relatively new funding practice through which people, often living in different geographical areas, provide (small) amounts of money to a project they are interested in. Money is raised either directly or through online platforms using Web 2.0 technologies. The precise factors that lead to the boom in crowdfunding remain unclear. However, two driving features can be identified: the structural and the contingent. The former is represented by the availability of web technology and the latter by 'the credit crunch' that occurred after the 2007–2008 global financial crisis (Kirby and Worner 2014, p. 12).

The aim of this chapter is to shed light on this phenomenon from several perspectives. We will first recount a short history of crowdfunding, from its origins to its most recent campaigns. We will also provide a detailed definition and classification of crowdfunding types, examine the motivations for participation of both the funders and the fundraisers, and highlight the risks associated with this source of funding. In addition, we will review

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studies that have attempted to identify the features of a successful crowdfunding campaign and the presence of herding by funders. This will provide us the opportunity to highlight further research streams.

The chapter is organised as follows: the next section presents a short history of crowdfunding and provides a definition and a classification of crowdfunding models. This section also presents reflections on the benefits and risks posed by crowdfunding, and discusses data on the phenomenon. Sect. 2.3 presents the literature review, and Sect. 2.4 suggests future directions for research.

2.2 What Is Crowdfunding?

Although crowdfunding may appear to be a new phenomenon, in fact, it is not. Artists such as Beethoven and Mozart financed concerts and the publication of manuscripts using individual donations (Hemer et al. 2011). In 1876, the Statue of Liberty was financed through crowdfunding, with citizens of France and the United States conducting initiatives to raise money—France for the statue and the US for the pedestal (Best and Neiss 2014). More recently, one of the most well-known successful crowdfunding campaigns was that of the UK rock band Marillion. In 1997, this band raised $60,000 in donations from their fans to finance their North American tour (Vassallo 2014). Other examples of successful campaigns are those of the Pebble Smartwatch and the movie *Veronica Mars*, both of which were funded on Kickstarter. In 2012, the Pebble campaign raised $10,266,845 from 68,929 people[1]; in 2013, the *Veronica Mars* campaign raised $5,702,153 from 91,585 investors.[2] In November 2014, the Caterham Formula One racing team financed its participation in the last Grand Prix in Abu Dhabi through the crowdfunding platform Crowdcube, raising £2,354,389 from 6467 investors.[3] What distinguishes old from modern crowdfunding campaigns is the presence of the web: nowadays, money is given to ideas and projects through online platforms.

The recent exponential growth of crowdfunding is mainly due to the technological innovation of Web 2.0 and the 2007–2008 global financial

[1] See www.kickstarter.com.

[2] See www.kickstarter.com.

[3] See www.crowdcube.com.

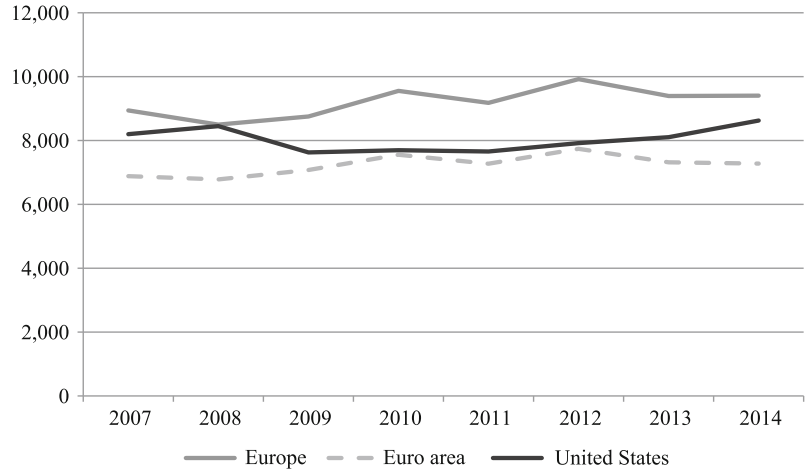

Fig. 2.1 Bank loans to non-financial corporations ($bn).
Source: Author's calculations from BIS long series on credit to the private non-financial sector

crisis. In the wake of O'Reilly's (2007) seminal paper, we define Web 2.0 as all the websites and applications that allow internet users to create and share online any type of information or material, that is, through social networks such as Facebook and Twitter, as well as blogs and sites such as Wikipedia. The role of the financial crisis is also important. It is commonly recognised that since the financial crisis broke out in 2007 (and even more seriously, in 2008 after the collapse of the US bank Lehman Brothers), bank credit has almost ceased, primarily in Europe and North America (see Fig. 2.1). As such, financing for small and medium enterprises (SMEs) and individuals decreased significantly during the crisis, thus creating a gap for crowdfunding as an alternative method for raising money (Dapp 2013, p. 2; Hagedorn and Pinkwart 2013, 2016). Nevertheless, as Fig. 2.1 demonstrates, bank credit has begun to recover, creating the opportunity for crowdfunding to become a complementary source of capital for SMEs and individuals, rather than being an alternative to bank credit.[4]

[4] This is also true for equity crowdfunding, which is supposed to become a complementary source of funding to all forms of angel investing, that is, business angels, venture capital and private equity funds (Hornuf and Schwienbacher 2014b).

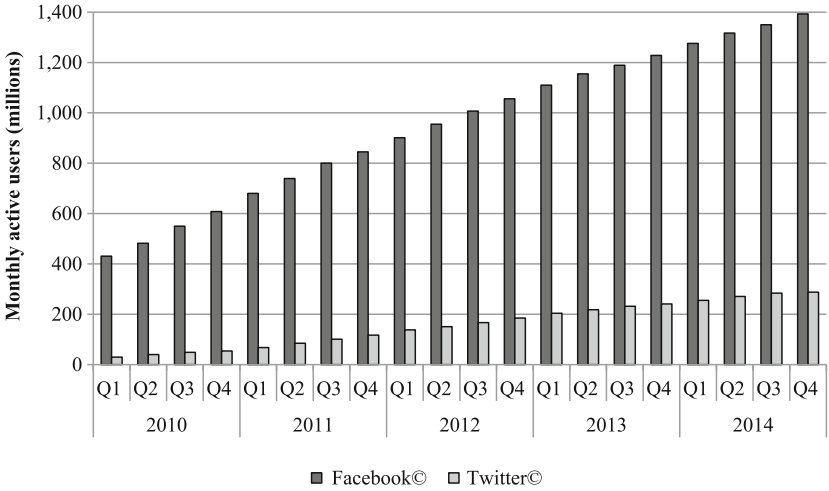

Fig. 2.2 Monthly active users on Facebook and Twitter.
Source: Author's calculations from Facebook and Twitter data

The importance of the Web 2.0 can be demonstrated by examining the number of worldwide monthly active users on Facebook and Twitter between 2010 and 2014. We selected these two social networks as a proxy of the importance of the Web 2.0 because they are the two most well-known social networks (Fig. 2.2).[5] The number of Facebook and Twitter monthly active users increased by 223 % and 860 % respectively in the 2010–2014 period.

The term 'crowdfunding' originates from the term 'crowdsourcing', which is defined as 'the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call' (Howe 2006a). Kleemann et al. (2008, p. 6) extend this initial definition by introducing the role of the internet (given that the 'open call' is now made over the internet), and explicitly state that the contribution of the crowd should be made to produce or sell the product ('Crowdsourcing […] takes place when a […] firm outsources specific tasks essential for the making

[5] Our data exclude China because of the ban on Facebook.

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 contribution to the firm's production process'). Thus, in general terms, crowdsourcing is the process of outsourcing a problem to the crowd, to obtain in return a solution to the problem using the resources of the crowd. Poetz and Schreier (2012) offer another definition of crowdsourcing, stating that it is the contribution of the crowd to the creation and fulfilment of a business idea. In the wake of Kleemann et al. (2008) definition, it is clear that crowdfunding is a particular form of crowdsourcing whereby the crowd is asked to provide a solution to a financial problem, namely, the lack of financial resources for a business idea to be initiated (Hagedorn and Pickwart 2013, p. 10). The first business ideas that were funded through crowdfunding in recent years were those of a creative or artistic nature, for example, music albums, films and books, but nowadays, crowdfunding serves a variety of investment proposals.

The literature offers different definitions of crowdfunding (see Valanciene and Jegeleviciute 2013 for an overview); here, we list only a few of them. Lambert and Schwienbacher (2010) and Schwienbacher and Larralde (2012) were among the first to explain crowdfunding, defining it as a way of financing a project or a company through the internet. The financial resources come from a large number of individuals, who may provide money either in the form of donation or in exchange for financial or non-financial rewards. De Buysere et al. (2012, p. 9) term it 'a collective effort of many individuals who network and pool their resources to support efforts initiated by other people or organizations […] usually […] via or with the help of the internet'. Ramsey (2012) defines crowdfunding as 'the process of raising money to help turn promising ideas into business realities by connecting investees with potential supporters'. Wheat et al. (2013, p. 71) provide the following definition: 'Crowdfunding is a new internet-based method of fundraising in which individuals solicit contributions for projects on specialized crowdfunding websites.' It is clear from these definitions that three features are essential in crowdfunding: (1) there must be a business project that requires funding; (2) there must be many investors (or backers) that wish to contribute to the realisation of that business—investors should be mainly, or in some cases exclusively, non-professional; and (3) the internet connects backers and entrepreneurs. Therefore, in general terms,

crowdfunding refers to circumstances in which many people provide, typically, small amounts of money to projects and ideas either directly—the so-called 'do-it-yourself' ('DIY') model—or via online platforms.

Two criteria for categorising crowdfunding are the fundraising mode and the presence or absence of a return. According to Cumming et al. (2015, p. 3), the fundraising mode can occur in two ways, either by 'all-or-nothing' or 'keep-it-all'. In both situations, the company or individual seeking finance sets a funding goal. If the target goal is not reached in an all-or-nothing campaign, backers will have their money returned. In the keep-it-all model, the fund seeker will keep all the funds that were raised, even when the funding goal is not reached.

Before categorising crowdfunding in relation to the presence or absence of a return, we introduce the different forms of crowdfunding (De Buysere et al. 2012; Harrison 2013, pp. 285–6; Pierrakis and Collins 2013):

- Donation crowdfunding: people give their money to a project or idea and do not expect anything in exchange for the money (as the word 'donation' suggests). This is the typical form of crowdfunding used by not-for-profit and charitable organisations, including disaster-relief campaigns and election campaigns.[6] This type of crowdfunding might entail an immaterial or intangible 'reward', for example, a thank-you email or a credit at the end of a film or on the cover of a CD or DVD.
- Social lending: this is a form of donation crowdfunding in which the money is collected through online platforms that specialise in lending to social projects only. These projects do not pay interest or principal, and typically involve businesses in developing countries that receive micro financing (De Buysere et al. 2012, p. 10).
- Reward crowdfunding: as with donation crowdfunding, people give their money to a project or idea, but they obtain a gift in return for the investment. This gift can take several types of material (tangible) forms, but it can never be financial.[7] Sponsoring is a particular form of reward

[6] For example, see www.crowdfunder.co.uk or the 2008 election campaign of US president Barack Obama.

[7] Examples are CDs, DVDs, books or any sort of gadgets from the artist whose project is being supported.

crowdfunding, where the gift is already set and provided by the sponsor itself. Reward crowdfunding, also in its sponsoring form, is principally used for creative purposes, for example, recording a music album or setting up an art exhibition.

- Pre-purchase (or pre-ordering or pre-selling): investors give money to pay in advance for a product they like and, as soon as the production is completed, and before the product is sold, they receive the product at a price discounted from the sales price. That is, the pledgers finance the production of a particular product. Pre-purchase is a particular form of reward crowdfunding, where the supporters and consumers overlap because the reward is pre-determined, being the product that is going to be produced if the crowdfunding campaign is successful (Belleflamme et al. 2014, p. 587; Wardrop et al. 2015, p. 18).
- Peer-to-peer (P2P) lending: this form of crowdfunding resembles bank loans. Here, investors finance a project or an idea and obtain a financial return in the forms of periodic interest and principal at the end of the lending period. The word 'lending' in the name captures the nature of the relationship between the investors and the fund seekers (credit/debt), while P2P recalls the fact that money is not intermediated by a bank or other financial institutions, but is directly provided by peers via an online platform.
- Equity crowdfunding: in this form of crowdfunding, the crowd is asked to support a project or idea by buying stakes of the company that may or may not include voting rights. Sometimes, investors do not buy shares of the company, but subscribe a mezzanine-finance instrument (see below in the case of the German crowdfunding market). The financial return is in the form of the dividends and/or the capital gain. Contrary to other forms of crowdfunding in which projects or ideas can originate from individuals as well as from companies, equity crowdfunding is exclusively for either start-up firms or existing companies seeing risk capital. Recently, equity crowdfunding has sometimes been named crowdinvesting to distinguish it from other forms of crowdfunding (De Buysere et al. 2012; Hagedorn and Pinkwart 2013, 2016; Dix and Luzar 2014; Wilson and Testoni 2014; Moritz and Block 2016). The European Commission considers that debt-securities crowdfunding (or the forms of lending crowdfunding), as well as equity crowdfunding and profit sharing constitute

crowdinvesting. Debt-securities crowdfunding refers to individuals investing in a debt security issued by the company itself, for example, a bond or mini-bond.[8] In its 2014 'Communication on crowdfunding', the European Commission uses the term 'securities-based crowdfunding' to refer to equity and debt-securities crowdfunding, but does not include P2P lending in this (European Commission 2014, p. 3).

- Profit and revenue sharing: backers participate in the profits or the earnings of the company they support. This form of crowdfunding is also known as royalty-based crowdfunding (Belleflamme et al. 2015). Belleflamme et al. (2014) suggest that profit-sharing platforms may be grouped together with equity crowdfunding platforms. Hemer et al. (2011) consider revenue-sharing crowdfunding as a form of P2P long-term lending.

As Lambert and Schwienbacher (2010) and the European Commission (2014) suggest, the crowd providing the funding may simply donate their money or may expect to receive a return that can take various forms. Crowdfunding models can thus be distinguished into donation crowdfunding and return crowdfunding. The latter category includes reward crowdfunding and the sub-category of financial return crowdfunding, which includes P2P lending, and equity crowdfunding. However, Esposti (2014, p. 37), the European Commission (2014) and Kirby and Worner (2014, p. 8) suggest that crowdfunding models can be classified based on the nature of the return the crowd expects. This gives rise to community crowdfunding, or crowdsponsoring, and financial return crowdfunding, or crowdinvesting (European Commission 2014, p. 4; Kirby and Worner 2014, p. 8). Community crowdfunding includes all crowdfunding types in which backers do not expect any return (social lending/donation crowdfunding) or in which the reward is non-financial (reward crowdfunding and pre-purchase). Conversely, financial return crowdfunding refers to P2P lending, securities-based crowdfunding and Profit- and revenue-sharing. In these types of crowdfunding, backers become investors and seek a yield (P2P lending and debt-securities crowdfunding) or

[8] The UK platform Crowdcube allows the use of mini-bonds.

a return on the investment, depending on the investment made (equity crowdfunding and profit and revenue sharing). See Fig. 2.3.

As noted by Tomczak and Brem (2013), crowdfunding is comprised of components determined by the fundraisers, platform and regulators. Fundraisers decide the type of crowdfunding and the rewards that will be provided to the investors in exchange for the money, and the platform determines the type of investment that can be made. Regulation specifically relates to financial return crowdfunding models, particularly to equity crowdfunding, and involves adhering to securities regulation *lato sensu*.

Two relevant aspects of the functioning of crowdfunding platforms should be investigated, the revenue sources and the problem of asymmetric information. Revenue sources of crowdfunding platforms principally come from success fees, sometimes termed 'transaction fees'. Crowdfunding platforms charge fundraisers a percentage of the collected amount of money if the funding goal is fully committed. In the all-or-nothing fundraising model, if the pledged amount is not fulfilled, the success fee is not charged. Sometimes, a subscription fee must be paid by the funders to register on the platform and become an investor. According to Belleflamme et al. (2015), two other sources of revenue

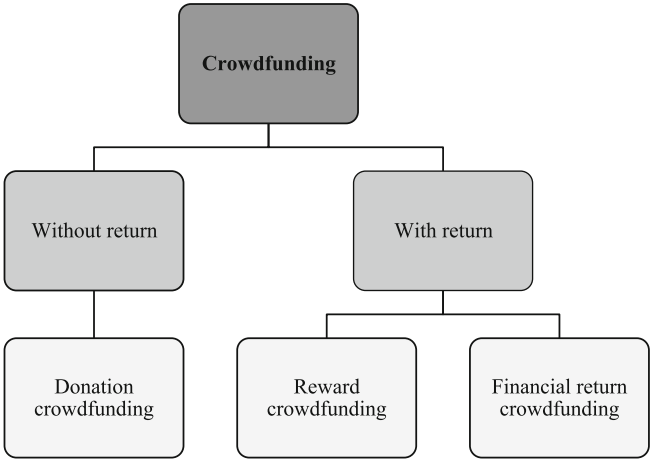

Fig. 2.3 Crowdfunding models.
Source: Author's own

are interest paid on the money pledged by funders, and charges for extra services. When backers provide money for a project, it is not immediately transferred to the fundraisers, which in part is an attempt to prevent fundraisers from using the money before the full funding amount has been collected. The committed funds are usually paid to the fundraisers only once the campaign is closed successfully. In the meantime, the platform keeps the money (see Sect. 2.2.1 for a discussion of business models in the case of financial return crowdfunding portals) and earns interest. The platforms may also provide services that give rise to extra revenues, for example, charges requested on handling payments from the funders to the fundraisers.

The problem of information asymmetries involves the fact that crowdfunding can suffer from problems of hidden information (adverse selection) and hidden action (moral hazard). Hidden information problems occur when crowdfunding platforms do not provide sufficient information to allow pledgers to make informed investment decisions. While there are several ways in which these difficulties can be overcome, the most common are discussed here. The first method is the screening activity that some crowdfunding platforms perform before posting the project online and allowing the fundraising to begin (Belleflamme et al. 2015). This method is particularly relevant for financial return crowdfunding portals such as P2P lending platforms. Another technique is that of restricting the turnout of investors to those who are sophisticated, that is, venture capital and private equity funds and institutional investors (Belleflamme and Lambert 2014). Hidden action problems arise after the fundraising campaign is closed because fundraisers may use the money collected for purposes other than the original project or before the full amount is raised. Crowdfunding portals may avoid such issues by regularly following up the outcomes of projects (ex-post monitoring) and transferring the money from funders to fundraisers only after the fundraising campaign is successfully completed (Belleflamme et al. 2015). Another mitigation against moral hazard is providing insurance against specific risks (credit risk) that some P2P lending platforms in particular offer to pledgers in case the firm or the fund seeking individual does not repay the loan.

2.2.1 Features of Financial Return Crowdfunding Platforms

Financial return crowdfunding platforms exhibit heterogeneous organisational structures and business models. This heterogeneity may be caused by three factors (Hornuf and Schwienbacher 2014a). First, the crowdfunding market is new and this is particularly true for financial return crowdfunding platforms. As will be demonstrated, globally, the crowdfunding market has undergone strong growth in the past two to three years, reaching a significant size in volume of raised funds and number of platforms (which peaked at 1250 worldwide in 2014) (Massolution 2015). Second, crowdfunding platforms may decide to differentiate among themselves to reduce competition and attract specific crowds. Third, heterogeneity may be a consequence of the different regulatory regimes surrounding crowdfunding in the various countries in which it operates.

In the case of P2P lending crowdfunding platforms, lenders provide money to borrowers, and become creditors of the fund-seeking companies or individuals. Indeed, while lenders on P2P lending platforms are typically individuals, borrowers may be companies, either start-up firms or existing firms, or individuals. This gives rise to two distinct forms of P2P lending: pure P2P lending, whereby both sets of peers are individuals, and peer-to-business (P2B) lending, in which the first peer is a crowd of individuals and the second party is a company seeking a loan. P2P lending platforms may play roles that cannot be narrowed down to a standard set of functions performed in the funding process, because each of them can decide which functions to perform. Especially for the European Union, the dissimilarities in the role played by the P2P platform stem from the differences in the regulation of P2P lending across countries, and from a lack of agreed rules on the phenomenon of crowdfunding at the European level (Aschenbeck-Florange et al. 2013; European Crowdfunding Network 2013).

Kirby and Worner (2014, pp. 16–9) distinguish three business models of P2P lending platforms. First, the 'client-segregated account model', in which platforms are a mere window for loans. When lenders provide

money for the project and when the borrowers provide money as reimbursement, this money is placed into a bank account separate from that of the platform (the 'client account'), over which the platform has no rights. In the notary model, the platform plays a slightly more significant role. As in the client-segregated account model, the platform hosts pitches for funding. Again, the money that is collected is not held by the platform, but it is transferred to a bank. Once the funding goal is met, the bank originates the loan and the platform issues a note to the lender reflecting the amount of money that has been invested. The repayment of the note is performed by the borrower to the bank, which transfers funds to the platform and, the platform returns it to the lenders. Finally, in the guaranteed-return model, the platform plays an expanded role in that it matches lenders and borrowers, defines the terms and conditions for the loan, issues the loan directly, manages the investments of borrowers and the repayments of lenders, and sets a guaranteed return rate for borrowers.

A critical aspect of P2P lending platforms relates to the processes that are used to reduce credit risk before and after the loan has been issued. This aspect refers to the ways in which platforms select and evaluate projects before they are posted online and the funding process begins (ex-ante screening). This aspect also relates to the information provided to investors during and after the life of the loan (ex-post monitoring).

In the case of equity crowdfunding platforms, investors buy shares in the companies that propose their business idea or project online, thus becoming shareholders of the companies. As in P2P lending, the peers can be individuals and companies; however, as stated, equity crowdfunding is typically employed by companies seeking seed capital they cannot obtain through traditional funding channels. Two forms of equity crowdfunding can be distinguished, depending on the types of peer involved in the relationship: P2B equity crowdfunding, whereby individuals give financial resources to start-up or existing firms, and business-to-business (B2B) equity crowdfunding, whereby the crowd of investors comprises other companies, which may or may not also act as angel investors. As with P2P lending platforms, business models may differ for equity crowdfunding. Investments in the companies seeking funding may or may not concern ordinary shares. In cases where investors buy common shares, they may or may not have full voting rights, as on Crowdcube (one of the UK's

largest equity platforms), where fundraisers decide whether to assign voting rights to investors. Other equity crowdfunding platforms sell different types of securities. For example, in the German equity crowdfunding market, investors hold a mezzanine-finance instrument, a subordinated profit-participating loan named '*partiarisches Darlehen*', which is typically senior to common shares and junior to other liabilities. Other securities sold by equity crowdfunding platforms include convertible bonds, participating notes and cooperative certificates (Hornuf and Schwienbacher 2014a). However, investments may differ in that they can occur directly or indirectly. In direct investments, investors buy and hold shares or other securities directly from the company, though through the equity crowdfunding platform. In indirect investments (which are seen only in one German equity crowdfunding platform, Companisto), investors give money to the platform, which is then transferred to a special purpose vehicle (SPV). The SPV is the 'final investor' in the start-up or existing firm because it invests the money collected from investors in the projects to which they want their investment to be directed.[9] Finally, equity crowdfunding business models may differ within the funding model. Typically, equity crowdfunding campaigns follow an all-or-nothing approach, meaning money is returned to investors if the funding goal is not reached. However, the German equity crowdfunding platform Innovestment recently turned to the all-or-nothing funding model from the three-step-auction funding model it used to apply. As Hornuf and Schwienbacher (2015, p. 8) illustrate, in the first phase of the three-step-auction funding model investors pledged for a specific project, indicating how many shares they were willing to buy and the price they were willing to pay. By agreement with the platform, fundraisers set a minimum price, which meant that investors had no incentive to pledge a higher amount than the minimum price; moreover, the fundraisers also set the maximum number of shares they would sell during the first phase of the auction. Once all the shares were bought, the second phase began, and investors—those of the first phase and new ones—were eager to post higher prices than the minimum set by the fundraisers in the first phase. Once the funding goal was met, the third

[9] For details, see www.companisto.com.

round of the auction began, with investors again attempting to outbid each other, but not being able to increase the raised funds over the target goal, thus leading to a reduction of the number of sold equity stakes.

2.2.2 Motivations for Participation in a Crowdfunding Campaign

Fundraisers and funders have different incentives for choosing crowdfunding, but for both, the benefits of crowdfunding can be considered the motivations guiding the fundraisers and the funders. For the fundraisers, it is clear that all crowdfunding types represent an opportunity to obtain funding through a channel other than traditional channels of credit (in all forms of crowdfunding but equity crowdfunding and semi-equity crowdfunding) and early-stage financing, which fills a financing gap, particularly for SMEs (De Buysere et al. 2012, pp. 18–9). Traditional channels of credit are banks and other financial institutions, early-stage financing is comprised of business angels, venture capital and private equity funds and the so-called 'informal funding' of family and friends. Furthermore, crowdfunding allows a rapid manner (the application to the platform and the fundraising process are rapid) in which to collect money from many small investors (rather than from few large investors). In addition, if the platform applies the keep-it-all fundraising model, money is collected in a more certain manner with respect to applying for grants, because the capital seeker receives all the money collected, while grants may not be approved (Gerber and Hui 2013). Specifically, for financial return crowdfunding, the benefits also include a lower cost of capital (Agrawal et al. 2013), improvement of economic growth, creation of a new asset class for portfolio diversification, flexible and rapid management, and enhanced competition against traditional channels of funding (Kirby and Worner 2014).

However, the fundraising activity may be only one of the motivations underlying the choice of fundraisers; there are at least three other non-financial benefits of crowdfunding that should be considered. First, creators of crowdfunding pitches are aware that it is an opportunity to

reach a large number of people, and this involves two important aspects. One is that crowdfunding is a way to make the project or idea known to the wide public, thus gaining personal satisfaction and recognition of personal skills (Belleflamme and Lambert 2014). The second important aspect is that crowdfunding may be seen as a market test for the product, that is, if people finance the project, the idea can be considered valuable. As such, using crowdfunding can function as a marketing resource through word-of-mouth and social-media interactions, and it can be a source of valuable feedback on the project, completely cost free (Lambert and Schwienbacher 2010; De Buysere et al. 2012; Gerber and Hui 2013; Belleflamme and Lambert 2014; European Commission 2015). From this perspective, crowdfunding can be a means through which fundraisers are able to expand their network, and become part of a like-minded community, enabling the establishment of a long-term relationship with the funders that goes well beyond the online platform and the single investment (Hemer et al. 2011; Schwienbacher and Larralde 2012; Gerber and Hui 2013).

The second non-financial benefit is that fundraisers are supposed to learn the best way for a pitch to be created and advertised, regardless of the success of the crowdfunding campaign. That is, fundraisers should learn new communication skills to reach a larger audience (Gerber and Hui 2013).

The third non-financial benefit is that in the case of a successful campaign, crowdfunding may be used as a way to obtain funding from traditional channels of credit and/or equity financing because a successful crowdfunding campaign communicates that the project is able to attract investors and thus, merits funding (European Commission 2015).

Contrary to what one might expect, for funders, the prospect of a reward is not an essential condition for investing in a crowdfunding campaign. As Hemer et al. (2011) and De Buysere et al. (2012) note, the emotional engagement with the project drives their investment. Indeed, funders give money to a project about which they are passionate because it shares their own values and ideas. That is, funders feel they are contributing to a societally important mission (particularly in donation crowdfunding) and to the completion of a project they feel is important

(Hemer et al. 2011, p. 14; Schwienbacher and Larralde 2012). Agrawal et al. (2013, p. 15) and Gerber and Hui (2013, p. 14) propose the 'philanthropic-behaviour' motivation of funders. This is strictly related to the emotional engagement of funders. According to this motivation, funders give money because they wish to help others (either people they do or do not know) to fulfil their funding goal and realise their project. Further, pledgers may be willing to provide money to become part of the project's community of pledgers, to expand their business and societal networks, which is similar to the motivation of fundraisers (Gerber and Hui 2013). The final motivation for funders is that they might be seeking a material or financial reward. The element of reward is absent in the case of donation crowdfunding. Therefore, in all crowdfunding campaigns but donation crowdfunding, backers may expect to receive a non-financial reward, or a financial return when funding through debt (interest and principal) or equity (dividend and/or the capital gain).

2.2.3 Risks of Crowdfunding

Although crowdfunding has numerous advantages, it also poses threats to both fundraisers and funders. The first risk for fundraisers is that they might not be successful in the crowdfunding round, either because they do not reach the funding goal (European Commission 2015) or, in the case of an all-or-nothing platform, because the money collected must be returned to funders. Another risk is that one of the features of crowdfunding is its internet-based, public nature. This risks plagiarism through intellectual property being made available on a public forum. That is, the project that is posted on an online platform is publicly released, and could be stolen by other internet users (Valanciene and Jegeleviciute 2013, p. 44; European Commission 2015). The final risk is particularly relevant for inexperienced fundraisers that use crowdfunding. Lack of familiarity with this and other forms of financing might lead to an underestimation of the administrative and accounting costs (Valanciene and Jegeleviciute 2013, p. 43), which can risk the reputation of the fundraiser and lead to errors in the preparation of the crowdfunding campaign, for example in setting the target funding (European Commission 2015).

Funders have higher risks when investing in a crowdfunding campaign than fundraisers. The main threat to funders is the risk of fraud committed by the platform that can take two forms. The first is that the platform (or more often, the pitch posted on the platform) might be fraudulent, either because the true financial status of the firm is hidden from investors or the money raised is not used for the stated purpose (De Buysere et al. 2012, p. 15; Galvin 2012; Valanciene and Jegeleviciute 2013, p. 44). This type of fraud stems directly from the information asymmetry problems of adverse selection and moral hazard that were highlighted in the previous section. The second form of fraud can come as a consequence of the internet-based nature of crowdfunding, which creates the risk of identity theft, money laundering and terrorism financing, as well as all the risks associated with data-protection violations (Kirby and Worner 2014, p. 26). The risk of default associated with companies and individuals collecting money via online platforms is particularly pertinent in financial return crowdfunding. This risk is twofold. With all lending types of crowdfunding, the company or individual might not repay the loan, bond or mini-bond. In the case of equity crowdfunding, the default of the company results in the loss of the entire investment of the funders[10] (Valanciene and Jegeleviciute 2013, p. 46; Kirby and Worner 2014, pp. 25–6). The principal factor that exposes investors to the risks of fraud and default is the lack of information on individuals and companies seeking funding (other than the information that is available on the platform). Moreover, because most crowdfunding platforms accept only unsophisticated investors, such investors might also lack the necessary expertise and knowledge to assess the project and the company or individual seeking money (Kirby and Worner 2014, pp. 26–7; Wilson and Testoni 2014, p. 7). The risks of fraud and default associated with investors' inexperience pose a problem in relation to investor protection rules, particularly in the case of equity crowdfunding, regardless of the form it takes. For this reason, and in contrast to P2P lending, equity crowdfunding has been the subject of ad hoc regulation. This is

[10] The most cited example of an equity crowdfunding campaign that went wrong is Bubble and Balm, a fair-trade soap company that in 2011 raised £75,000 from 82 investors on the UK platform Crowdcube but closed in July 2013. Investors lost all their money.

particularly the case in the US and in several European countries (France, Germany, Italy, Spain and the UK). Regulation can have a strong effect on the organisational structures of equity crowdfunding platforms, and it can influence the potential of these platforms to provide an alternative source of capital to start-ups and SMEs. In addition, regulation for investor protection may be invoked to limit investments on equity crowdfunding platforms to professional clients, investors with specific competences, and High Net Worth Individuals (HNWIs). Such strict regulation can reduce the number of possible investors giving money to business projects via online platforms. Moreover, as Pierrakis and Collins (2013) suggest, regulation could be considered inconsistent with the principle of crowdfunding, which is the monetary contribution (even if very small) of the crowd to fund projects via the internet. This crowd is principally comprised of non-professional investors wishing to contribute to the realisation of a business idea they believe has value.

Finally, only investors in equity crowdfunding and debt-securities crowdfunding platforms face the significant risk of illiquidity. Contrary to financial markets in which shares and bonds are bought and sold quickly and easily, selling a stake of a company or a bond or mini-bond on a crowdfunding platform is not easy, partly because very few equity crowdfunding platforms provide a secondary market specifically for selling equity (Kirby and Worner 2014, p. 27; Wilson and Testoni 2014, pp. 8–9; European Commission 2015).

2.2.4 Crowdfunding Market

The global market for crowdfunding has significantly grown in recent years (Fig. 2.4). According to Massolution (2015), crowdfunding platforms raised $16.2 billion in 2014, and they are expected to raise up to $34.4 billion in 2015.

The strong development of crowdfunding has occurred not only in the US and Europe, but also in Asian countries, whose use of crowdfunding increased by 320 % from $0.8 billion in 2012 to $3.4 billion in 2014 (Fig. 2.5). The Chinese market is of particular importance to the

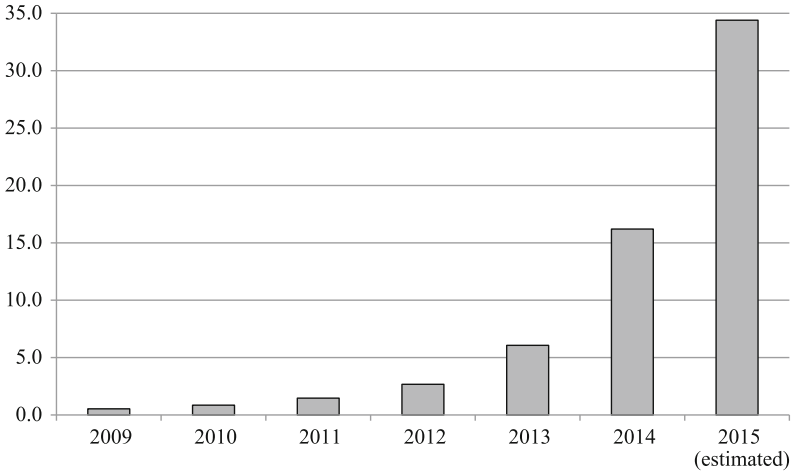

Fig. 2.4 Crowdfunding global volumes ($bn).
Source: Author's calculations from Massolution (2015)

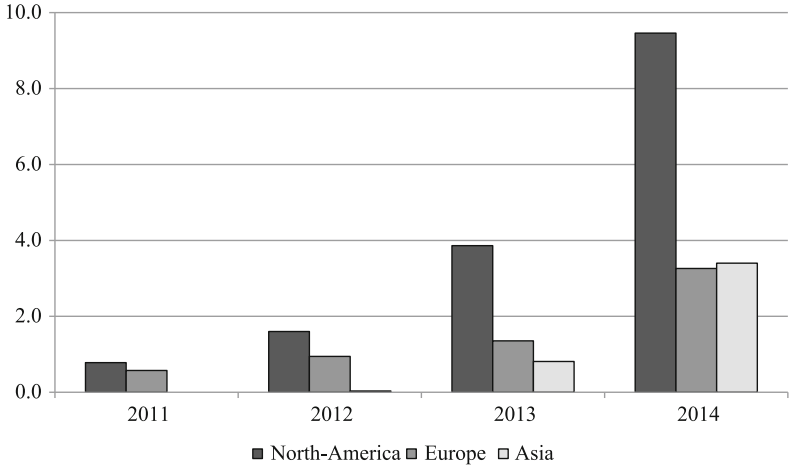

Fig. 2.5 Crowdfunding volumes per geographical area ($bn).
Source: Author's calculations from Massolution (2015)

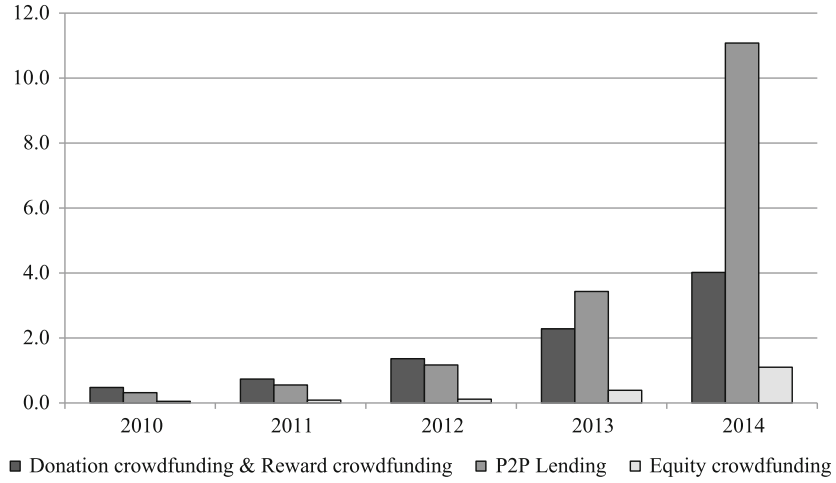

Fig. 2.6 Crowdfunding global volumes per type ($bn).
Source: Author's calculations from Massolution (2015)

growth of crowdfunding in Asia, raising more than $72 million in 2014 (iResearch Consulting Group 2015).[11]

In its very early stages of development, crowdfunding was principally used for donation or reward purposes, while only recently, financial return crowdfunding gained relevance, particularly through lending crowdfunding. As demonstrated in Fig. 2.6, financial return crowdfunding experienced a boom in 2014, collecting $12.2 billion, which is a 221 % increase on the previous year. In particular, lending crowdfunding increased by 226 % to $11.1 billion in 2014 from $3.4 billion in 2013, and equity crowdfunding expanded by 175 % from $0.4 billion in 2013 to $1.1 billion in 2014 (Massolution 2015).

Wardrop et al. (2015) offer a snapshot of the European market of crowdfunding for the years 2012 to 2014, highlighting a trend forecast

[11] We should be aware that the rise of crowdfunding in China is less due to the role of Facebook and Twitter because foreign social networks and video-sharing sites such as YouTube are banned. This does not mean that Web 2.0 plays a secondary role in the development of crowdfunding in China; it simply means that Chinese people use different social networks to promote their projects. Moreover, crowdfunding in China is slightly different from crowdfunding in the US because it is mainly used to gather the crowd and to build social and business networks rather than money (Zhang et al. 2014, p. 39).

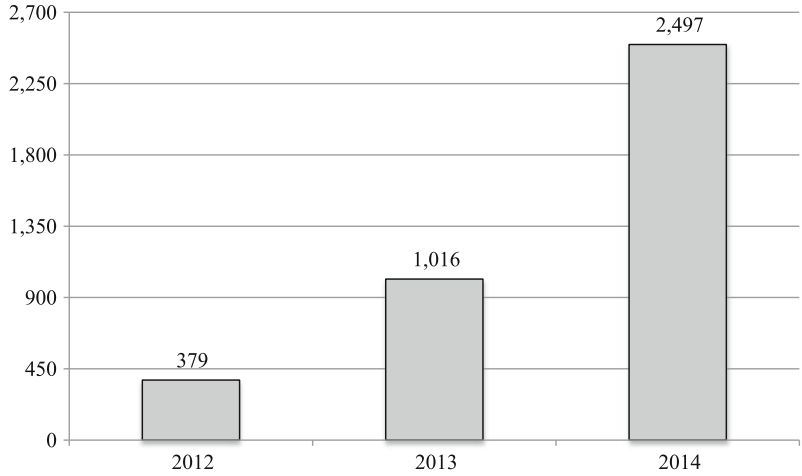

Fig. 2.7 European crowdfunding market (€m).
Source: Author's calculations from Wardrop et al. (2015)

to reach €7 billion in 2015.[12] Figures for 2012 demonstrate a relatively low volume of funds raised on European crowdfunding platforms (€0.49 billion), but this market grew by almost three times in 2013 to €1.2 billion, and it more than doubled in 2014 to €2.96 billion. However, a caveat applies to the data presented by Wardrop et al. (2015): the total amount of funds also considers invoice trading and microfinance, which we do not include in our definition of crowdfunding. Invoice trading is much like factoring because companies sell their invoices to a crowd of individual or institutional investors (Wardrop et al. 2015, p. 17), and microfinance is not considered as crowdfunding because the money does not typically come from a crowd, but from credit institutions (other than for rotating savings and credit associations (ROSCAs)). Fig. 2.7 presents data on the European crowdfunding market that does not include invoice trading and microfinance.

[12] We appreciate that the figures for the European crowdfunding market presented in Wardrop et al. (2015) differ from those in Massolution (2015), potentially due to the differences in the sample platforms. Wardrop et al. (2015) surveyed 255 EU27-based crowdfunding platforms; while data for Massolution (2015) were gathered from 91 European crowdfunding platforms, these data excluded some of the most important players in the European context (Companisto).

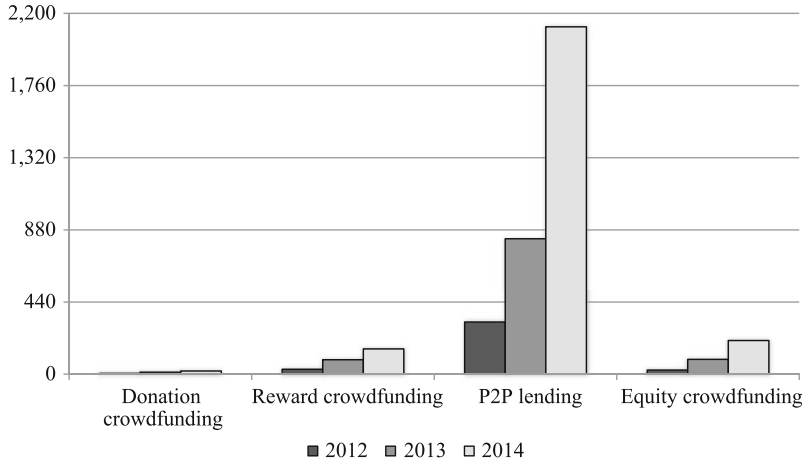

Fig. 2.8 European crowdfunding market per type (€m).
Source: Author's calculations from Wardrop et al. (2015)

The type of growth of the European crowdfunding platforms resembles that of global crowdfunding in that financial return crowdfunding platforms collected more money in the past three years than non-financial return crowdfunding platforms (Fig. 2.8).

2.3 Literature Review

Given that crowdfunding is a new phenomenon, it has only recently become a core topic in the literature. While the first papers addressing crowdfunding date back to 2010, research on crowdfunding has significantly increased in the past two years. Although this review is not exhaustive, its purpose is to explore the streams of research on this particular funding model and the methodology that is typically used to assess crowdfunding.

As a starting point, the literature on crowdfunding can be separated into two categories based on methodological approach—theoretical or empirical.

In the theoretical category, research is included that aims to investigate the driving factors of the entrepreneur in selecting the type of crowdfunding to raise money for a project. Thus, notwithstanding the literature referred to when discussing the motivations for fundraisers, the only contribution worth mentioning here is that of Belleflamme et al. (2014). These researchers demonstrate that entrepreneurs prefer reward crowdfunding, particularly pre-ordering crowdfunding when a relatively small amount of money is needed, while they generally use equity crowdfunding, particularly profit sharing, if the funding need is much greater.

In the empirical literature, contributions are grouped that use an econometric model with the aim of investigating the determinants of crowdfunding. However, at the time of writing this stream of literature has the limitation that there is no database that collects data on all the projects seeking funds, and that there is no database that captures all active crowdfunding platforms. With this caveat in mind, this stream of literature can be divided according to the data used in the analysis:

- Research using data on individual crowdfunding practices (the DIY approach).
- Research using data from projects available on either a number of platforms or on specific platforms.

Lambert and Schwienbacher (2010) were the first to collect data on DIY crowdfunding initiatives posted on the internet to investigate which characteristics and factors determined their success. Their results suggest that very few DIY pitches choose the donation model or provide shares in exchange for the money raised. The majority of DIY pitches seem to prefer reward-based collection, either in the form of pre-sale or pure reward. Moreover, Lambert and Schwienbacher (2010) reveal that non-profit organisations tend to be more successful than for-profit organisations in raising funds, which may be because not-for-profit projects are regarded as being more trustworthy. Belleflamme et al. (2013) reach the same conclusions, though also suggesting that the success of DIY projects might also be caused by their highly customised features distinguishing them from pitches posted on standardised crowdfunding platforms.

The literature investigating crowdfunding via online platforms is quite recent and can be divided into two streams:

- Research focusing on the determinants of the success of pitches on either a number of platforms belonging to the same country, or on specific crowdfunding portals.
- Research investigating the extent of herding behaviour on crowdfunding platforms.

However, the novelty of the topic and the increasing interest it is attracting mean that the literature review that follows is far from exhaustive.[13]

Turning to the literature that aims to identify the determinants of the success of a crowdfunding project, studies are first reviewed that make use of data stemming from a number of crowdfunding platforms. Giudici et al. (2013) investigate 11 Italian crowdfunding platforms to test whether there is a relationship between the success of the crowdfunding campaign and the number of social-network contacts of the fundraisers and their geographical position. The researchers demonstrate that the higher the number of contacts on the social networks, the higher the probability that the project will reach full funding during the crowdfunding campaign. Further, they found that geographical location has no effect on the crowdfunding campaign; however, geographical location gives rise to an adverse selection problem. Indeed, only bad quality projects are posted on crowdfunding platforms because they could not raise the necessary amount of money in their municipality of origin.

Hornuf and Schwienbacher (2014a) describe the growth pattern of crowdinvesting in Europe, analysing 32 platforms: Germany (16), France (5), the UK (5), Austria (2), Belgium, Italy, The Netherlands and Switzerland (one platform each). They then focus on German platforms to assess which features of platforms have an effect on the success of crowdfunding campaigns. The results suggest that new projects (start-ups) tend to be more successful than established companies in attracting funds. In the analysis of the characteristics of the platforms, the research

[13] For more exhaustive literature reviews see Funk (2011) on P2P lending, Moritz and Block (2016) and Viotto (2015) on crowdfunding more generally.

reveals that those allowing smaller investments have a higher number of successful campaigns, as well as those that use *partiarisches Darlehen*. However, the fees imposed by the crowdfunding platforms seem to play no role in the success or failure of an equity campaign.

To review the literature relating to the determinants of success of crowdfunding on specific platforms, research is now reviewed according to the crowdfunding type of the platforms analysed.

Three studies are identified as worth mentioning for donation crowdfunding campaigns. The first is Burtch et al. (2013) who base their study on a crowdfunding platform on which journalists can post their articles and/or stories to seek funds for them to be published on the website. The results suggest that the longer the fundraising period, the higher the probability that the project will reach its funding goal and thus that the story will be published and read by consumers. Moreover, the authors demonstrate a negative relationship between the funding goal and the success of the pitch; that is, the larger the amount of money to be collected, the lower the probability of the story being published because larger target funding is typically associated with costs that are strictly related to the story to be written.

The second study is by Meer (2014), who uses data from the US platform DonorsChoose.org, which is a platform where teachers can post their projects for children in school. The authors aim to assess the effect of the 'price of giving', that is, the effect the amount donors give to the charity on the online platform has on the probability of the project being successful. The results reveal that as the size of the donation increases, the funding is less likely to reach the target goal. Further, the analysis demonstrates that no differences exist in the probability of being fully funded between male and female teachers; however, if teachers are members of specific associations or post projects for older students (15 to 18 years of age) or for poor students/schools, their projects are more likely to receive full funding.

The third study is by Crosetto and Regner (2014). This makes use of data from the German donation and reward platform Startnext. Their analysis demonstrates that the social features of the pitches (the project updates or blog entries) increase the probability of the campaign being successful. However, a longer fundraising period and a higher funding

goal both result in a lower probability of the project reaching the desired funding goal. Startnext also accepts reward crowdfunding campaigns, and the results for this type of crowdfunding campaign demonstrate that the probability of success is related to the reward being offered to donors. In the cases of pre-sales and rewards that convey a social recognition to the pledger, the pitch is more likely to be funded. Further, the pattern of donations reveals an increase in the frequency of pledges in the last days of the campaigns, particularly for projects that have already reached the funding goal.

In the review of the literature that examines the drivers of the success of projects on donation crowdfunding platforms, three contributions are included that focus on Kiva, a US microcredit platform that supports fundraisers who live in developing countries and have less access to traditional forms of credit because of their poverty. Kiva's lending model is similar to that of P2P lending in that the amount of money raised through crowdfunding campaigns is returned to lenders; although at a zero per cent interest rate. Despite this feature, these contributions using data from Kiva are included in this review because of the social nature of the projects seeking funding, which resembles that of donation-based crowdfunding.

Ly and Mason (2012a, 2012b) use the speed of funding as their variable of interest. This is because they construct a database only of fully funded pitches. Ly and Mason (2012a) find that projects that are more likely to reach the funding goal in less time are those typically associated with microfinance and poverty alleviation. In particular, these are projects asking for smaller amounts of money whose proponents are women and related to sectors with reduced entry barriers. The speed of reaching the funding goal also depends on the purpose of the requested loans; those concerning health and education are more likely to be fully funded in a shorter period. Further, Ly and Mason (2012b) demonstrate that increasing the number of projects posted at the same time on the platform slows down the funding rate, particularly for pitches that are perceived to be similar, especially in their sector or purpose.

Burtch et al. (2014) investigate the role of culture and geography in social donations. They find that lenders on Kiva prefer borrowers that are culturally and geographically close. The larger the cultural difference

between the countries of the fundraisers and the funders, the fewer the donations to specific projects. The same is true for geographical distance. However, the authors demonstrate that culture and geography may cancel each other out because the larger the geographical distance between fundraisers and funders, the less importance culture has in the investment decision.

For reward crowdfunding platforms, most of the literature uses data from the biggest and most important US platform, Kickstarter. To our knowledge, the aim of most academic research on reward-based crowdfunding is to find supporting evidence of relationships between specific variables of interest and the success of crowdfunding campaigns.[14] On the contrary, the research by Li and Martin (2014) and Barbi and Bigelli (2015) is the only attempt to discover the determinants of success of reward crowdfunding projects without focusing on specific variables of interest. Li and Martin's (2014) analysis highlights that the most important features for a project or idea's success are a smaller funding goal and a shorter fundraising period. They also demonstrate that the reputation of the entrepreneur has a significant benefit as a determinant of success. Projects posted by fundraisers who have at least one previously successful project and a pre-existing reputation (measured by the existence of an independent Wikipedia page) are more likely to be funded fully. Barbi and Bigelli (2015) find that pitches that have a video description of the

[14] In contrast to other research reviewed here, Kuppuswamy and Bayus (2013) aim to investigate backers' dynamics on Kickstarter. That is, the researchers investigate the timing of the contributions by pledgers. They suggest that the contributions to projects are U-shaped; thus, they are more frequent in the first and in the last week of the fundraising period, while in the middle period they are quite stable. This U-shape is not influenced by the platform, as it allows sorting by 'recently launched', 'ending-soon' or 'popularity'. However, it may be influenced by project updates, which are usually provided at the beginning and soon before the end of the campaign. Finally, these researchers find that the percentage already raised has a greater effect on backers' investment decisions than the absolute amount raised. In addition, research by Cumming et al. (2015), who use data from Indiegogo, does not aim to identify the drivers of success. Rather, they investigate whether the chosen funding model (all-or-nothing or keep-it-all) depends on the company seeking funds. The analysis reveals that firms wishing to signal to pledgers that the project will be implemented only if sufficient funding is raised use the all-or-nothing approach. Conversely, the keep-it-all model is preferred by companies whose project can be realised even if the funding goal is not reached, that is, the project can be scaled. Cumming et al. also demonstrate that in this latter case, crowdfunding campaigns are less likely to be fully funded because the crowd perceives a higher risk associated with a project that might fail after the fundraising ends, due to a lack of money since the original funding goal has not been reached.

project, a higher number of rewards offered to the crowd in exchange for investment, and—as in Li and Martin (2014)—a smaller funding goal and a shorter deadline for the fundraising campaign are more likely to be successful. Further, providing backers with more information through 'Description', 'About' and 'FAQs' sections in the pitch page leads to a higher probability of reaching full funding. These results hold true in US and non-US projects.

Marom and Sade (2013) address the relationship between success and precise variables of interest. They suggest that one of the features that most affects the success of a project is the extent to which entrepreneurs present themselves (as an individual), rather than providing details only about the project. The researchers measure the fundraisers' presentations of themselves as individuals by the number of times they quote their full names in the project title, in the first one hundred words and in the 'About' section of Kickstarter's pitch page. The results demonstrate that mentioning the entrepreneur's name in the pitch presentation increases the probability of success of the pitch itself, particularly in the case of projects in the 'arts' category. Younkin and Kashkooli (2013) argue that the main drivers of the success of crowdfunding campaigns (in both the probability of success and the amount raised) relate to the quality of the presentation of the project. The researchers measure this by the professionalism of the video, the inclusion of details on the timing and costs of the project, and—as in Mollick (2014)—the absence of spelling errors. In this study, it seems that the personal characteristics (apart from past experience in crowdfunding campaigns) of the fundraisers have no effect on the success of the campaign.

Mollick (2014) aimed to test whether the quality of the project and the role of social networks and geography play a major role in determining the success or failure of pitches on Kickstarter. The analysis demonstrates that three types of projects tend to attract funding: (1) those with the greatest attention to the quality of the project[15]; (2) those in which the

[15] Mollick (2014) measures the quality of the project through the lack of spelling errors in the description of the pitch, the presence of a video that presents the project and the updates provided by fundraisers. The results demonstrate that the role of traditional credit channels and/or business angels, venture capitalists and private equity in assessing the quality of the projects (the so-called 'delegated-monitoring function') is failing. However, Mollick (2013) demonstrates that funders on

entrepreneurs have a substantial number of friends on the social networks; and (3) those that reveal the closest relationship between the business idea and the socioeconomic and cultural context in which it will come into existence. Another important finding in Mollick (2014) is that projects tend to overfund, and so are successful, by small amounts of money, and fail by large amounts of money.

Mitra and Gilbert (2014) and Xu et al. (2014) demonstrate the importance of language in the success of crowdfunding campaigns. In their research, Mitra and Gilbert (2014) demonstrate that the phrases that fundraisers use to promote their projects on the pitch page play a pivotal role in driving the success of crowdfunding campaigns. Xu et al. (2014) use the project updates that relate to specific pitches and find that in general, updates are an important driver in the success of a crowdfunding campaign. Certain themes and timing of updates are found to be more important: (1) those that call for promotion on social media *lato sensu*, particularly in the first days; (2) those that report on the progress of the funding, particularly during the fundraising; and (3) those that relate to rewards, mainly in the last days.

Colombo et al. (2015) demonstrate that high funding contributions in the very early days of the campaign, both in the frequency of contributions and their absolute value, lead to a higher probability of being successfully funded. More importantly, the authors highlight the importance of the 'internal social capital', that is, the relationships and contacts built by fundraisers within the platform's community (with other fundraisers and with backers). Their analysis reveals that early contributions are driven by the internal social capital, which affects the number of pledges and the amount raised in the first days of the campaigns. The role of social capital had already been investigated by Zvilichovsky et al. (2015), who focused on the role of fundraisers in enhancing the probability of success of their campaign. The authors highlight that an entrepreneur backing other

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online crowdfunding platforms and venture capitalists use the same variables when assessing the quality of a project, namely, the background and past success stories of the fundraising team, external endorsements and alliances, and the preparedness of the fundraisers to seize the opportunity. Moreover, it seems that crowdfunding relaxes two of the biases that characterise venture capital investments. Crowdfunded projects are not geographically constrained to the location of the funders and many of the projects that receive full funding on online platforms have a female founder.

projects on the same platform on which their pitch is posted increases the probability of the success of their crowdfunding campaign. Further, the more projects the fundraisers back, the higher the probability of their projects being fully funded.

Apart from Kickstarter, the US is home to another of the most important reward crowdfunding platforms, Indiegogo. Hörisch (2015) focuses on the environmental orientation of projects presented by Indiegogo to test whether a project being related to the environment is a success factor for reward crowdfunding campaigns. Contrary to what Hörisch expects, the analysis reveals that an environmental focus does not have a positive effect on the success of a funding campaign. That is, projects related to the environment are less likely to reach the target funding amount, and in general, receive the lowest average percentage of the funding goal.

Cordova et al. (2015) analyse four reward crowdfunding platforms: Kickstarter and Indiegogo (based in the US); Eppela (Italy); and Ulule (France). However, data from Ulule never enter the analysis. Focusing on technology-related projects only, the aim of this research is to identify the determinants of success of crowdfunding pitches and whether the success factors are also important for collecting money beyond the funding goal, so-called 'overfunding'. The researchers find that three factors affect the probability of success of projects and their overfunding: the amount requested, the duration of the fundraising campaign and the frequency of contributions by pledgers.

Literature on financial return crowdfunding has boomed in the past four years, consistent with the rise in the number and amount of money raised through P2P lending and equity crowdfunding platforms. For P2P lending, two US platforms have been analysed in detail: Lending Club and Prosper.com.[16] Literature exists also that makes use of data from PPDai.com, the most important P2P lending platform in China.

[16] Lin and Viswanathan's (2014) contribution is worth mentioning despite it falling outside the aim of the present literature review. They analyse Prosper.com to test for the presence of home bias in the investment decisions of lenders. Given the nature of crowdfunding, which links pledgers and fundraisers from different countries, it would seem natural that home bias would not exist on online crowdfunding platforms. Surprisingly, the authors demonstrate that investors tend to give money to projects in the same geographical area, thus finding supporting evidence of home bias in the P2P lending market.

For Lending Club, Mach et al. (2014) investigate the characteristics of the projects posted on the platform, as well as the interest rate paid by the fundraisers. The results suggest that projects proposed for small-business purposes are more likely to be fully funded than projects designated for other purposes, for example, debt consolidation and paying off credit-cards. Moreover, higher requested amounts reduced the probability of a project being funded fully. The results relating to the interest rate demonstrate that the interest rate for projects for small business is higher by one percentage point than that paid by other loans. Another interesting result concerns the delinquency rate of loans, which demonstrates that loans for small-business purposes tend to perform more poorly than loans for other purposes.

Pope and Sydnor (2011) test for discrimination on the US-based P2P lending platform Prosper.com. This research aims to identify whether one of the drivers of the success of a fundraising campaign is the physical appearance of fundraisers. The researchers analyse the importance of the photographs fundraisers include on the page of the project they post online. The analysis demonstrates that pitches that have no photo, or whose fundraisers seem older, unhappy or are black people are less likely to be fully funded. In contrast, photographs of women and those that highlight a military involvement increase the probability of the crowdfunding campaign being successful. Regarding the interest rate paid, results show that women are usually charged a lower interest rate. Ravina (2012) reaches the same conclusions on women and older and black people, while finding no evidence to support the theory that happier people (measured through a smiling picture on the pitch page) have a higher probability of reaching full funding or paying lower interest rates. Duarte et al. (2012) research is partially connected to the studies by Pope and Sydnor (2011) and Ravina (2012). These researchers test for the role of trustworthiness in P2P lending, also using data from Prosper.com. The results suggest that people who display higher trustworthiness on profile photographs are more likely to obtain a loan, pay a lower interest rate and have a lower probability of default. Herzenstein et al. (2011b) investigate the role of the fundraiser's presentation in helping the success of a crowdfunding campaign. Their results suggest that borrowers with lower credit scores (and hence a higher probability of defaulting

on the loan) tend to be more likely to be regarded as trustworthy, successful, hardworking, in economic hardship, moral and religious. These factors enhance the probability of the fundraising being successful and reduce the interest rate fund seekers are going to pay on the loans. Results relating to the probability of success in Herzenstein et al. (2011b) agree with those of Marom and Sade (2013) in relation to Kickstarter. Lin et al. (2013) analyse Prosper.com with the aim of testing for the role of friendship in driving the success of a project fundraising campaign. They demonstrate that the borrowers with the highest number of 'friends' on the platform are more likely to receive the requested funding in full. The analysis also demonstrates that borrowers with friends have a lower probability of defaulting once the project is funded. Freedman and Jin's (2014) study partially relates to that by Lin et al. (2013). They test for the role of social networks created within Prosper.com in the fundraising campaign. Prosper.com members can indeed create groups and join existing groups on the platform, hence creating some sort of social network within the platform itself. Freedman and Jin (2014) show that lenders prefer giving money to borrowers belonging to a group on the platform; in addition, borrowers who are part of a group on the platform are more likely to reach the funding goal and pay a lower interest rate on the loan.

Three contributions are worth mentioning that investigate the Chinese P2P lending market. Chen et al.'s (2013) results contrast those of Pope and Sydnor (2011) and Ravina (2012) as regards gender discrimination. Chen et al. (2013) find that projects whose proponents are women are less likely to reach the funding goal, but in the post-funding phase usually show a lower default rate. The results by Chen et al. (2013) are extremely significant also because their sample comprises more than 80 % male borrowers. Li et al. (2013) investigate the role of friendship networks on PPDai.com. Their results highlight the importance of friendship on the Chinese P2P lending market, since projects whose proponents have higher quality friendship networks, that is, friends with high credit scores and highly successful track records, are more likely to reach the funding goal and pay a lower interest rate. Feng et al. (2015) show that projects with higher interest rates are more likely to receive bids from lenders and be fully funded. In addition, fundraising campaigns with shorter funding windows or larger funding goals are shown to be more successful,

although in the case of projects seeking higher amounts of money the time needed to reach the target funding is usually longer.

The principal role of equity crowdfunding is that of filling the funding gap faced by companies (either start-ups or SMEs) in their early stages of growth. Equity crowdfunding financing comes immediately after the family, friends and fools (FFF) investments (Hemer et al. 2011; Tomczak and Brem 2013). There is extensive literature on the role of entrepreneurial finance in reducing the funding gap (Cosh et al. 2009; Lam 2010), and on the determinants and features of funding provided by venture capitalists and business angels to companies in either the seed or start-up stages (Barry 1994; Lerner 1995; Kaplan and Stromberg 2001; Hsu 2004). However, literature on the role of entrepreneurial finance in reducing the funding gap will not be reviewed here, because it goes far beyond the scope of the present chapter. While the literature on the role of equity crowdfunding in reducing the funding gap for start-ups and SMEs is still at the embryonic stage, two contributions focusing on peculiar features of equity crowdfunding are worth mentioning.

Agrawal et al. (2011) investigate whether the geographical distance between investors and entrepreneurs, the so-called 'geographical dispersion', plays a role in the investment decision. Their dataset is comprised of all projects available on Sellaband, a Dutch revenue-sharing crowdfunding platform. Their results suggest that, in general, investors tend to invest more as the project accumulates funding, while in general, local investments are typically done before the projects reach the first $20,000 in terms of money collected. This suggests that distance plays a role in the investment decision of backers, but only with respect to local investors (typically, but not exclusively limited to family and friends) who typically have more soft information on the entrepreneur and its business project than external funders. However, in general, results demonstrate that investors back the projects irrespective of the geographical location of the entrepreneur.

Ahlers et al. (2015) investigate which information provided by start-ups is essential in stimulating investment through equity crowdfunding. Their analysis is based on the Australian equity crowdfunding platform ASSOB. Their results demonstrate that when forecasting an exit either through an initial public offering (IPO) or a trade sale, having more

members in the management team with a higher level of education (such as a masters in business administration) greatly increases the funding goal and the number of investors. Conversely, offering a higher equity or not disclosing financial forecasts reduces the funding goal and the number of supporters.

The second important stream of literature on crowdfunding is the literature focusing on the potential for herding behaviour in the decision of investors about which project to support. Herding behaviour is not limited to specific types of crowdfunding; it occurs in all categories.

Bøg et al. (2012) focus on the projects on Justgiving, a British donation crowdfunding platform that provides a list of all previous donations on the homepage of each project, which can function as a signal for other donors. These researchers focus only on projects containing the term 'cancer' in the campaign title to ensure that the objectives of the donation campaigns under research are similar. The authors demonstrate that strong herding behaviour marks the fundraising campaign, particularly for the first 2 days.

Smith et al. (2015) collect data to assess the extent of herding behaviour in donation crowdfunding from two UK-based platforms, Justgiving and Virgin Money Giving. Their sample is larger than that of Bøg et al. (2012), and focuses on the 'runners for charity' in the 2010 London Marathon. The analysis reveals a pattern of herding, in that early donations seem to stimulate later donors and this particularly holds true for donations above the £50 threshold. However, these results do not hold true for newer charities or for those with smaller donations.

In contrast, Koning and Model (2014) find no supporting evidence of herding behaviour on donation crowdfunding platforms. These researchers randomly select 320 new projects posted on DonorsChoose.org and, as initial donors, make either a small ($5) or a large ($40) contribution. Their results demonstrate that previous contributions negatively affect the funding success, thus harnessing the 'wisdom of crowds'. In particular, they find that early contributions are important to the crowdfunding campaign because a $5 contribution was almost always considered a negative sign, that is, projects that received an initial contribution of $5 were less likely to reach the

funding goal. This result can be generalised: the smaller the initial contribution with respect to the funding goal, the lower the probability of the project receiving subsequent donations and reaching the funding goal. In other terms, the higher the percentage of the donation relative to the funding goal the more positive the effect on other donors. As the authors state (p. 15), 'it seems plausible that potential donors may view a five dollar donation to a $100 project differently than the same donation to a $1000 project'.

Kim and Viswanathan (2014) analyse the reward crowdfunding platform Appbackr, a US-based pre-sale platform for mobile applications (apps) that are in their pre-sale stage (concept apps) or have already been sold in the market (live apps). They investigate whether the crowd bases its decision to support a mobile app on what early investors did. They find that herding behaviour exists on the platform; however, the herd instinct is different depending on the type of early investors. Although app developers' investment decisions have an influence for both concept and live apps, the crowd tends to herd more in the case of pre-sale apps, while experienced investors herd more for live mobile apps.

Herding behaviour on P2P lending platforms is studied for the US, China and South Korea. Herzenstein et al. (2011a) and Zhang and Liu (2012) use data from the US P2P lending crowdfunding platform, Prosper.com. Herzenstein et al. (2011a) investigate strategic herding, that is, the decision of lenders to bid on loans. They demonstrate that bids on loans that are yet to receive full funding increase continuously as soon as a new bid on the loan is made. However, once the loan secures full funding, the number of bids declines, perhaps because lenders fear they will gain a lower interest rate than that for which they bid. Zhang and Liu (2012) distinguish between rational and irrational herding behaviour. Rational herding occurs when investors determine the borrower's default risk and consequently base their investment decisions on all the available information related to the pitch. Irrational herding occurs when what other lenders do seems a great deal more important than the characteristics of the entrepreneur and the loan itself. In their analysis of Prosper.com, the authors demonstrate that in P2P lending, rational herding behaviour seems to prevail over irrational herding.

Chen and Lin (2014) test for the presence of herding behaviour on the part of lenders on the Chinese P2P lending market using data from Chinese's largest P2P lending platform, PPDai.com. They show that herding behaviour exists on that market, however it is of an irrational nature, since on the one hand herding on existing projects leads to a lower interest rate, that is, a lower return on the investment, and on the other hand it does not reduce the ex-post default rate.

Lee and Lee (2012) and Yum et al. (2012) use data from one of the biggest South Korean P2P lending platforms, Popfunding.com. Lee and Lee (2012) investigate whether the market for P2P lending demonstrates a path for herding on Popfunding.com. They reveal that herding exists on that market, in particular when loans have higher participation rates (more bids, more posts in the question and answer section of the pitch), more verified information on the fundraiser, an initial higher interest rate, a shorter maturity, and are new and posted by a borrower whose loan history is positive. Yum et al. (2012) also find evidence of herding on Popfunding.com, particularly related to what they term the 'collective intelligence'. On Popfunding.com, as soon as a project is posted and before fundraising begins, future lenders can vote on the creditworthiness of the fundraisers and their capacity to repay the loan in full and on time. The analysis demonstrates that projects with a higher number of positive votes have a higher rate of success. Moreover, the authors highlight that the greater amount of information that is transferred from borrowers to lenders through the platform, the more lenders tend to use this additional information to make their investment decision, rather than following the collective intelligence.

Finally, Hornuf and Schwienbacher (2015) and Vismara (2015) test for the presence of herding on equity crowdfunding platforms. Hornuf and Schwienbacher (2015) analyse the four most important German equity crowdfunding platforms (Companisto, Innovestment, Seedmatch and United Equity), and find supporting evidence of herding behaviour. They demonstrate that: (1) investors place more money in campaigns that have reached the funding goal; and (2) larger investments trigger investments in the subsequent days of funding, particularly in the last seven days of the campaign. In contrast, they find no evidence of a herding effect in the case of withdrawals of previous investments, which may

be because withdrawals are quite rare.[17] Vismara (2015) uses the projects posted on the UK's most important equity crowdfunding platform, Crowdcube, to verify whether investors base their investment decisions on what other investors do. The results demonstrate that pitches with a higher number of early investors (people who invest in the first five to 10 days of the campaign) have a higher probability of success. Moreover, what drives early investors is the presence of public profiles of other investors. That is, if some of the first investors share their personal information and investment decisions on social networks, others are encouraged to invest in the project. As such, investors appear to consider that the disclosure of an investment decision is a signal of the quality of the project.

2.4 Future Research

The literature presented in the previous section is far from exhaustive. Moreover, it concentrates only on studies that identify the success factors driving crowdfunding campaigns and the herding behaviour of backers.

Despite recent substantial analyses of crowdfunding, there remains room for more research on this topic. Three streams for future research can be identified. The first relates to the importance of crowdfunding as an alternative (or complementary) source of capital for firms and individuals. It is said that one of the most significant consequences of the 2007–2008 global financial crisis is the sharp reduction in credit provisions to the real economy, particularly to SMEs. Start-ups also suffered from the credit crunch, particularly in receiving early-stage financing deriving from venture capital and private equity funds. Research in this field could investigate whether crowdfunding has the potential to become a substitute for or an alternative to traditional sources of capital, either bank credit or early-stage financing. In particular, given the differences between traditional funding channels and the P2P lending and equity markets, research is needed to clarify whether results from former

[17] Contrary to Kuppuswamy and Bayus (2013), Hornuf and Schwienbacher (2015) demonstrate that funding dynamics in equity crowdfunding tend to be L-shaped, with a high frequency of investments in the beginning.

research in the banking and early-stage financing markets are applicable to financial return crowdfunding markets. Moreover, it should be investigated for which types of companies seeking funds crowdfunding is a viable option for capital. In addition, the interaction between crowdfunding and traditional sources of capital should be explored, with attention paid to the willingness of traditional channels of funding to finance companies that have already received money through a crowdfunding campaign.

The second stream of research should focus on post-funding momentum. While gaining access to crowdfunding campaigns that are in progress or closed is straightforward, gaining insight on the performance of a project in the post-funding period is more difficult. However, investigating the post-funding performance could be of great value to the understanding of the role of crowdfunding in the modern economy. As the case of Bubble and Balm demonstrates, being funded on a crowdfunding platform may not lead to success in business.[18] As highlighted, one of the issues of crowdfunding relates to the inability of pledgers to evaluate the projects and their potential path for future success. Business models of platforms and the existence of an ex-ante due diligence activity should be examined—in the wake of Borello et al. (2015)—because the business model of a platform can benefit fundraisers, funders and the fundraising campaign, and ex-ante due diligence activity could prevent ex-post losses for pledgers by preventing a poor crowdfunding campaign from occurring.

The third stream of research relates to the rules and regulations around crowdfunding. As noted, crowdfunding should be a regulated activity. However, the extent to which crowdfunding markets should be regulated remains an open question. As such, investigation should be conducted on whether established rules on investor protection apply to this form of funding, as well as on the scope of newly introduced regulation. In addition, the potential for self-regulation (in a similar manner as regulation is applied in financial markets) of the crowdfunding market should be

[18] In 2009, Bubble and Balm raised £75,000 from 82 investors on Crowdcube thanks to rapidly growing sales projections and money from a small venture capital fund. In the summer of 2013, Bubble and Balm closed, owing shareholders hundreds of thousands of pounds. For details on the failure, search on www.ft.com.

explored. Further, research should investigate whether regulation should require certain information to be provided by fundraisers in an attempt to reduce information asymmetry and ensure investors can assess the risks associated with the investment. If it is found that such a requirement should apply, research should concentrate on discovering the information that is most relevant to funders' decision-making. Concurrently, a standard pitch page (a template pitch page) should be created that contains all relevant information on the fundraising campaign, similar to the recommendations included in Directive 2003/71/EC (Prospectus Directive) and Directive 2010/73/EU for securities offerings on the financial markets.

3

Web 2.0 as Platform for the Development of Crowdfunding

Federico Brunetti

3.1 Introduction

Crowdfunding is an innovation that has changed the way companies start up and find funding, as well as investment opportunities and related markets. With crowdfunding, anyone can start a business or realise a personal project, collecting funds on specialised websites. Crowdfunding involves a financial component related to the forms and ways in which capital is collected, but there is also a social component of sharing.

In a broad perspective, the consequences of crowdfunding on the organisation and functioning of economic activity in general are potentially significant and largely unexplored. Indeed, if crowdfunding catches on, the whole system of production and distribution could change. This possibility is not, however, considered here.

With reference to the subject of this chapter, internet and so-called Web 2.0 clearly enabled the development of crowdfunding. The possibilities offered by the context of the social web and the idiosyncrasies of that environment are not mere infrastructural aspects but essential components of this form of funding-investment. To understand

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crowdfunding in more than its technical and financial aspects it is therefore necessary to have a notion of the logic, instruments and background (cultural, psychological and behavioural) of Web 2.0 (Danmayr 2014).

In this chapter, we first consider the general characteristics of Web 2.0 as an individual and collective environment of communication and interaction. We then describe crowdfunding and finally the characteristics of Web 2.0 with regard to crowdfunding, defining its subjects, flows and the objects exchanged. We also discuss the consequences of this new form of collective funding-investment and conclude with some questions to stimulate reflection about theoretical and practical aspects.

3.2 Features of Web 2.0

Although many years have passed since the advent of the World Wide Web, its initial version had important features that distinguished it from previous forms and environments of communication. It is worth recalling them briefly, because they are forerunners of the social web. The features were simultaneous reach and richness, the combination of hypertext and multimedia, the coexistence of public and private communication, push and pull, broadcasting and narrowcasting, interactivity and social presence (Mandelli 1998).

In the World Wide Web, it was possible to reach a vast audience with a large amount of information. Many addressees and abundance of content were no longer alternatives but could be achieved simultaneously.

The World Wide Web also offered content that could include hypertext and multimedia. The content was interconnected and easily accessible through links that provided direct access without any hierarchy or pre-established chronological order. Regarding multimedia, a web page typically contained text, images, sounds and video; in other words, an environment naturally predisposed to cater for many modes of communication.

The World Wide Web enabled all available communication options: interpersonal or mass; public or private; user sought (pull) or user sent

(push). Those involved in the communication process could activate different settings according to their needs.

Interactivity not only had to do with receiving and enjoying content generated by others, but also replying and contributing with one's own content. Thus, the web was an environment that required user activity, favouring consultation instead of mere uptake of information.

Social presence was a singular prerogative, consisting in feeling part of a context. Although web participation is virtual, many people regard it as the closest thing yet to the real experience of being with others in a given place.

Coming now to the definition of the subsequent version of the World Wide Web, its complexity means that it has various names. These include Web 2.0, the social web and user-generated content (UGC). Some see these different names as indicating the same thing, whereas others distinguish between them (Kaplan and Haenlein 2010). Strictly, the term 'Web 2.0' belongs to the technical sphere, shown by the numbering normally used to indicate versions of software. The term 'social web' underlines the collective interaction side and the power shift in favour of users, whereas 'UGC' emphasises the creative role of users (Berthon et al. 2012). For the sake of simplicity, we consider Web 2.0, social web and UGC as one and the same due to their evident links, relationships and conceptual as well as operative overlaps. Incidentally, enthusiasm for these tools has often created Web 2.0 rhetoric and ideology, and the same applies to words such as 'sharing' and 'wiki'. The great variety of expressions often arises more from hype and the desire of contributors to distinguish themselves than from authentic substantial differences in content (Ciracì 2013). Irrespective of the names used, we have to go back to the contribution of O'Reilly for a definition. O'Reilly (2007) introduced these expressions and established certain essential elements of this new version of the web. As he recalls, the need for a new version of the web emerged after the dot-com bubble burst in 2001. Far from decreeing the end of the web economy, O'Reilly showed that the web was about to enter a new phase, thanks to the evolutionary capacity of certain companies and to the advent of certain innovative functions. Although some features could be found in the previous version of the web, he chose the qualification Web 2.0 to mark this new phase. O'Reilly listed the founding features of Web 2.0:

- The web as platform.
- Harnessing collective intelligence.
- Data is the next 'Intel Inside'.
- End of the software release cycle.
- Lightweight programming models.
- Software above the level of a single device.
- Rich user experiences.

As we can see, O'Reilly's attention is focused mainly on changes in software and programming. This is understandable because at the time many of the 2.0 applications we know today did not yet exist and it was logical for attention to be focused on infrastructure, that is, software. Nevertheless, it is a fundamental contribution since it came from the person who first introduced the suffix '2.0' applied to the web.

Other authors subsequently tried to define Web 2.0, identifying four factors, each with associated features. The Four Factors Model (Wirtz et al. 2013) includes: social networking; interaction orientation; user-added value; customisation and personalisation.

'Social networking' designates the intrinsically participative structure of Web 2.0; 'interaction orientation' is seen as the propensity of companies to strike up an authentic dialogue with consumers; 'user added value' indicates the contribution of users in terms of content and income creation; 'customisation and personalisation' extends the concept from individual level to group and social level.

These factors are very close to the working mode of Web 2.0 for users and therefore more useful for understanding the background of crowdsourcing and crowdfunding in behavioural rather than solely technical terms. Wirtz et al. (2013) proceeded to analyse the implications of Web 2.0 on the creation of value using the internet and on the consequent need for firms to change their business models. For our purposes, however, the nature of Web 2.0 is what interests us most.

Regarding the similar concept of social media, Kietzmann et al. (2011) draw a framework composed of seven elements. Identity, conversations, sharing, presence, relationships, reputation and groups are the conceptual and operative elements that may come into play in the various forms

of social media. These authors, too, emphasise the collective dimension of which the seven elements are only facets.

The most significant features seem to be social presence, interaction and above all sharing between persons and the resulting community spirit, as well as production and dissemination of content by users. While they are not new in an absolute sense, they are peculiar to Web 2.0. Interestingly, interaction and social presence were both part of the initial version of the web (Kaplan and Haenlein 2010). However, in the context of Web 2.0 they manifest with a new quality and intensity. In this new environment, these features fully express their potential, giving rise to completely new applications, types of websites and businesses. For example, the Airbnb private house exchange platform is a typical example of the Web 2.0 landscape and functions in a different manner from traditional websites.

Other features of Web 2.0 include pre-existing aspects of the digital world in general, such as practicality, game-like approach, self-effectiveness and flow. Although they are not new in an absolute sense, their importance and implications for crowdfunding make it worth recalling them briefly.

Practicality comes from the fact that personal computers (PCs) and digital devices are extremely fast and effortless: with a click, everything is at the user's fingertips. The game-like approach comes from the fact that digital devices have always been the environment of videogames. Using a PC, tablet or smartphone is therefore like playing. Self-effectiveness is the gratification that comes from the tangible effects of the user's actions. Whatever the software or application used, by pressing a key or touching the screen something happens. In the digital environment there is always feedback, perhaps not what the user expects if the action is not correct, but a response is received. Finally, flow happens or can happen because the user is immersed in an environment that calls for concentration and that proposes situations which challenge individual capacity, creating the condition that Csikszentmihalyi (1997) calls 'flow'.

Evolution of the web in this direction therefore offers a context in which activities such as exchanging, sharing, collaborating and cooperating have become extremely simple, economical and gratifying: simple from the practical point of view of ease of operation; economical in terms of cost, generally low or decreasing (Rifkin 2014); gratifying through the

possibility of activating and maintaining relations of great intensity and value. A context of this kind offers the possibility of manifesting the best qualities of human beings. It has enabled activities, services, applications and communities that can advance the economy and society. Indeed, the networked information economy strengthens individual autonomy, increases democracy through public information and creates a basis for justice and human development (Benkler 2006).

In a broader perspective, there is also literature criticising Web 2.0 or pointing out less favourable aspects and consequences (Turkle 2004, 2011; Metitieri 2009; Schirrmacher 2010; Morozov 2012; Belk 2014). In concluding this section, let us also mention these in order to avoid giving a one-sided picture.

Turkle (2004) initially concentrates on the relation between human and computer and on the changes in human nature caused by relating to reality through a machine, symbolised by the computer screen. Later, she reflects on the illusion of connection that information technology produces and on the condition of new solitude in which people find themselves, despite the quantity of communication devices available (Turkle 2011).

Metitieri (2009) criticises the damaging effects of Web 2.0 on the production and dissemination of information, which is no longer in the hands of institutions and professional figures but left to individuals and crowds without the necessary understanding or instruments. Anonymity and the resulting loss of responsibility in the production and dissemination of news, indiscriminate use of copy and paste, approximation and superficiality are some of the factors that the author sees as ushering in a Medieval 2.0.

Schirrmacher (2010) is mainly interested in information overload and its consequences on individual cognitive capacity. Without denying the benefits of the internet, he is concerned by the loss of the faculties of thought, understanding and interpretation inherent in delegating intellectual activity to machines.

Morozov (2012) mainly deals with the political implications of the web, disputing the widespread idea that the internet is only responsible for benefits such as freedom and democracy. He invites users to take a more realistic view of the role of the internet as a tool for fighting

authoritarian regimes and to evaluate carefully the consequences of relying on the web in international relations.

Belk (2014) makes a distinction between sharing and pseudo-sharing or between situations of effective sharing and situations that only appear to involve sharing, while exploiting the perceived positive aura of '2.0' and 'sharing' terminology. There are three criteria on which a distinction can be made: the presence of profit motives, the absence of feelings of community, and expectations of reciprocity. Not everything labelled 'sharing' implies authentic exchange.

These papers may seem over-pessimistic and more numerous that those in favour. However, the pervasive nature of these new communication and relationship environments and the magnitude of the changes they are making in individual and collective behaviour warrant a certain concern. First the web and now Web 2.0 combined with mobile devices enabling ubiquitous and permanent access have transformed the way in which many activities are conducted. The change is such that doubts about the maintenance of a series of human characteristics, at least as hitherto known, are more than legitimate. The self-propulsive force of the web and Web 2.0 is irresistible in theory and in practice, even if users are aware of the risks and potential problems implied. The offline and online worlds, from their standard to their social applications, are now so integrated that the web and Web 2.0 can no longer be considered separate domains of society and the economy. They have to be considered constitutive components and accepted along with their implications, seeking to limit those that could wreak unacceptable anthropological and societal damage.

3.3 Crowdsourcing and Crowdfunding: Context, Subjects, and Objects of Exchange

Web 2.0 has a wide range of functions and applications from multiplayer virtual games (*Farmville*, *Clash of Clans*) and collaborative projects (such as Wikipedia) to sites for social relations (Facebook, LinkedIn),

sites hosting reader reviews (TripAdvisor, Foursquare), common interest communities (Myspace) to 'simple' sharing platforms (YouTube, Instagram, SlideShare). Its frontiers are probably still widening. In simple terms, Web 2.0 is based on innovation or on transforming activities and functions according to the principle of sharing. In future, we can expect that other activities and functions, currently wholly or partly conducted individually or in isolation, will be sucked into the social dimension.

Among the applications of interest there are those gathered under the name of 'crowdsourcing'. As we saw for Web 2.0, crowdsourcing activities have also gone under other names, such as peer production, collaborative economy, wikinomics, sharing economy and sharing capitalism. Here again, for the sake of simplicity and accepting a certain level of imprecision, we opt for the single term 'crowdsourcing'. This term was coined by Jeff Howe in the magazine *Wired* (Howe 2006b). It indicates a form of production that involves people, who are outside the organisation and not included among its commercial suppliers, in various activities at various levels. Crowdsourcing relies on a set of consumers or on people in general.

Among the activities that function by sharing, via the social web, often remaining beyond the market perimeter, crowdsourcing enables entrepreneurs to entrust their projects to individuals, whose contribution is exploited to improve project performance. Crowdsourcing can aim to improve efficiency by reducing costs; improving output through product development, configuration or design; and providing product ratings. Crowdcrafting is still experimental and goes as far as involving the public in manufacturing (Bonfanti and Brunetti 2015).

Crowdsourcing has many guises. A useful contribution by Geiger et al. (2011) proposes a taxonomy of crowdsourcing processes, built on four dimensions: pre-selection of contributors, accessibility of peer contributions, aggregation of contributions and remuneration for contributions. There are 96 possible combinations of these dimensions, known as process types, which on the basis of empirical evaluation, can be reduced to 19. Applying cluster analysis, the authors identify five general patterns of crowdsourcing: 'integrative sourcing without remuneration', 'selective sourcing without crowd assessment', 'selective sourcing with crowd assessment', 'integrative sourcing with success-based remuneration' and

'integrative sourcing with fixed remuneration'. Crowdsourcing therefore has many forms and it is worthwhile distinguishing its manifestations. However, even more significant, at least for our purposes, is to recognise its essential novelty. In general, crowdsourcing is a new way of organising and conducting processes of production that overcomes the historical rift between production and consumption, thus forging a path for enormous change.

Irrespective of type, crowdsourcing inevitably leads to consumer involvement (Sashi 2012) even for tangible goods and not just for services. Here, consumer participation is physiological, intrinsic and already known and analysed (Langeard et al. 1981; Grönroos 1990). The novelty of crowdsourcing, however, also lies in consumer participation in production processes of firms that produce goods. Consumers become 'working consumers' and may be exploited by the firm and not adequately evaluated or remunerated for their input. Apart from the benefits usually underlined, crowdsourcing therefore also has disadvantages, which have been under observation for some time (Cova and Dalli 2009; Rieder and Voss 2010).

Crowdfunding is a crowdsourcing activity not concerned so much with sourcing expertise and other work of consumers but with the participation of persons as sources of funding. From this point of view, crowdfunding is unique, being the only form of social application directly involving money flows as the primary object of exchange. It is also singular from the temporal point of view because the crowd does not interact with an established, functioning company but before the firm starts up, indeed for the very purpose of creating an enterprise. This implies that trust has considerable weight as a production factor (Ugolini 1999), providing further justification for the existence of crowdfunding platforms, as we shall see.

Since the subject of this chapter is Web 2.0 as a context for the development of crowdfunding, its different forms, objectives, functioning and consequences are not analysed in detail here but in other chapters of this volume. We focus on a definition of crowdfunding sufficiently general for the aims of this chapter. To arrive at this 'service' definition, we considered some of the definitions offered by scholars, listed below in chronological order.

Schwienbacher and Larralde (2012, p. 4) define crowdfunding 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'.

Another paper sustains that 'crowdfunding is an initiative undertaken to raise money for a new project proposed by someone, by collecting small to medium-size investments from several other people (i.e. a crowd)' (Ordanini et al. 2011, p. 444).

A third definition: 'crowdfunding involves an open call, mostly through the internet, for the provision of financial resources either in form of donation or in exchange for the future product or some form of reward to support initiatives for specific purposes' (Belleflamme et al. 2014, p. 588).

According to the fourth definition, 'crowdfunding refers to the efforts by entrepreneurial individuals and groups—cultural, social and for-profit—to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the internet, without standard financial intermediaries' (Mollick 2014, p. 2).

Thus we arrive at the following formulation: crowdfunding is an innovative way of gathering financial resources, which individually may be small sums, from a broad public by open calls on special websites, so that the promoters can carry out initiatives of various types.

This definition seeks to include all the elements considered essential for crowdfunding, some of which are included in the reference definitions. These elements are: (1) a promoter; (2) the purpose of gathering funds; (3) addressed to a wide public; (4) the final aim of starting profit and non-profit projects; (5) internet and Web 2.0 as infrastructural conditions; (6) a platform as intermediary for the activity. All these elements are examined in the next section.

To focus more closely on the subject, it is useful to consider the classification of Kaplan and Haenlein (2010) who distinguish social media according to the degree (low, medium, high) of social presence/media richness and the degree (low, high) of self-presentation/self-disclosure. The expression 'social presence/media richness' indicates the intensity of the relation that can be established or the capacity of the medium to

synchronously or asynchronously convey a range of contents, whereas self-presentation/self-disclosure refers to the impression one gives of oneself and the measure in which individual subjectivity is revealed in the social context.

From this point of view, crowdfunding is a social medium with low self-presentation/self-disclosure. Indeed, the person and his/her preferences, passions, interests and interior world are not so much the centre of interest as the enterprise. On the whole, it is also a social medium with low social presence/media richness, since the interpersonal interaction evoked and the variety of contents and media implied are not particularly high. Since crowdfunding mainly involves money, it is a relatively 'cold' application compared with other Web 2.0 applications, such as online games, communities and social networks, which imply much greater personal involvement. However, crowdfunding acquires a particular character from the social background in which the search for funding sources takes place. Compared with ordinary ways of accessing finance, we can therefore say that crowdfunding is quite 'warm'.

The actors of crowdfunding are numerous and each has a different role. Starting from the most essential elements, the internet, the web of webs, is what provides the physical and technical infrastructure for the system. Next comes the web (obviously including Web 2.0) that is the communicative infrastructure, the hypertext, multimedia, one-to-one, one-to-many, many-to-many, interactive and collaborative environment, without which crowdfunding processes could not take place.

Turning to the actors, a function of the system is the crowdfunding platform, an intermediary that connects demand and supply for funding that in normal circumstances would never meet. Crowdfunding websites have various institutional forms and business models, and may generally be qualified as gatekeepers that offer the functional framework and rules within which the operations in question can be carried out. Crowdfunding platforms are therefore essential as they offer a space where the innumerable, sometimes thousands of individuals taking part in this economic and social experiment meet.

Then there are aspiring entrepreneurs, individuals or groups for whom crowdfunding is a different or even exclusive way of funding their business ideas (or other types of projects) compared with traditional finance.

Indeed, in many cases crowdfunding offers an otherwise non-existent opportunity of obtaining funds. Actually, the expression 'aspiring entrepreneur' is not completely accurate since the activities seeking funding are not always strictly enterprises. However, 'aspiring entrepreneurs' are nevertheless a strategic individual actor in the social context.

The next figure is the investor or backer. If crowdfunding is an innovative way of funding enterprises, it is an even more innovative way of investing. From the point of view of funding, in fact, crowdfunding has some antecedents, or similar forms, for example microcredit. However, in crowdfunding, the investor has a new importance, and as we shall see, has particular roles and functions. It is also important to underline that even persons who are not normally involved in financial markets, either directly or indirectly, can be crowdfunding investors.

Finally, in writing about crowdfunding, a word about the crowd is also necessary, even if it is just an aggregation of single investors. It is somewhat different from a generic mass of persons or a crowd in the strict sense. The most appropriate concept is probably that of community, that is, a narrow group of people familiar with crowdsourcing practices and/or the specific crowdfunding platform. Further research is needed to understand the nature and composition of the 'crowd' involved. The crowd does not, in fact, have specific functions, but can be considered a strategic collective player, essential to the system, since it is the element that qualifies crowdfunding in a determinant way (Hui et al. 2014).

Besides the actors, a complete view of the phenomenon requires a closer look at the 'objects', material or immaterial, real or financial, that flow through the system. Like the subjects, the 'objects' are particular and merit a few words. Fig. 3.1 proposes a scheme indicating the objects exchanged.

As we can see in Fig. 3.1, the subject who promotes the project does so via the crowdfunding platform, launching it to gather a predetermined sum of money. However, the project does not consist solely of specific technical content and economic-financial data, but must also include understanding, creativity and entrepreneurship. Mediated by the platform, the subject receives the money (minus commission charged by the platform). However, what the subject receives is not exclusively financial,

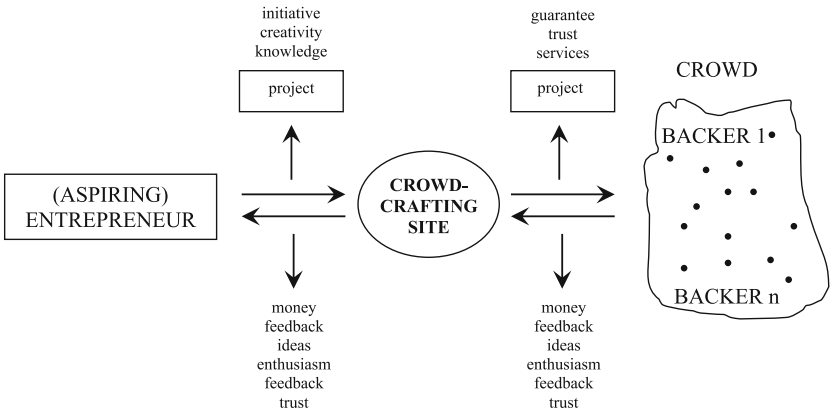

Fig. 3.1 Subjects, objects and exchange flows in crowdfunding processes. *Source*: Author

but may be accompanied by non-monetary elements such as feedback, ideas, energy, enthusiasm, conviction and trust.

For its part, the crowd accepts the project and the promoter via the crowdfunding platform, but enriched with the platform's services, guarantees and trust. The crowd, or single backers, in turn provide the promoter with money as well as feedback, ideas, enthusiasm and trust.

As we can see, although the object of the transaction is capital, other elements also come into play. The smaller the sums of each transaction, the more important the set of all these elements. In other words, the smaller the contributions requested and conceded, the greater the importance of the immaterial elements such as creativity, enthusiasm and trust. This is why crowdfunding is not only financial but above all social. Crowdfunding contributes to the wider movement of collective sharing and participation that characterises the social web epoch.

Thus in the next section we analyse the different inputs, showing the consequences of Web 2.0 for crowdfunding and its subjects, and vice versa the effects of crowdfunding and its subjects on Web 2.0 and its culture, although the latter are perhaps less evident.

3.4 Crowdfunding and Web 2.0: Mutual Interaction and Consequences

After our description of the features of the web and Web 2.0, as well as the various components of crowdfunding, it should be clear that Web 2.0 is an essential environment for the existence of crowdfunding. Without infrastructure such as Web 2.0, crowdfunding could not have developed. The context of Web 2.0 provides a favourable habitat for crowdfunding and its players. It hosts a community spirit, a propensity to share and a hacker ethic (Himanen 2010) fundamental for its development. Thanks to this specific psychological and behavioural background, the delicate activity of fundraising for entrepreneurial activity may occur in virtual form.

However, Web 2.0 is not limited to providing these conditions. Its social nature calls for the observation of certain conditions and places constraints on the subjects involved in crowdfunding. The context of Web 2.0 is more or less explicitly governed by a behavioural code that must be observed by participants, otherwise they are barred from operating.

Web 2.0 certainly favours democratisation, but also, in some ways, has a tendency to make everything more banal and depersonalise activities in its space. In our case, this influence affects the investment-funding process. Because it allows individuals to act directly, it brings within reach of everyone activities that were previously exclusive, reserved and dealt with in contexts of high competence. Anyone can easily access the market as an aspiring entrepreneur or lend money for the start-up of businesses. This inevitably means a loss of power for conventional financial institutions dealing with loans or debt capital and an increase in self-determination of individuals as entrepreneurs and funders. However, the influences in question are not one-way: not only does Web 2.0 influence crowdfunding, but vice versa. The following interesting observations emerge from an attempted analysis of the effects of the presence of crowdfunding on the web:

- Crowdfunding gives everyone the possibility of being an entrepreneur; backers are involved emotionally, take part in the entrepreneurial adventure, and identify with the entrepreneur.

- Crowdfunding gives people the possibility of being part of something larger than themselves; they take part in a project with many other people.
- Crowdfunding gives everyone the possibility of expressing expertise acquired as consumers; the crowd can advise and help the entrepreneur to develop a market supply system.
- Crowdfunding is like gambling in the sense that it involves the excitement of betting on something and testing one's skill and/or luck.
- Crowdfunding gives people the possibility of controlling how their savings are used; users choose exactly who and what project to back and do not blindly entrust their savings to intermediaries.

Thus crowdfunding gives the social web a different shared object: different in content, reviews, emotions and sentiments, while also involving entrepreneurship. It does not use Web 2.0 and social media for marketing of established firms but as a lever to start enterprises. Web 2.0 and social media are not used to persuade, involve or capture clients but rather as environments that favour the birth of entrepreneurship. By making start-up a collective process through crowdfunding, the social nature of the web creates many entrepreneurial opportunities. In brief, while start-up of firms is socialised, the web acquires an entrepreneurial aspect.

3.5 Questions for the Future

This chapter has traced the essential coordinates of the relation between crowdfunding and Web 2.0. It would be interesting to explore many other aspects for a fuller understanding of the social dimension of crowdfunding. Since space does not permit, we conclude with some questions that could be the subject of future research.

- Is there interaction-conversation-feedback between backers? Do backers promote the project in their social networks? Does this create a community of backers?
- With regard to the relationship between entrepreneur and investors: Is there interaction-conversation-feedback between entrepreneur and

backers? Is there an interaction between entrepreneur and backer once the funds have been collected and the project is launched, and if so in what form? Does a community of backers linked to a certain entrepreneur form and follow him/her in subsequent projects?
- More general questions: Can we speak of communities linked to crowdfunding platforms? Do crowdfunding platforms have followers on Facebook or other social networks? How much does ability in the use of social instruments affect the success of the projects?
- With reference to future clients of firms arising through crowdfunding: Can a short circuit occur between the investor and the client, such that the two figures merge? Might finding backers in this manner also mean automatically finding clients and a market?
- From the client's point of view: Could crowdfunding be useful for obtaining products that are not on the market?
- The biggest theoretical question: Could crowdfunding transform the nature of enterprise, making it a collective rather than an individual endeavour?

These questions can only be answered by further research. Although these and other important aspects are unclear, what we have seen seems sufficient to conclude that the combination of Web 2.0 and funding activity has given rise to a phenomenon that is not solely economic. On one hand it has brought entrepreneurship into the realm of sharing, and on the other it has brought sharing (extended to 'crowd' scale) into the sphere of business start-up.

4

Competitive Frontiers in P2P Lending Crowdfunding

Roberto Bottiglia

4.1 Introduction

This chapter deals with lending-based crowdfunding or peer-to-peer (P2P) lending crowdfunding, often referred to simply as P2P lending. It is a major expression of the recent and more general phenomenon indicated as 'alternative finance' and is often defined by two components: P2P consumer lending or personal finance for private consumption, and P2P business lending, which is finance for small and medium enterprises (SMEs). Other forms of alternative finance that can have a role in corporate finance include invoice trading, concerned with trading commercial invoices of firms and debt-based securities, or issue of securities by moderate-size firms. Since invoice trading and debt-based securities are underdeveloped sectors, we focus on P2P consumer lending and P2P business lending. Where necessary, we differentiate our observations between the consumer and business sectors. Still in terms of classification, we recall that P2P lending is included in the category of financial return crowdfunding, which also comprises equity crowdfunding, that is,

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the collection of capital to support business start-up or mezzanine finance operations.

Fig. 4.1 shows a taxonomic scheme of alternative finance, relevant to the present chapter, inspired by classifications in the literature (Wardrop et al. 2015).

Briefly, P2P lending can be defined as the collection of financial resources and the issue of loans via web platforms. The main actors are: (1) the platforms themselves (P2P lending platforms); (2) lenders, who invest their savings; and (3) borrowers, who may be individuals or firms. Along with the 'pure' P2P lending activity, platforms provide various services, among which are analysis of credit risk, financial flow management, loans securitisation and so on. The platforms generally have business aims. Lenders are comprised of mostly small-to-medium investors, but with an increasing presence of institutional investors, who look for adequate returns for their investment. Borrowers seek to cover their financial needs for consumption or investment. By virtue of the interaction between these

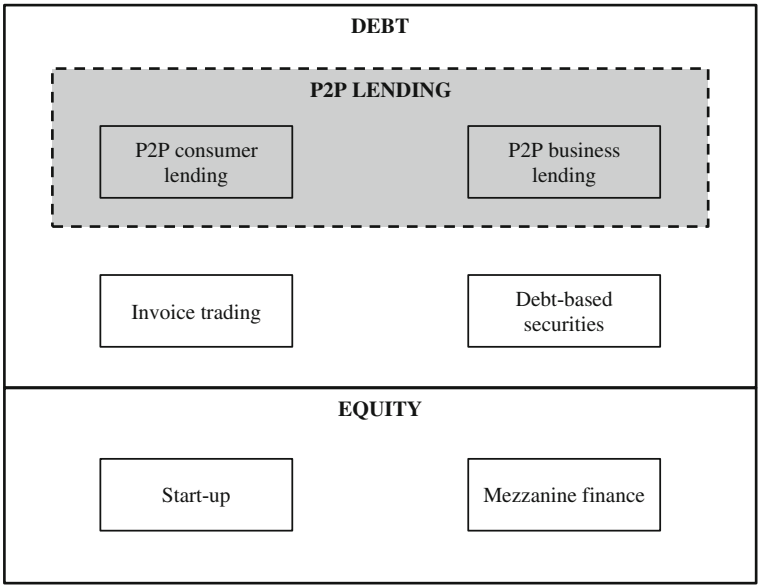

Fig. 4.1 P2P lending in the context of financial return crowdfunding. Source: Author's own.

actors, an alternative or complementary financial circuit is created with respect to the traditional financial circuit operating in credit and financial markets and whose main actors are financial institutions, especially banks.

In the present chapter, we firstly describe how P2P lending platforms work and how this new source of funding has spread in the main financial centres in the past few years. Second, we sketch out the characteristics of P2P lending to illustrate the causes of its recent strong growth and to identify traits that may assist us in defining the outlook of this activity. Third, we focus on the competitive advantages of P2P lending platforms and on issues and risks stemming from their operating mode. The competitive advantages are assessed in a comparative analysis with the competitors of P2P lending platforms, that is, banks and other traditional financial institutions such as personal and consumer credit, credit card and leasing companies. We therefore suggest some reflections on the prospective roles that these actors (P2P lending platforms, traditional financial institutions, internet-based market operators) can have within this innovative phenomenon. A crucial question that emerges is whether this new circuit is *complementary* to traditional financial intermediation or it can truly become an *alternative* to it. The fundamental issue of competitive distortions for financial intermediaries, and especially large banks, caused by P2P lending turns on this open issue.

Before turning to our analysis, it is useful to recall the recent origin of the phenomenon, which makes it difficult to interpret the data on it and limits the extent of the available literature, despite its interesting and rapid growth (Funk 2011; Belleflamme and Lambert 2014). Because of this, all reflections, analyses and hypotheses of the present chapter must necessarily be interpreted in light of this context.

4.2 P2P Lending: Types and Business Models

P2P lending is qualified according to the means by which it links individuals or firms in opposite financial conditions (those in financial surplus and those in financial deficit), but with converging motivations and aims. This means is comprised of the internet and web-based structures,

such as P2P lending platforms. The motivation for lenders (individuals or firms in financial surplus) consists in the need to invest to obtain a return on money withheld from consumption or investment in material goods (financial savings). However, they wish to invest their savings into alternative investment solutions to those offered by different intermediaries, in an attempt to obtain higher returns on investment. Conversely, the most relevant factor that seems to favour P2P lending on the part of borrowers (individuals or firms in financial deficit) is the need to find an additional or alternative source of capital with respect to bank credit, and hence a funding channel different from traditional ones, where borrowers may encounter difficulties in being financed and usually have little contractual power. A critical factor of convergence between lenders and borrowers lies in the positive attitude of both parts towards communication and interaction via the web. In other words, lenders and borrowers' financial motivations are complemented with attitudes, behaviours and motivations that are more complex than those that typically characterise the search for funding through the traditional intermediation circuit. This aspect is favoured by the use of social networks and the creation of user groups within them, who regularly chat and recognise themselves as part of a virtual community that shares sensitivity, values and interests. In brief, although generally P2P lending resembles financial intermediation, there are factors of innovation related to interaction and above all to communication.

More in detail, the many existing P2P lending platforms show a plurality of business models that can be grouped into three categories according to the platform's role (Kirby and Worner 2014).

The first of these is the 'client segregated-account model', in which the platform plays a relatively limited role, in just matching the requests of borrowers with the financial resources of lenders. The contractual relationship is settled directly between lenders and borrowers without the platform's involvement. The platform assesses the creditworthiness of borrowers and offers other administrative services, whereas money is transferred from lenders to borrowers via an account separate from the platform's. The existence of a separate account for the money invested on the platform assures that the relationship between lenders and borrowers endures even in the case of the platform's default, and is protected

from any creditors' claim. As regards the fees to be paid to the platform, borrowers pay an origination fee, which may be fixed or determined as a percentage of the amount collected, as well as fees for administrative expenses. Lenders are charged for reimbursement of expenses and access to services, especially registration on the platform. Specific services, such as trading the investment on a secondary market, are remunerated with special fees, determined ad hoc. A variation for the client segregated-account model involves setting up a trust fund; therefore, lenders buy fund share and the platform acts as fund manager, matching lenders' financial resources with borrowers' financial needs. The trust fund legally separates the platform and investors, protecting the latter in the case of the platform's default.

In the 'notary model', the platform selects which borrowers may post their crowdfunding campaign online and gathers funds from lenders. Afterwards, once the target funding is reached, the platform transfers the collected amount to a bank that issues the loan, whereas the platform issues a certificate ('note') that reflects the value of the funds invested by each lender and must be presented to the borrower at the time of reimbursement. Since the note is generally recognised as a security, credit risk does not relapse on the issuing bank, but is faced by lenders. Concerning the fee structure, this is similar to that of the client segregated-account model.

Third is the 'guaranteed return model', in which the role of the platform is more incisive than in the previous models, since it determines the rate of return for the lender's investment. It is the platform that collects lenders' resources and matches them with a borrower's request according to the risk-return profile of the lender, thus ensuring a given return rate. As a variation for the guaranteed return model, the first phases may be conducted 'off-line', for example through financial consultancy desks or networks if the collection of borrowers' requests occurs by traditional channels. These collect borrowers' applications, assess their creditworthiness and turn to the bank for the loan to be issued. It is only at this point that the borrowers' P2P lending campaign can begin on the platform and lenders can commit their money to specific projects. In the guaranteed return model, the platform acts as a financial intermediary in every respect, placing itself between lenders and borrowers.

All three business models share some common aspects. First, lenders' and borrowers' requests are matched in a web environment on the platform, where the projects presented by borrowers undergo initial assessment and selection. The purposes of the ex-ante selection are to exclude opportunistic, fraudulent or illegal applications, and to select which applications to accept on the basis of the credit risk associated with borrowers. The creditworthiness of borrowers is mainly assessed through the use of algorithms or credit-scoring methods that are based on data provided by the borrowers themselves. Second, the activity performed by P2P lending platforms is standardised and regards short- and medium-term unsecured loans, generally with a set minimum and maximum duration determined by the platform itself. In general, the size of the loans is much smaller than those issued by the traditional banking channel and qualifies P2P lending as a funding alternative particularly suited to finance individuals and SMEs. Third, some platforms set limits to the maximum amount a single lender can invest in a specific loan. Obviously, financial flows between lenders and borrowers are handled by a bank. Sometimes, partial mutualisation of losses is offered and costs relapse on the virtual community or group of lenders affected by the default. In addition, to cope with low investment liquidity, some platforms now offer the opportunity of trading the loan on a secondary market created and managed by the platforms themselves, whereas others securitise the loans. Finally, independently of the model used, different platforms show prevailing attention devoted to specific categories of client or market segments. The main distinction is therefore between P2P lending platforms oriented to the consumer sector on the one hand, and P2P lending platforms oriented to the business sector (SMEs) on the other. However, there are also mixed P2P lending platforms and in some cases, P2P lending platforms that specialise on specific market niches.

Table 4.1 presents a summary of the main P2P lending platforms in major crowdfunding markets.

It should be noted that P2P lending platforms' evolution has occurred in a mostly unregulated environment. However, supervisory authorities in various countries have intervened to bring the activity of P2P lending platforms under regulations governing financial intermediaries or under newly issued specific rules. Given the complexity of the topic, which varies according to differences in geographical contexts, we refer the reader to the contribution of Kirby and Worner 2014 (pp. 52–62),

Table 4.1 Main P2P lending platforms in the US, the UK and China

Platform	Country	Date established	Business segments	Loans origination 2014*
Lending club	US	2007	Consumer, education, healthcare, business/SME	$4.4 billion
Prosper.com	US	2006	Consumer, healthcare	$1.6 billion
SoFi	US	2011	Consumer, education	$1.4 billion
OnDeck	US	2007	Business/SME, revolving credit	$1.1 billion
Avant	US	2012	Consumer (middle income)	$0.5 billion
Kabbage	US	2010	Business/SME, revolving credit, consumer	$0.4 billion
Ratesetter	UK	2010	Consumer and Business/SME	£293 million
Funding circle	UK	2010	Business/SME, consumer mortgages, asset finance, working capital	£277 million
Zopa	UK	2005	Consumer (subprime included)	£264 million
Hongling Capital	China	2010	E-commerce, consumer lending	Rmb 8.21 billion
Lufax	China	2013	Consumer, business/SME	Rmb 1.59 billion
Renrendai	China	2010	Online micro-credit business	Rmb 0.49 billion
Jimubox.com	China	2013	Consumer	Rmb 0.59 billion

Source: Collated from Morgan Stanley (2015) and Chinese lenders' websites
*For Chinese platforms, these figures represent Transaction volumes 2014.

where the authors present an in-depth analysis for major countries. Further evidence of the complexity of the topic emerges from P2P lending platforms' observations on the state of regulation and its outlook for the future, which seems highly structured and subject to major variations (Gajda and Mason 2013, pp. 13–5; Wardrop et al. 2015, p. 14).

4.3 P2P Lending Market

Financial return crowdfunding is, on the whole, a recent phenomenon. The first campaigns occurred in the UK in 2005–2006 and in the US in 2006–2007. Later, it spread to emerging countries, especially in the Asia-Pacific

area (Australia, China and South Korea). As for the rest of Europe, financial return crowdfunding market is growing, but still is somewhat limited.

By virtue of the key features of P2P lending, it is not feasible to measure its market size adequately in terms of volumes, growth rate or number of active platforms. Global estimates on financial return crowdfunding for 2013 on the basis of IOSCO data (Kirby and Worner 2014, pp. 14–5) show a still very modest global market ($4.3 billion), almost entirely concentrated in three big countries, the US (51 %), China (28 %) and the UK (17 %).

Slightly more recent data on P2P lending alone display strong concentration of the phenomenon in the above mentioned countries (the US, China and the UK), with an increase in volumes in 2014 to about $12 billion in the US, $9 billion in China and £1.3 billion in the UK and a spread to other areas, such as Australia (Morgan Stanley 2015, pp. 4–7). The Chinese market is especially lively, with an impressive increase in the number of P2P lending platforms, from 10 in 2010 to 1,575 at the end of 2014.

In Europe, recent data on the broader alternative finance market confirm the significance of the UK's market. British issues of about £2.3 billion represent about 80 % of the European total; clear predominance of the UK is also shown in the two P2P lending sectors of consumer and business finance, issues of which amount to €1.75 billion, whereas all the other European countries account for €0.37 billion (Wardrop et al. 2015, pp. 13–9). However, the non-British European market is also growing fast, especially France, Germany, Spain, Sweden and The Netherlands (Wardrop et al. 2015, pp. 20–1). An odd feature of the European P2P lending market is the number of platforms, which is very high in some countries (more than 30 in France, Germany and Spain). Nonetheless, these platforms process much lower volumes of P2P lending than the less numerous British platforms. This confirms that the UK's P2P lending market structure is much more solid (Morgan Stanley 2015, p. 38).

Overall, the size of the phenomenon is still quite limited, especially since loan origination within P2P lending is still a tiny percentage of the total issues to the target sectors of consumer and business finance. In the US, where P2P lending is most developed, issues at the end of 2014 were estimated at 1.1 % of all unsecured consumer loans and 2.1 % of loans issued to SMEs (Morgan Stanley 2015, p. 6). In the UK,

the same figure is below 1 % in both consumer and business finance sectors (Morgan Stanley 2015, p. 39). Even considering that P2P lending is highly concentrated in very few countries as well as its recent birth, it is still quantitatively marginal on the overall financial scene. This reduced importance is demonstrated also by systemic risk assessments, since P2P lending is still considered negligible, albeit worthy of monitoring (Kirby and Worner 2014, pp. 33–47). Cross-border activity of the platforms is also limited (Wardrop et al. 2015, p. 23), indicating that P2P lending is an essentially domestic phenomenon. In addition, institutional investors have only recently discovered P2P lending as an asset class. The role of banks will be discussed in Sect. 4.6.

However, different reflections emerge if we consider the growth rate of P2P lending. Indeed, focusing on the two markets where it is most developed (the US and the UK), these experienced an annual doubling in the volumes issued in the past two to three years, whilst in the start-up phase the growth rate was restrained (Morgan Stanley 2015, p. 4; Wardrop et al. 2015, p. 13). Recent growth has been equally strong in other high-potential countries, such as France and Germany, where P2P lending was still quite uncommon (Wardrop et al. 2015, pp. 27–9). The same incisive growth rate was experienced by the Chinese P2P lending market, where the number of transactions increased by a factor of 2.4 between 2013 and 2014 (Morgan Stanley 2015, p. 48).

Overall, the phenomenon continues to be intensely lively. Although data should be interpreted with caution, because of the great variety of circumstances and to the fact that data are usually provided by the platforms themselves, the trend seems definite and suggests an extremely positive medium-term outlook for the P2P lending global market. Although the estimates should not be overstressed in a pretty uncertain context for financial market dynamics and specifically, in the case of P2P lending, a recent study by Morgan Stanley is worth citing. The authors predict the global volume of P2P lending in 2020 to be $290 billion, its growth rates to be gradually decreasing, but still sustained with a mean annual growth of 51 % in the period 2014–2020 and an increasing role for the Chinese market, forecast to become the biggest market for P2P lending in the world (Morgan Stanley 2015, p. 4). Clearly, if Morgan Stanley estimates are confirmed, P2P lending will no longer be marginal but will assume a

central role on credit markets, becoming a consolidated innovation rather than a potentially disruptive novelty. In any case, even ignoring the significance of medium-term estimates, trends suggest that it is reasonable to expect that P2P lending can play a major role within the global financial scene in the short to medium term. What follows can therefore be of exceptional importance to further enhance P2P lending activity:

- More intense growth in countries where P2P lending is still not as developed as credit and financial markets. This is typically the context of most European countries, except the UK.
- Evolution towards a market structure where supply is less a prerogative of the main actors operating in the market, who still tend to coincide with the first innovators. This relates to, although not exclusively, to the leading countries, that is, the US and the UK.
- Further growth and consolidation of the Chinese market, which embeds an enormous potential for development, but still seems to be characterised by unclear features and its size cannot always be easily measured within the larger sector of alternative finance.

In general terms, the growth of web-based forms of communication hinging on social networks can become significant for the growth of P2P lending, which can extend to countries where the internet still has technical limits or cultural delays, as well as to new user bases. Due to the extraordinary speed with which these innovations have profoundly changed habits and mass behaviour, it is legitimate to imagine that P2P lending still has relevant growth potential and that it is worthy of considerable attention by credit and financial market actors.

4.4 Conditions Favouring the Growth of P2P Lending

P2P lending is a new phenomenon that lacks historical depth, so, to investigate the factors that have aided its success and affirmation in the wider financial system, an analysis of the conditions in which it arose and began to spread is needed. First, initiatives of P2P lending were put in

place in a time of great historical significance. On the one hand, internet access became widely available and web-based technologies led to high levels of interaction; on the other hand, the global financial crisis broke out in 2007–2008, being the worst, deepest and longest financial crisis since the Great Depression of the 1930s. The coincidence of these two extraordinary processes created room for intermediation circuits and financial markets to work properly (Kirby and Worner 2014, pp. 12–4). However, the extent to which these conditions had a role in the development of P2P lending is still an open question.

Referring solely to the financial crisis, it is a common opinion that the new circuit matching savers and individuals or firms with financial deficits was favoured by the financial stress that firms and consumers experienced after its burst. The role of the crisis in helping the creation and development of this alternative intermediation circuit is explained in what follows:

- In many industrial countries, credit has been rationed, to the detriment of those with less contractual power and fewer financial options, individuals and small businesses. The liquidity crisis facing large banks forced them to rationalise credit issues as a response to the bail-out led by governments and central banks. Beyond the liquidity crisis, credit rationing had already been put in place by banks directly, in response to the negative trends and modest growth outlook of many economies. The banking sector, by far the most important player in global intermediation circuits, is still trying to cope with the varying damage caused to different countries by the financial crisis, and so banks are still rationing credit to clients, especially those in the weaker financial environments. All these factors created favourable conditions for the development of alternative funding circuits (Gajda and Mason 2013, pp. 11–2; Namvar 2013, p. 6; Mach et al. 2014, pp. 3–4).
- What public authorities did in response to the global financial crisis affected the development of alternative financial circuits and could continue to do so. Indeed, on the one hand, central banks provided extraordinary liquidity to the economy through massive quantitative easing operations; on the other hand, central banks tried to strengthen bank capital, which in major countries entailed massive bail-outs, and also hastened the launch of Basel III regulations. Notwithstanding its benefits in

terms of structural consolidation of the financial system and prevention of future crises, the Basel III framework has greatly raised the capital requirements for banks with respect to credit issues for clients with weaker financial conditions. Attempts are being made to reduce the negative impact of the Basel III rules on credit to SMEs, but it is said that such an impact is difficult to avoid. As a consequence, SMEs are expected to continue experiencing credit rationing in the future, as they did in recent years. The reaction of public authorities to the financial crisis combined with the funding gap faced by individuals and firms in the near past favoured the development of new financial circuits and funding alternatives.

- Another, albeit indirect, consequence of the financial crisis is the implementation of monetary policies aimed at stimulating economic growth. However, they led to a strong and lasting dropping of interest rates, with intense influence on the performance of financial investments.Within this context, investors are likely to seek investment alternatives or different asset classes, while individuals and firms in financial need possibly search for other sources of capital with lower intermediation costs. This helps explain why savers choose to invest in loans issued by P2P platforms and why individuals and SMEs, which need financial resources, apply to the same channels to get credit.
- Investors searching for new asset classes are typically represented by institutional investors (Namvar 2013). Their decision to turn to other asset classes has clearly also been conditioned by the sharp reduction in the outstanding securities on financial markets since the burst of the securitisation bubble in 2007.
- Finally, as a consequence of the financial crisis, banks faced strong reputation risks. This involved widespread concerns about bank stability and may have favoured the development of new intermediation circuits and of alternative finance, such as P2P lending. Reputation risk is not easy to measure because many factors come into play. On the one hand, the financial crisis spread differently across countries; on the other hand, savers, especially in the form of depositors of banks, are in almost every country protected by public authorities. However,

if most banking systems go back to stability, it is quite unlikely that reputation risk will be addressed in the future.

The second historical event that encouraged the development of alternative finance, and P2P lending in particular, is the growth of the web, with special reference to the success of social networks. Although we recognise the absolute importance of the internet in the expansion of P2P lending, we are not addressing this issue in the present chapter and we refer the reader to the analysis in Chap. 3. However, it must be said that the origins and growth of P2P lending occurred within this context. Undeniably, technological advances and the resulting changes in communication between distant individuals created an exceptionally encouraging environment for the development of innovative forms of interaction even within financial circuits. Conversely, it is more difficult to evaluate whether the potential growth of P2P lending, fostered by the two historical processes previously mentioned, has reached its peak or is destined to continue and cause deep and lasting changes in the structure of the financial system.

Lastly, two main aspects deserve citing:

- Enduring factors of competitive advantage probably exist for P2P lending with respect to traditional channels of financial intermediation. These factors are unrelated to the financial crisis and its consequences, as well as to the development of internet-based activities.
- The feasible competitive reaction of financial institutions, especially banks, to the expansion of P2P lending. This aspect also relates to the actions they may implement to take advantage of its benefits and to cope with its risks.

4.5 Competitive Advantages of P2P Lending

Compared with traditional finance, P2P lending presents advantages and issues. While competitive advantages are analysed in the present section, issues and risks related to it are investigated in the next section.

P2P lending is considered a more efficient funding source than the traditional banking channel because of its lower costs and this represents the first advantage usually associated to it. In other words, P2P lending envisages lower costs for the borrower, or rather lower cost for the borrower-return for the lender margin (Jeffery and Arnold 2014, p. 12). P2P lending platforms have strong competitive advantages in terms of cost structure because:

- 'Traditional' operating costs (personnel, buildings and equipment) being replaced by distribution and communication costs, which are lower and, more importantly, more flexible (Jeffery and Arnold 2014, p. 12; Kirby and Worner 2014, p. 22).
- 'Regulatory costs' that are extremely low for P2P lending platforms and exceptionally high for financial institutions. Regulatory costs are of a financial (capital requirements) and an operative nature (human resources and technology-related costs that should ensure compliance with complex and changing rules).

As regards traditional operating costs, the advantage of P2P lending platforms is evident, since their technological infrastructure can be managed with few personnel, in relatively simple legal entities and with incredibly low and flexible costs. Investment in the start-up phase is likewise low with respect to traditional banking intermediation, and consists essentially in technological equipment, especially the development of credit-scoring algorithms, and advertising costs.

When evaluating the cost structure of P2P lending platforms, it is of utmost importance to consider the quality of the credit issued explicitly, because it can impose heavy costs on the credit portfolio, such as from depreciation caused by delinquencies on loans. The critical aspect concerns whether P2P lending platforms have the skills needed to select borrowers while maintaining acceptable credit quality. In fact, P2P platforms might end up with a reduced credit quality, in turn exposing lenders to losses and subjecting themselves to instability, which can in the end reduce their competitive advantage with the traditional funding channel.

The great importance of credit quality to P2P lending calls for a necessary look at the borrowers' selection process, which involves a credit-scoring analysis. However, by virtue of the advent of P2P lending, it is

awkward to reach definite conclusions. As noted, on the one hand, a global view on the phenomenon is still lacking; on the other hand, the most recent studies largely concern only the two countries where P2P lending is developed the most, the US, particularly focusing on the two leading P2P lending platforms, Lending Club and Prosper.com (Mach et al. 2014; Everett 2015; Morse 2015), and the UK. Notwithstanding these limits, we attempt to define the main characteristics of the borrowers' selection process, which in P2P lending may be summarised as follows:

- P2P lending platforms generally make market choices that favour risk mitigation. For example, in the case of the business sector, they may only accept applications from firms that have been operating in their specific sector for a number of years and that can show constant good financial condition as well as reputation.
- When they receive applications, P2P lending platforms make specific formal checks aimed at complying with legal requirements, for example, on money laundering, and at identifying opportunistic behaviour on the part of individuals or firms with questionable or fraudulent purposes. These checks are of great importance when considering the difficulties that traditional banks have always had fighting the adverse-selection and moral hazard of applicants, which normally afflict newcomers in both local markets and elsewhere. Besides, the essentially domestic nature of P2P lending, the relatively undeveloped cross-border activity and the promotion of proximity relationships, that is, between individuals or firms belonging to groups or virtual communities, tend to limit damage from adverse-selection and moral hazard. Clearly, the role of asymmetric information can be very different if P2P lending extended its scope in terms of both volumes and geographical boundaries.
- In the creditworthiness assessment process, P2P lending platforms use credit-scoring models or algorithms, the details of which are not publicly known, but which presumably follow the logic of models used in consumer credit and financing of firms. The efficacy of these models is therefore crucial and the competitive advantage of P2P lending platforms is based on the creation of algorithms that make widespread use

of 'soft' information. Soft information can now be broadly used, especially in the case of individual borrowers (consumer or personal credit), due to the huge quantity of data available on the web, deriving from increasing interaction with users ('big data') (Gajda and Mason 2013, p. 12; Morse 2015, p. 24). In this regard, while it is reasonable to assume that big data will influence credit-scoring models and that P2P lending platforms are, by nature, inclined to use them, it is difficult to determine whether and to what extent using big data can be a long-lasting advantage for P2P lending platforms. Furthermore, big data may be used also by financial institutions, reducing the competitive advantage of P2P lending platforms.

- For the purposes of credit risk mitigation, a minority of P2P lending platforms use off-line components in their borrowers' selection process. Off-line components refer to the collection and filtering of applications by branches, agencies and financial consultants and to auditing activities delegated to professionals or external assessment teams. These factors allow a deeper analysis of specific borrowers' characteristics and add the 'human factor' to the assessment process. Of course, this approach involves extra phases that can be implemented only face to face, and reduces the cost advantages of P2P lending. The benefits of using off-line lies in a balance between higher structural costs and a more effective borrowers' selection process, which leads to higher credit quality. Incidentally, this approach can be of special importance to traditional financial institutions entering P2P lending market, which can therefore make the best of their competences and resources, spreading the costs over many activities.
- Some platforms favour lenders' portfolio diversification through risk mitigation measures. These actions include quantitative limits to the amounts invested per project and compulsory loan diversification. The latter entails forcing lenders to commit money to several loans, to avoid the complete loss of lenders' capital in case a borrower defaults (Kirby and Worner 2014, p. 25).

Relative to the development of the borrowers' selection model for P2P lending platforms, the literature indicates that a role is played by lenders' motivation (not limited to financial returns) on the one hand, and by special relationships established between individuals or firms

who systematically interact on the platforms, on the other. Interaction occurs mainly when individuals or firms become part of a virtual group or community and therefore tend to act permanently as lenders or borrowers within that group or community (Berger and Gleisner 2009; Namvar 2013; Belleflamme and Lambert 2014; Everett 2015; Morse 2015). This is particularly true when individuals or firms who gradually become borrowers or lenders in the same group coexist: an example is retailers and sales agents for different types of goods who belong to the same online group or community as their employees, clients and consumers. In fact, it is reasonable that the financial behaviour of lenders and borrowers is influenced by their virtual proximity and that the group or community may be constituted by individuals or firms who share interests not exclusively of an economic or financial nature, but who also have a sense of belonging. These relationships are likely to encourage correct behaviour of lenders and borrowers, as in relationship banking, even if they are not directly in contact one with each other, ultimately enhancing credit quality. Partial loss-sharing mechanisms that sometimes exist on P2P lending platforms share the same aim (Kirby and Worner 2014, p. 25). Within these online groups or communities, another crucial aspect is the psychological sense of distinction of lenders and borrowers compared with individuals or firms who turn to traditional financial institutions. If this feeling combines with the bad reputation associated with banks since the financial crisis, it can reinforce the idea of belonging to a more virtuous and ethical system, entailing psychological benefits for both lenders and borrowers and favouring high credit quality on P2P lending platforms.

Finally, by virtue of the financial nature of the P2P lending activity and the absence of direct contact between lenders and borrowers (apart from the case of partially off-line processes), P2P lending platforms cannot monitor the performance of the credit they issued afterwards, except by analysing the track record of each borrower's activity on the platform itself. Although this is of little importance when giving credit to individuals, which is managed in a standardised and computerised way even by banks, it is highly significant for credit to firms, where direct contact can reveal symptoms of problems at an early stage,

allowing action to be taken. This is especially significant for short-term credit, which is still uncommon with P2P lending platforms.

Assessing the efficacy of the selection process for borrowers on P2P lending platforms is difficult because of limited historical depth of the phenomenon, poor availability of homogeneous data suitable for comparison, as well as potential bias in the data, which are generally provided by P2P lending platforms themselves. Studies on P2P lending platforms in the US (Lending Club and Prosper.com) suggest that, so far there have been no significant episodes of instability; and that default rates have on the whole been low, although some platforms have experienced a drop in credit quality after the initial assessment. US-based P2P lending platforms were prompted also by regulatory interventions to implement some corrective actions in response to the decreasing credit quality, which apparently have been effective (Kirby and Worner 2014, pp. 23–24; Morse 2015, pp. 5–7). As regards other geographical contexts, little can be said about Europe, because of the limited scope of P2P lending activity, and China, where P2P lending is closely linked to financial and banking groups and, at the same time, presents overlapping borders with respect to other forms of alternative finance, such as microcredit.

The borrowers' selection process used by P2P lending platforms has intrinsic features that enable it to control credit quality over time and so exploit the advantages of their low-cost structure. Two important aspects relate to the motivations and behaviour of lenders and borrowers and to the use of big data. In general, all intrinsic factors are of great importance, especially to loans issued by P2P lending platforms, which are typically standardised and of smaller amounts than those issued by banks. However, while it is quite easy to assess the importance of these factors in consumer or personal credit, it is more difficult to evaluate their role in the business sector, due to the historical funding gap experienced by SMEs in particular. Moreover, the amount of information that characterises the 'loan relationship' in the case of traditional financial institutions is more likely to be a competitive factor that new competitors, such as P2P lending platforms, will hardly have at their disposal.

Obviously, the above analysis needs revision in light of future developments, as the specific context factors that favoured the emergence of

P2P lending might lose their importance as the P2P lending market becomes more mature.

The second competitive advantage generally recognised to P2P lending platforms is the speed of the borrowers' selection and loan issue procedures. In general terms, this can be labelled 'easy access' to the service (Jeffery and Arnold 2014, p. 13; Kirby and Worner 2014, p. 22). These features have proved to be of great importance to traditional financial circuits, where the increase in competitiveness and the presence of new competitors have prompted market agents to adopt the simplest and fastest possible procedures to assess borrowers' creditworthiness and trustworthiness and to issue the loan. An example is the almost computerised supply of consumer credit and personal loans via procedures that ensure maximum ease of access and speed of response. This results from the familiarity of users with technology and the development of effective algorithims for selecting borrowers, as well as the wide availability of databases and information services on users' financial behaviour (delinquency rates, insolvencies and so on).

In the case of P2P lending, speed and ease of access are emphasized due to:

- Lenders' experience of reduced access times to the financial circuit.
- Making use of informal instruments that are used daily on the internet. This creates familiarity even for users without any inclination to financial services.
- A lack of interaction with banks, which eliminates any potential psychological factor. The absence of such factors may be strengthened by the fact that users feel part of one or more groups that frequently interact through the web.

All these factors can be important to the launch of circuits where transactions are typically of small amounts.

Existing literature has not investigated the importance of these factors yet, although the banking sector has experienced cases where non-bank financial institutions are competing with traditional ones. These are, for example, the cases of housing finance and personal loans, where the

length and onus of the borrowers' selection and loan issue processes were minimised, thus enabling hitherto excluded individuals to gain access to credit. It should be noted that these non-bank financial institutions have often had to balance their competitive success with scarce credit quality, which led to episodes of instability. Nonetheless, these drawbacks do not undermine the importance of ease of access to credit and speed of borrowers' selection and loans issue procedures, which are important factors when assessing the role of P2P lending within the financial system.

The last competitive advantage of P2P lending is associated with lenders' responsiveness to a project's social or ethical nature, which is typically lacking in traditional banking. An example is the case of money to be collected to sustain activities of interest to the community, or related to social welfare. Another example is the case of projects with a social or ethical commitment. The previous examples all imply the 'sense of doing something useful' that characterises crowdfunding itself and contributed to its huge success. This helps explaining why some crowdfunding platforms, also P2P lending ones, have focused on specific market niches, for example, education, social housing, cultural and 'creative' activities (art, music).

4.6 Problems and Risks of P2P Lending

The competitive advantage and market growth of P2P lending may be limited by issues and risks that must be taken into consideration when investigating this funding alternative (European Commission 2013, pp. 7–8; Kirby and Worner 2014, pp. 23–8).

Problems that arise during a crowdfunding campaign can be summarised as follows:

- Issues relating to the efficacy of borrowers' selection and credit-scoring models were analysed in the previous section. However, one problematic aspect should be highlighted. Although they have a lower-cost structure, P2P lending platforms have to manage the whole borrowers' selection process in an impersonal way, without any direct contact between platform and borrower. Moreover, this process relies on information (albeit verified) provided by the borrowers themselves or

retrieved from big data. With specific reference to business borrowers, the absence of direct contact can be a limiting factor and may hide risks, especially in the case of borrowers that are new to the P2P lending market or that only use this alternative funding source. In addition, many countries prohibit P2P lending platforms accessing the credit registers normally used by banks, thus preventing P2P lending platforms from a deep knowledge of the borrowers' financial condition and creditworthiness.

- Loans issued by P2P lending platforms are unsecured, hence they carry more risks than loans issued through the traditional banking channel. The absence of direct relationships between borrowers and the P2P lending platform makes it impossible to determine whether borrowers hold additional financial resources that might be used to repay the loan.
- P2P lending platforms also lack information to use in the borrowers' selection process deriving from the 'one-stop-shopping' phenomenon, that is, the opportunity to give borrowers additional (financial) services to the pure lending activity. Furthermore, P2P lending platforms must outsource the litigation management of problematic or defaulting loans, thus losing another important source on information about borrowers.
- P2P lending is by nature highly specialised and implies all the typical risks associated with such a strategic choice. Moreover, P2P lending platforms do not sell other financial services to borrowers, thus limiting revenues to the fees paid by borrowers and lenders, whereas traditional financial institutions, especially banks, are usually oriented towards retail clients and cross-selling.
- Liquidity management is prominent in P2P lending and is critical for lenders and platforms themselves, although in the latter case differences apply according to the business model. Generally speaking, investments on P2P lending platforms are usually not traded before they expire. The creation of a secondary market for lenders to sell their loans to other investors would help overcoming this limitation, but secondary markets only work well when transactions are of significant volumes, many lenders/borrowers are involved, or for organisations that have direct access to external sources of liquidity, for example, the

interbank market and central banks as lenders of last resort. Securitisation of loans can be useful for P2P lending platforms to generate additional liquidity, but makes P2P lending platforms dependent on financial markets. However, it can cause instability if the growth rate of P2P lending platforms that securitise loans slows down or, more generally, liquidity dries up on financial markets. The global financial crisis provided many examples of lending-specialised financial institutions that suffered from a liquidity crisis due to a massive use of securitisation.

Turning to risks associated with P2P lending, we firstly recall technological risks, which can take several forms, for example, platform's malfunctioning, service interruption, identity theft and cyber attacks. Although it is true that technological risks affect financial institutions as well, they are of greater importance to P2P lending platforms, because their activity is exclusively web-based.

Other potential risks for P2P lending platforms relate to the regulatory issue of investor protection for non-professional investors. We refer the reader to Chap. 8 for an analysis of regulation of financial return crowdfunding. Here, we merely appreciate the importance of investor protection in P2P lending in light of the absence of public protection, lenders' independent decision-making process and willingness to satisfy personal, social and cultural motivations along with financial return objectives when investing on P2P lending platforms.

Nevertheless, a comprehensive analysis of the competitive advantages and disadvantages of P2P lending must consider also likely changes in the general framework. For example, advantages associated with the lack of regulation will certainly weaken, especially if P2P lending becomes a large part of the financial system and a potential source of systemic risk. Furthermore, P2P lending platforms might also decide to broaden the range of their activities (different types of crowdfunding and, eventually, other services), to limit the risks associated with specialisation, enter new markets and add more sources of revenues.

Finally, another aspect might play a decisive role. It relates to the future actions taken by traditional financial institutions, particularly banks, as well as newcomers.

4.7 Competitive Reactions and Positioning of Banks and Other Financial Institutions

Although banks and other financial institutions have so far shown a rather limited interest in P2P lending, they are unlikely to remain passive, given the intense growth P2P has experienced in the past few years. This forecast is grounded on experience of technology-driven changes in the banking sector, for example, the expansion of the range of services provided to retail clients via the internet, the development of online-trading platforms or the broad range of payment services, especially cash management and corporate banking activities for firms. These technology-driven improvements were then accompanied by the same uncertainties that relate to P2P lending nowadays, also with respect to competitive displacement that could have affected traditional intermediation circuits or the services they provided.

The reaction of financial institutions unfolded then in a way similar to what is happening now with P2P lending:

- Once the technological and legal foundations are set, innovators start offering the services in new forms, emphasising modernity and innovation. Even though these services are already offered, they are presented as 'new' and create expectations of high profitability. However, it may happen that the new technology reveals itself to be useless, as, for example, in the case of many remote banking initiatives tried out in the pre-internet era, or that users are not paying remunerative prices for these services.
- Financial institutions, especially large banks, react slowly to these newly introduced technologies or services, because of their organisational complexity and long-term competitive strategies. Nevertheless, they have a better knowledge of the market, and thus suggest solutions that will last on both a technological and an economic level.
- After technology consolidation has occurred, banks become more interested in the new technologies or services. At this point, however, innovation generally relates to process more than to product/service and profitability gives way to other aims, such as service efficiency and

quality, consolidation of relationships with clients, cross-selling of products or services and reputation. In this context, the raison d'être of the innovators, especially highly specialised ones, quickly tapers off, and they often end up abandoning the market or being bought out by banks that are making up for their inertia.
- At last, the technology is mature (as far as 'mature' can be used to refer to something as dynamic as information technology) and banks fully internalise it, making it part of their infrastructure.

On the whole, the spread of technology and of the internet shows an initial inertia on the part of banks and other financial institutions, which then take the opportunities presented by technological innovation. In contrast to the few dynamic innovators that focus on reputation, most financial institutions react slowly and search for widespread and widely accepted solutions. As a consequence, the introduction of new technologies or services affects service provision and causes organisational and economic changes. If P2P lending continues to grow and becomes a widespread funding source, banks will not fail to investigate this activity and enter the P2P lending market (Morgan Stanley 2015, pp. 30–1).

P2P lending may also turn out to be such a major innovation for the financial system with unique competitive advantages that it becomes a potential 'disruptive innovation' for traditional financial intermediation. However, innovation brought about by P2P lending is unlikely to cause the level of change in the banking and finance sectors that has been seen in the industrial sector. This is mainly because of the nature of the innovation, which, in the financial sector, concerns processes more than products. The disruptive effect of the technology is then reduced; furthermore, since the financial industry provides clients with services, innovation is more difficult to protect, for example, through patents. Second, there is the ability of financial institutions, especially banks, to react to the innovation itself. Their reaction depends on the way they control the market due to:

- Their strong establishment within the financial markets and the complexity and stability of their relationships with clients.

- The role they play in the system of payments, nationally and internationally, which is deemed critical and unique.
- Their role as 'privileged' counterparts of public authorities with respect to liquidity management for the wider economic and financial system. This role benefits them in guaranteeing access to the lender of last resort function of central banks and charges them through regulation costs.
- Their market power, deriving from their economic size and opportunity to access funding on international financial markets.

Although one may believe that the global traditional banking system was weakened by the events of the financial crisis, and thus it is more exposed to competition from new funding channels, it is worth noting that:

- The crisis did not affect banking systems globally in similar ways. In fact, some banking systems were hardly affected by it, while others took advantage of events and underwent restructuring and consolidation processes.
- Large banks suffered damage to their reputations, but their market power has not been affected. Conversely, bail-outs promoted or endorsed by public authorities in many countries increased the market power of many large banks.
- Despite having to cope with one of the worst financial crises in history, banks are still the main actors in intermediation circuits.

It follows that banks, faced with P2P lending, are unlikely to continue showing a lack of interest in this phenomenon because they face a risk of competitive displacement. On the contrary, they will probably take up this innovation, as they have done with other forms of alternative finance, in two main ways:

- Entering the P2P lending market directly. This can be done by buying out existing P2P lending platforms and incorporating their activity into the banks' organisational structure.
- Providing operating and advisory services to P2P lending platforms.

Banks' decision to enter the P2P lending market directly might be driven by three aims, which can coexist to some degree:

- General direct-business aims. To buy existing P2P lending platforms or to create new ones would complete the vast range of distribution channels of banking and financial services traditionally used by banks. These channels would not only be added to existing ones, but incorporated in the organisational and distribution structure of banks. An area where integration of distribution channels will work perfectly is that of personal or consumer financial services, whose processes are highly computerised.
- Selective entry, with the aim of exploiting credit market niches. These are presumably those where users are already familiar with social networks or those whose activity is closer to the original aims of crowdfunding, for example, social lending, ethics-related projects, education and culture.
- Entry with the aim of expanding outside the usual scope of banking activity. In other words, banks may be willing to enter new market segments but to avoid regulatory costs, especially those in terms of capital requirements imposed by the Basel III framework. Of course, this aim must be pursued within limits set by rules on banking activity and, more generally, credit markets, so as to avoid the difficulties caused by the shadow banking system in the financial crisis.

On the other hand, in case banks choose to collaborate with existing P2P lending platforms, their interest in P2P lending revolves around the services that P2P lending platforms can acquire from banks. These services are of an operating and an advisory nature. Operating services include, for example, financial flows and liquidity management, securitisation and litigation management of problematic or defaulting loans. Advisory services relate to, for example, information management and borrowers' selection processes. However, we can only indicate the likely existence of this collaboration between banks and P2P lending platforms, the extent of which is difficult to assess at present.

Finally, the speed of entrance by banks in the P2P lending market should be considered. It seems clear that the process will occur over a

prolonged time and include searching for adequate technological solutions and research on market outlook. As noted, it is also likely that it will relate to the main P2P lending platforms, by buying them out, acquiring stakes in their capital or making commercial agreements (joint ventures) with them (Morgan Stanley 2015, pp. 34–5; Mach et al. 2014, p. 10).

4.8 The Role of Institutional Investors and Internet-Based Service Providers

The evolution of the P2P lending market is not only associated with the competitive reaction of banks and traditional financial institutions in general. In fact, banks and financial institutions form part of the broader category of institutional investors. By far, we focused our analysis on them; we should now turn to other institutional investors that—along with, mainly large, internet-based service providers—can play a significant role in P2P lending market. However, it should be said that the dynamics that characterise institutional investors, apart from banks and financial institutions and internet-based service providers, are still in their early stages and differ across countries.

As regards institutional investors other from those analysed in the previous section, we focus on mutual funds and long-term investors. Mutual funds, especially innovative and highly specialised funds, which are quite similar to 'hedge' funds, are showing more interest in P2P lending as a new asset class. Namvar (2013) has focused on choosing P2P lending as an alternative asset class, which was favoured by the reduction in outstanding securities with a high-risk, high-return profile on financial markets since the financial crisis. The interest in P2P lending as a new asset class can also be caused by the nature of these assets (loans issued by the P2P lending platforms and equity stakes in the P2P lending platforms' equity capital), the existence of a borrowers' selection process already performed by P2P lending platforms and mutual funds' knowledge, competences and assessment skills. Furthermore, mutual funds are likely to use a 'cherry picking' approach, that is, to make a specific selection among loans that different P2P lending platforms offer, to select the most appealing investment on a risk/return basis.

Long-term investors include mainly pension funds and foundations and usually invest on financial markets with a low-risk propensity. Thus, they may be interested in financial return crowdfunding, and P2P lending in particular, as an asset class to invest in, in an attempt to diversify investment portfolios.

Although it seems much more obvious that mutual funds and long-term investors will prefer equity shares, and so equity crowdfunding, there is no reason to exclude loans issued on P2P lending platforms from their likely asset classes. Actually, institutional investors have already signalled their interest in the P2P lending industry, particularly in the US. Morgan Stanley (2015, p. 9) reports some estimates of the weight of funding deriving from institutional investors in P2P lending and their presence has raised concerns about whether financial return crowdfunding will survive in its original form. However, it is difficult to understand the extent to which the presence of institutional investors is driving a widespread and definitive institutionalisation of financial return crowdfunding, or whether institutional investors only entered the financial return crowdfunding market purely to diversify their portfolios. Sect. 4.9 focuses on this aspect.

The internet-based service providers' category is even broader than that of institutional investors and its boundaries are difficult to set because it comprises such heterogeneous operators. In general, managers of technology services, databases, search engines, social networks as well as large e-commerce professionals fall into the internet-based service providers' category. Independently of the features that characterise each provider, the above mentioned operators share some commonalities, which are large size, global strategic vision (or at least presence on large markets) and high technological capacity. In addition, they are all dynamic young firms, set up in the internet environment, stationed at critical nodes of the internet network and endowed with great financial resources. These internet-based service providers have recently shown increasing interest in P2P lending. Although their strategic focus may seem distant from P2P lending and financial return crowdfunding in general, this new funding source entails one feature that can be of absolute interest to internet-based service providers, that is, the involvement of masses of users who are regularly active on the web. In some cases, the interest

of internet-based service providers has translated into the acquisition of shares or investments into loans issued by P2P lending platforms (Mach et al. 2014, p. 9). In addition, internet-based service providers have long been indicated as likely new actors in the payment system, which represents the basic necessary infrastructure of the financial system, thus likely becoming competitors for banks.

Finally, as noted, the likely competitive reaction of banks and the growing attention of institutional investors and large internet-based service providers has raised concerns about a potential institutionalisation of P2P lending. If this happens, there may be several consequences: (1) gradual loss of dynamism and entrepreneurial spirit in the business sector, which are key to the US business culture; (2) disaffection on the part of the internet community; (3) banks' reduced interest in P2P lending as part of their complex strategies; and (4) heavy decline of a spontaneous phenomenon, that of financial return crowdfunding, and P2P lending in particular, which can be interpreted as 'financial democracy'. The scenario involving an institutionalisation of P2P lending therefore suggests a different path for the development of financial return crowdfunding compared with the potential for a disintermediation of the banking sector and a decrease of banks' market power.

4.9 Conclusions

To conclude the analysis of potential competitors for the P2P lending activity, we present some reflections. First, we consider the condition of P2P lending with respect to other types of crowdfunding. While the aim of donation and reward crowdfunding was to satisfy financial needs not necessarily related to a business idea (financing a participant in a London marathon or recording a music album) and no pre-existing competitors to these funding channel existed, P2P lending entered a traditional and highly consolidated sector, which is part of one of the largest existing markets, the credit market. Although it has so far concerned only limited activity within this market (unsecured loans for individuals or SMEs), it competes in a major business area in terms of volumes issued and existing competitors. The latter are mainly banks, whose core business is

comprised of collecting money and issuing loans to clients. It is therefore clear why there has been much interest in gaining an insight into the potential and outlook of P2P lending, especially in the context of competitive relationships with traditional financial institutions. Hence, the debate has focused on the potential for a disruptive innovation associated to P2P lending and on its disintermediation effect on banks.

A second point of interest concerns the potential development of the demand side. Current research suggests that P2P lending is expected to grow. The increase is expected not only from the existing trend, but also because such lending is currently limited to a few countries. Hence, development can come not only from the growth of P2P lending in other advanced economies, but also from its global expansion into major emerging countries. This global growth has already, though slowly, begun. Moreover, the increase in P2P lending is fed by the fact that it is an internet-based activity, which makes it unlikely to remain limited to a few countries.

However, the size of P2P lending crowdfunding is still insignificant compared with the credit issued through the traditional banking channel, and growth outlook is highly uncertain. Uncertainties are of an endogenous and an exogenous nature. Endogenous factors are intrinsic to the P2P lending activity. The most important endogenous factor is probably the ability of P2P lending platforms to face the current growth phase and maintain control over a mass phenomenon while avoiding instability. Indeed, the growth of P2P lending within the credit market can only consolidate if all P2P lending platforms, not just the first comers, maintain high credit quality through the implementation of optimal borrowers' selection procedures. Again, the recent origin of the phenomenon prevents any precise considerations; however, the history of finance is littered with cases of innovative actors that had a great initial competitive success, but ended up in difficulty because they could not handle the growth of operating volumes and to manage asset quality.

In any case, it is necessary to determine to what extent the activity performed by P2P lending platforms is compatible with the likely potential global nature of the phenomenon. In other words, P2P lending has the potential to become widespread in many countries, but its recent history has shown it to be a domestic activity. In fact, it is difficult to combine

the proximity of P2P lending (not in a physical sense, but due to interests and values that participants share) with its expansion to new countries or the development of cross-border transactions. Furthermore, cross-border activity might be conflicting with the skills necessary to select borrowers and manage the platforms themselves. An example of the effect of cross-border activity is what happened during the global financial crisis: banks that had previously expanded into new markets and countries experienced severe problems with credit quality management, despite their experience and resources.

Exogenous factors are also labelled external or market factors. These concern assessing whether and to what extent P2P lending will continue spreading in the future even though some factors that facilitated its growth might fade. The latter refer to the low level of regulation, the existence of a major financial gap that characterise specific borrowers (SMEs), the very low interest rates that reduce the gross margin of main competitors, and so on.

Third, it is worth considering the outlook on the supply side. It seems likely that if the market trend continues, competitors will not be unresponsive. As noted, this suggests focusing on the role of banks and financial institutions as well as of institutional investors and internet-based service providers. Banks and financial institutions have a stronger competitive advantage on specific activities than P2P lending platforms (financial flows and liquidity management, litigation management of problematic or defaulting loans). On the one hand, these competitors cannot fail to perceive P2P lending as disintermediating the financial system, hence as a potential threat. On the other hand, banks and financial institutions are likely to exploit P2P lending as a way to enter new market segments and to develop more efficient lending procedures. Also, institutional investors and internet-based service providers will play a crucial role if they decide to enter the P2P lending market, either as lenders or borrowers, as part of their portfolio diversification approach.

If estimates on the demand and the supply side are confirmed, P2P lending will probably evolve further. On the one hand, it will expand its geographical boundaries, that is, growth in so far little served countries and transnational activities, and enlarge the services it provides to the crowd, that is, offerings of new financial products, implementation of

segmentation policies according to the type of lender/borrower, entry into market niches. On the other hand, it will presumably attract interest from traditional financial institutions and newcomers in the financial sector.

Finally, estimates on the future outlook of lending crowdfunding as a whole, not limited to P2P lending alone, should be suggested. Lending crowdfunding is intended here as the activity originally performed by the first comers into this new funding channel that boosted widespread users' participation through peer-to-peer activity. This last aspect of interest relates to the institutionalisation of P2P lending crowdfunding and concerns whether and to what extent P2P lending platforms that originated the lending crowdfunding phenomenon will be the main if not the only actor in the market. Conversely, they might have to face the increasing presence of banks, financial institutions, institutional investors and newcomers. Although making considerations on this last aspect of interest is difficult at such an early stage, it seems clear that an initial institutionalisation of lending crowdfunding is under way. It is therefore reasonable that in a context characterised by growth, traditional financial institutions and perhaps also newcomers in the financial system will enter the P2P lending market, either acquiring P2P lending platforms or setting up their own. In addition, institutional investors will consider loans issued by P2P lending platforms as an interesting new asset class to diversify their portfolios. The role of institutional investors are likely to attenuate the original features of the phenomenon, though P2P lending can continue existing in its original forms within specific geographical areas or market segments.

Indeed, if existing trends continue, P2P lending can, at least partly, lose some of its distinctive characteristics and become part of the convergence of mass markets and big economic operators. This convergence concerns the infrastructure of modern productive systems and the various resources (human, technological and financial) that drive them. This path of convergence resembles what has happened in the history of industry and finance: the dynamism of the first innovators is taken over by larger, more complex and organised actors, as growth consolidates. How long it will take to go from the development stage, prerogative of innovators, to the consolidation phase, led by large competitors, is difficult to estimate.

5

How to Obtain Credit from Alternative Funding Agents

Giuliana Borello

5.1 Introduction

Financial return crowdfunding provides an alternative funding source to traditional forms of credit. In particular, peer-to-peer (P2P) lending allows individuals to lend and borrow directly among each other without the mediation of a credit institution. Therefore, in P2P lending platforms, lenders give money to borrowers, becoming creditors of the individuals or companies requesting funding online. As part of the shadow-banking sector, the first P2P lending company to launch was Zopa in the UK in February 2005. Today, many online P2P lending platforms have emerged worldwide, for example, Prosper.com in the United States, Zopa in the UK and Japan, CommunityLend in Canada, and PPDai.com in China. According to Morgan Stanley research, this trend is playing out globally (Morgan Stanley 2015). In 2014, in the US, Australia, China and the UK, P2P lending platforms generated loans for almost $24 billion. The effect of this type of lending on the financial system can be significant, and represents an important field of research. In addition to crowdfunding, some P2P lending platforms permit companies to raise money for their business through a new form of loans, mini-bonds.

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Identifying the specific characteristics of alternative funding practices (P2P lending and mini-bonds) is an important step towards recognising the features that enable lenders and borrowers to deal with each other directly via online platforms, thus facilitating credit within the European P2P lending market. This chapter seeks to understand which factors encourage borrowers and lenders operating through P2P lending platforms, to grant academics and practitioners a way to understand whether the P2P lending market has the capacity to homogenise, and to allow regulators to understand whether a funding model is being created that needs to be regulated at the European level.

This chapter firstly provides a synthesis of previous research, investigating the factors that influence lenders to invest through this unregulated instrument, as well as the factors that influence borrowers to post their financing needs online, and consequently, their strategies for attracting investment. Like other online businesses, a fundamental problem in P2P lending is information asymmetry between lenders and borrowers. As such, the P2P lending platform plays an important role in assessing projects before uploading them (ex-ante screening) and in providing adequate information during the life of the loan (ex-post monitoring). Obviously, the P2P lending platform has an economic interest in increasing the number of loans it posts; thus, each platform defines a marketing and communication strategy to empower borrowers to construct their financial identities (based on soft and hard information), and lenders to make complex financial decisions. In performing this activity, the specific characteristics of these alternative funding platforms should be clearly identified by European policymakers that are either defining or adjusting an appropriate regulatory environment.

Second, this chapter analyses a sample of P2P lending platforms with legal residence within the European Union, acknowledging the lack of a complete list of European P2P lending platforms. The analysis investigates the best practices operated by the platforms, which need to construct a long-term strategic relationship with their clients to ensure regular participation and to establish their own presence in the P2P lending market. European regulators need to consider the business model of P2P lending platforms to define or adjust policy that can ensure a secure P2P lending market and the growth of the P2P lending market itself.

Moreover, given the well-known paradigm associated with capital access, consumption and gross domestic product (GDP), such policy could play an important role in supporting the P2P lending phenomenon and therefore, economic growth. This paradigm is a great deal stronger if the borrowers are small and medium enterprises (SMEs) that are seeking capital as well as a way to engage more deeply in their business. On the contrary, only a limited number of European countries have regulated this innovative financial market with respect to investor protection and to foster retail investment.

As stated, a new form of debt has emerged in Europe in the past few years, mini-bonds, which give companies the opportunity to raise money in a way easier than through corporate bonds. The final section of this chapter discusses this alternative finance instrument and gives an insight into some of the newly created markets that allow investors to buy mini-bonds directly or through a fund managed by specialists who conduct an ex-ante business evaluation and spread the level of risk.

The chapter is organised as follows. Sect. 5.2 provides a literature review. Sect. 5.3 presents the methodology for the analysis of the European P2P lending platforms' business model and discusses the results. Sect. 5.4 discusses mini-bonds as an alternative funding opportunity for business. Sect. 5.5 presents the conclusions and policy implications.

5.2 Literature Review on P2P Lending

Although crowdfunding in the form of P2P lending originated in Europe in 2005, the phenomenon has now spread to the US and China, and is quite extensive in European countries, particularly in the UK. In the past five years, P2P lending platforms have expanded across several European countries whose national differences influence the success of the P2P lending phenomenon. Being a very recent phenomenon, existing literature on P2P lending is scarce, is generally found in the form of working papers, and is pretty much limited to the US context. However, P2P lending, and crowdfunding in general, are expected to become an important field of research.

The decline in the role of banks as intermediators of credit risk (Allen and Santomero 2001) has directed attention to the role of P2P lending markets, where P2P lending platforms replace banks as the intermediary, and enable the brokerage of consumer loans to occur directly between borrowers and lenders (Hulme and Wright 2006; Meyer 2007). Hence, it is relevant to investigate the factors that guide lenders to invest their savings through an unregulated instrument and borrowers to post their financing needs and strategies for attracting investment online. As Belleflamme and Lambert (2014) suggest, entrepreneurs prefer to finance their companies through a P2P platform not only to raise money but also to obtain the attention of potential clients (thereby reducing marketing costs) and feedback related to the business idea (as market test and product/service validation).

As stated, a fundamental problem in P2P lending is information asymmetry between lenders and borrowers. As such, the P2P lending platform plays a vital role in assessing projects before they are uploaded (ex-ante screening) and in providing adequate information during the life of the loan (ex-post monitoring). The platform has an economic interest in increasing the number of loans it matches. Therefore, P2P lending platforms need to be able to define marketing and communication strategies to help borrowers construct their financial identities and lenders to make complex financial decisions.

Along with focusing attention on the problems related to information asymmetry between lenders and borrowers, academic research addresses the factors affecting lenders' bidding strategies. For example, Freedman and Jin (2008), Barasinska and Schäfer (2010) and Pope and Sydnor (2011) find that the offered interest rate and the loan amount tend to increase the funding success rate. Klafft (2008), Adams et al. (2009) and Yum et al. (2012) find a strong effect of credit scores and financial history on the funding success rate. Combining hard information (wage, age, job, past delinquencies, and so on), obtained through traditional credit reporting agencies, with soft information (funding purposes, project description, credibility of the borrowers and perception of the borrower's trustworthiness) can enhance lenders' ability to assess risk. The biggest P2P lending platforms such as

Prosper.com[1] (US), Lending Club[2] (US) and PPDai.com[3] (China) have understood the importance of soft information in P2P lending and include such information on their platforms.

Pope and Sydnor (2011), Ravina (2012) and Gonzalez and Loureiro (2014) focus on the determinants of access to credit on Prosper.com, and in particular, on how signals from pictures that reveal demographic characteristics of borrowers such as race, age, gender and beauty affect the likelihood of receiving funding and the interest rates to be paid by borrowers. They find disparities related to ethnicity and beauty in the lending process. However, Ravina (2012) also finds that there is no evidence of a difference in default rates between loans made to black and white people. Other research has found some evidence for the effect of demographic information and soft information (such as friendship or pictures) on funding success rate (Freedman and Jin 2008; Collier and Hampshire 2010). In addition, culture, use of different technologies (such as computer communication), infrastructure and laws and regulations have been found to have a great effect on the funding success rate.

Using Prosper.com, Zhang and Liu (2012) find evidence also of 'rational herding' among lenders, meaning that almost fully funded borrowers tend to attract more funding. This occurs as lenders rationally attribute a listing's herding momentum more to its public attributes (such as high credit risk and high debt to income ratios) than to the borrower's intrinsic creditworthiness (such as endorsements from friends and group membership).

As demonstrated, much of the literature focuses on lender and borrower behaviour, but it must be acknowledged that the interactive function among users is defined by the P2P lending platform. In the wake of the preliminary paper of Berger and Gleisner (2009), this chapter focuses on the role of P2P lending platforms that emerges in the interaction between borrowers and lenders in the online P2P lending market.

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[1] Prosper.com allows members to create networks of friends who endorse each other.

[2] Lenders on Lending Club can see whether they have a common background with borrowers.

[3] PPDai.com develops forums for their members to share their experiences, stories and advice.

5.3 Analysis of P2P Lending Platforms

Identifying the characteristics of the alternative funding practices of European P2P lending platforms is an important step in understanding the features that enable lenders and borrowers to deal with each other directly, thus facilitating credit within the European P2P lending market. This section aims to create an understanding of the factors that encourage borrowers and lenders to operate within P2P lending platforms, as well as the motivation of all subjects (borrowers, lenders and platforms) that operate in the P2P lending market. Gaining such insight is important for understanding whether the P2P lending market needs to be regulated at the European level.

5.3.1 Sample Selection Process

Given the lack of a complete database that provides information on Europe's P2P lending platforms, three websites offer such information to create our sample. In particular, we included P2P lending platforms that have legal residence within the European Union listed on www.thecrowdcafe.com, www.crowdsourcing.org and www.wiseclerk.com.

From our initial sample of 93 European P2P lending platforms, we excluded the following P2P lending platforms:

- 11 that perform microcredit activity.
- 14 that are no longer active.
- Four with reduced activity.
- 13 whose website has no English section or information in English, even if there is a link for the English language. We excluded these platforms to avoid influencing our dataset with information for which translation is a critical issue; moreover, if the platform's website does not provide an English translation, it might mean that it exclusively operates at domestic level so it reduces the dimension of the 'crowd'.

Our final P2P lending sample consisted of 51 European platforms (see Table 5.1). The UK is the most represented country in our sample with 37 P2P lending platforms. This is in part due to the exclusion of platforms

Table 5.1 European P2P lending platforms in the sample

Country	Platform
Belgium	Look & Fin
Estonia	Bondora, Estateguru, Investly
Finland	Fellowfinance, Fixura
France	Lendix
Germany	Bitbond
Ireland	Cofunder
Italy	Prestiamoci, Smartika
Latvia	Mintos
Spain	Loanbook
Sweden	Trustbuddy
UK	Abirate, Archover, Assetz Capital, Bank on Dave, BridgeCrowd, CapitalStackers, Crowd2Fund, Crowdproperty, Folktofolk, Fruitful, Funding Circle, Funding Knight, FundingEmpire, Fundingtree, Invest&Fund, Landbay, Lending Works, LendingCrowd, LendInvest, Madiston LendLoanInvest, MarketInvoice, MayfairBridging, Money & Co., Moneything, Platform Black, Proplend, QuidCycle, RateSetter, Rebuildingsociety, Relendex, Saving Stream, StudentFunder, ThinCats, UK Bond Network, Unbolted, Wellesley & Co., Zopa

that do not provide information in English. The other countries represented are Belgium, Estonia, Finland, France, Germany, Ireland, Italy, Latvia, Spain and Sweden.

5.3.2 Methodology and Results

This research aims to capture 85–90 % of all online and active platforms that provide an alternative funding source in Europe through P2P lending, peer-to-business (P2B) lending, invoice trading, and debt-based securities. To implement the analysis, three sets of relevant variables were identified that reflect the characteristics of the platforms and of the counterparties involved, borrowers and lenders.

Using the variables presented in Table 5.2, we present the results of the analysis on the characteristics of the platforms. The analysis of our sample demonstrates that the P2P lending phenomenon was initiated in the UK, where the first P2P lending platform (Zopa) was created in 2005. In the first years after establishment, P2P lending platforms operated principally

Table 5.2 Main features of P2P lending platforms

Platform characteristics	Description
Country	Country in which the platform is legally established
Activation date	Date when the platform was established or began its activity
Founders	People who set up the platform
Active in other countries	Indicates whether the platform is active in other countries and where it is active
Funding model	All-or-nothing model or keep-it-all model
Business model	Client segregated account model, notary model or guaranteed return model
Platform's participation	Indicates whether the platform invests as a lender in projects it posts
Lender's protection	Unsecured model, secured model or protected model
Interest rate	Auction compared with market
Allocation	Lender's choice or automatic diversification
Credit rating classes	Number of rating classes identified by the platform to classify the borrower
Secondary market	Whether the platform allows the buying or selling of loans on a secondary market

outside financial regulation through 'shadow banking'. The lack of regulatory barriers and the low cost of establishing a P2P website made it relatively easy to begin a P2P lending business.

However, recently, the number of P2P lending platforms has increased throughout Europe (Fig. 5.1), principally in market-based financial systems such as that of the UK. Further, the creation of the majority of European platforms overlaps with the 2007–2008 global financial crisis and credit crunch in these countries.

Fig. 5.1 presents the number of P2P lending platforms in our sample corresponding to their year of establishment as well as the cumulative number of P2P lending platforms (right scale). The increase in the number of P2P lending platforms since 2011 is driven by the rise in the number of UK-based platforms. The criteria of our sample selection of platforms in the English language might have limited this analysis given that it has geographically restricted the sample to platforms that are operating mainly in the UK. Over the past few years, several P2P lending platforms have been established in the UK but not all of them have achieved success. Fig. 5.2 presents for each year the number of

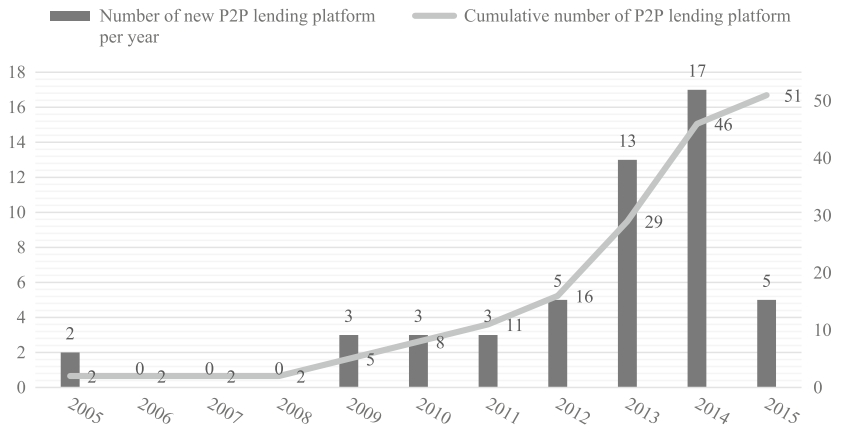

Fig. 5.1 P2P lending platforms in Europe by year of establishment. *Source*: Author's calculations

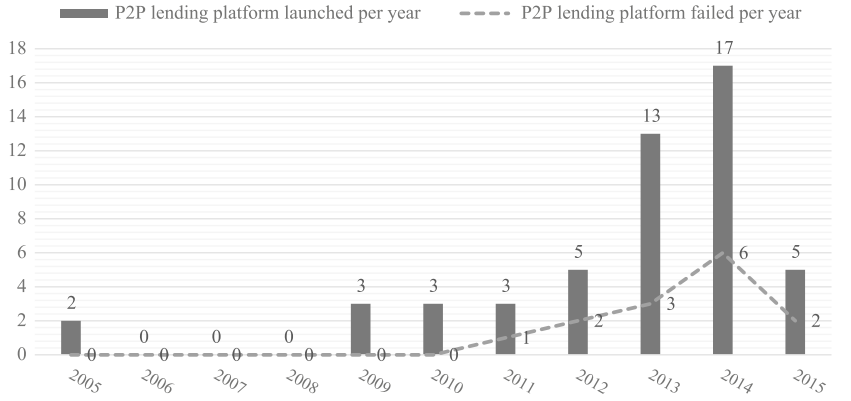

Fig. 5.2 P2P lending platforms launched and failed in the years 2005–2015. *Source*: Authors' own calculations

unsuccessful P2P lending platforms in comparison with the platforms launched and analysed in this section.

All the failed P2P lending platforms were established in the UK, where there is a strong competition between platforms. In fact, most platforms in the UK operated for less than one year, with only three (YesSecure, YouAngel and BigCarrots) having operated for almost four years.

Individuals with primarily financial or information technology (IT) backgrounds founded 34 of the 51 sample P2P lending platforms. Nine platforms were established by companies, of which only two operate in the financial sector.

The variable that proxies the internationalisation of the platforms' activity reveals that the platforms principally have domestic interests. Only nine P2P lending platforms accept borrowers or lenders from other European countries, but only two of them accept counterparties also from non-European countries. An exception is the German platform Bitbond, which uses the digital currency Bitcoin.[4] As such, only 18 % of the European P2P lending platforms in our sample operate at an international level, which contrasts with one of the main features of crowdfunding, the lack of barriers.

Fundraising can take place through two models: 'all-or-nothing' or 'keep-it-all'. In the former model, if borrowers do not reach the target amount of the loan, they do not receive any money and all money is returned to lenders. In the latter model, the borrower is permitted to keep all the funds raised, even when the target loan amount is not reached. Fifty-seven per cent of the platforms opt for the all-or-nothing model, while eight per cent of the platforms adopt the keep-it-all model. The remaining 35 % of the platforms do not provide this information.

The business model of the platform is another variable in our analysis.[5] Most of the European P2P lending platforms in the sample (38) adopt a client segregated-account model, as suggested by recent UK regulatory law. Five platforms choose the notary model and play a central role in issuing the notes to lenders, while only two European P2P lending platforms guarantee lenders a minimum return (guaranteed return model).

We also found evidence of an interesting practice related to the participation of the platforms in each loan request accepted by the platform and published on the platform website. To demonstrate to lenders greater involvement and sponsorship through their actions, six platforms

[4] Bitcoin is a decentralised digital currency that enables instant payments to anyone, anywhere in the world. Bitcoin uses P2P technology to operate with no central authority. Transaction management and money issuance are conducted collectively by the network.

[5] For a description of the business model of P2P lending platforms see Sect. 4.2.

declared having invested a fixed percentage on each loan, thus sharing the risk with lenders.

P2P lending activity is characterised by the occurrence of credit risk on the part of borrowers. Therefore, it is important to evaluate which guarantees the platforms provide to lenders. In particular, borrowers might be asked to provide real or personal guarantees (secured model), or the platforms could establish a provisional fund to which lenders could apply if the borrower is insolvent (protected model), or the platform may not establish any guarantees for lenders (unsecured model). While, in the first years of the P2P lending phenomenon, most platforms were unsecured, a recent development has been conversion to the protected model (7 platforms) and secured model (11). In fact, only 18 % of the P2P lending platforms in the sample use an unsecured model.

The interest rate is determined either through an auction or by the platform in accordance with the market interest rate. If this is executed through auction, both borrowers and lenders participate in a competitive bidding process. If the platform determines the interest rate, it is set depending on market information and the borrower's specific credit risk (based on hard and soft information). In our sample, 22 P2P lending platforms determine the interest rate through auction, while 28 determine the interest rate using the market interest rate as benchmark. Only one platform provides participants with the opportunity to select the method of setting the interest rate.

Allocation of investments can come through automatic diversification, where the platform itself matches borrowers' and lenders' requests, thus diversifying the lender's portfolio. Under the other option, lender's choice, lenders can choose which initiatives to support. Twenty-four of the P2P lending platforms in the sample prefer the latter method, while 10 platforms use automatic diversification. Fourteen platforms allow lenders to choose between automatic diversification and lender's choice.

To support the lenders in their investment choice or to appear more transparent, 12 platforms also declare the number of credit rating classes applied to each loan request. The number of credit rating classes ranges from three to nine on the platforms in the sample. As such, it appears that European P2P lending platforms do not use the same method of credit assessment.

Table 5.3 Borrowers' characteristics

Characteristic	Description
Target borrowers	Defines the borrowers allowed on specific platforms
Sector	Sector in which the borrower operates
Amount	Minimum and maximum loan amounts
Loan maturity	Minimum and maximum loan maturity (measured in months)
Early repayment	The borrower may be able to repay a loan before its maturity
Fees	Application fee, annual management fee, late-repayment fee or enrolment fee

The role of the secondary market is relevant in reducing credit and liquidity risk, as well as in fostering investments. Seventeen European P2P lending platforms establish a secondary market in which lenders can sell their loans before they come to maturity.

The second part of the analysis focuses on borrowers' characteristics since it is a necessary step towards understanding which initiatives can be funded through P2P lending in an attempt to fill the funding gap of the potential borrower (see Table 5.3).

The P2P lending market seems to be segmented in P2P retail consumer lending and P2B lending to reflect the different borrowers and consequent funding mechanisms and financial purposes. In our sample, 12 platforms provide funding exclusively to individuals, 24 platforms provide funding solely to companies, and 14 platforms accept funding projects from both individuals and companies. Since 2011, the prevalence of P2B lending has grown, particularly in the UK. Recently, a sector of specialisation by platforms has emerged that is not related to the type of borrower (that is, individuals or companies), but to the aim of the loan (properties, invoice trading, factoring). Most P2P lending platforms that began activity in the past two years provide borrowers with a property (real estate) guarantee for the loan.

The minimum and maximum amounts of funding set for the borrowers was found to depend on whether the platform accepts individual and/or company initiatives for crowdfunding. For individuals, the minimum range is between €100 and €2,000 (equal to £74–£1481[6]), while the maximum range is between €600 and €33,760 (£444–£25,000). For companies, the minimum range is between €1,350 and €337,600

[6] The exchange rate used throughout the chapter was 0.7405 (euro to sterling).

(£1,000–£250,000) and the maximum range is between €100,000 and €4.05 million (£74,050–£3 million).

For the majority of European P2P lending platforms, the loan has a minimum maturity of 1–12 months and a maximum maturity of five years. Only three platforms have a maturity longer than 20 years, but the loans provided are backed by prime mortgages. The opportunity for the borrower to reimburse the loan before it reaches maturity is popular among P2P lending platforms; in fact, 23 platforms make a prominent declaration on the website that the borrower can repay the loan before the schedule time, and seven of these allow prepayment without penalties.

Fees for borrowers are different among the platforms and are updated continuously. The main fees are:

- The application fee: this is charged to cover some of the costs involved in processing the funding. The fee is determined either as a percentage of the required amount of the loan or as a fixed amount. Thirty-four P2P lending platforms charge this fee when borrowers apply for the loan.
- Annual management fee: this is usually calculated as a percentage of the borrowed amount and is aimed at covering the administrative costs of the platforms. Seventeen platforms charge this fee.
- Late repayment fee: 12 platforms use this fee to penalise borrowers that delay their loan interest payments.
- Enrolment fee: 14 platforms allow borrowers to apply for a loan only if they have previously registered with this fee.

The third part of our analysis of P2P lending platforms relates to lenders' characteristics (see Table 5.4).

Table 5.4 Lenders' characteristics

Characteristic	Description
Target lenders	Defines the lenders allowed on specific platforms
Amount	Minimum and maximum investment amounts
Investment maturity	Minimum and maximum investment maturity (measured in months)
Fees	Enrolment fee, lending fee or other expenses

To analyse lenders' characteristics, it is firstly necessary to clarify who can lend money on P2P lending platforms. We identify four categories relating to the nature and the risk aversion of the prospective lender: retail investor, professional investor, companies and investment funds (which also comprise investors through a self-invested personal pension—SIPP). According to European Union regulation, if companies lend systematically to individuals (business-to-person lending—B2P) it is necessary for them to obtain a consumer credit licence; however, lending to other businesses (business-to-business—B2B) does not require this licence. Investment funds refer to investment-management firms that use P2P loans as new assets in their investment strategy. Recently, the UK market demonstrates the presence of pension funds and SIPPs as prime lenders in the market. Professional investors[7] are High Net Worth Individuals (HNWIs) or sophisticated investors. Professional investors may have greater knowledge, skills or experience about investments and be able to select the best borrower. A retail investor is a client who is neither a professional client nor an eligible counterparty. To be able to make informed decisions, investors need to have sufficient reliable information. Retail investors need more disclosure and protection than other investors on the part of the platform. Only four platforms out of 51 exclude retail investors as eligible counterparts in their lending activity; 39 platforms accept both retail investors and professional investors. Twenty-six platforms allow investment from companies, and 14 of the 26 allow investment funds. P2P lending represents and alternative asset class for institutional investors with prospectively with prospectively appealing characteristics of low correlation, and low volatility allied to an attractive yield. For this reason, such investors are now giving their support to P2P lending platforms to feed capital and receive loans. This strategy seems to have the support of the UK government, which lent £30 million through Zopa and other UK P2P lending platforms in August 2013 as part of its efforts to encourage lending to SMEs. In March 2014, the UK chancellor

[7] The Markets in Financial Instruments directive (MiFID) creates a regime in which investment firms establish whether an individual investor can be categorized as a professional client. If it has undertaken an adequate qualitative assessment of the expertise, experience and knowledge of the client, that gives reasonable assurance, that the client is capable of making his own investment decisions and understanding the risks involved (see in particular articles 19(10)(c), 21(6)(a) and 24). Whereas the FCA Directive allows investors to self-certify as qualified investors if they are willing to place their name on a register available to all issuers.

George Osborne announced that P2P loans were to be allowed assets for holding in tax-advantaged individual savings accounts (ISAs).

Fifty-seven per cent of the sample of P2P lending platforms do not set a maximum to the investment. On the contrary, the minimum investment ranges from €5,000 to €67,520 (£3,702 and £50,000). The minimum investment is higher when loans are for a business purpose.

Most platforms in the sample have different investment maturity for borrowers and lenders. This may be due to the presence of the secondary market or automatic diversification. However, nine platforms have the same investment maturity for borrowers and lenders.

Fees for lenders are not requested in 47 % of the sample of P2P lending platforms. However, when the platforms request lenders to pay fees, these are lower than those for borrowers are. Lenders are usually charged for registering on the platform (12 %), as well as a percentage of the investment (22 %). Only eight per cent of platforms request other lending fees.

This analysis of European P2P lending platforms evidences that this new funding method is widely established in the UK, which typically has a market-based financial system. Further, the recent financial crisis and credit crunch encouraged the creation of the majority European P2P lending platforms, which have evolved from pure P2P to P2B where borrowers are mainly represented by start-up companies. Some characteristics of P2P lending platforms are significant for the future development of crowdfunding as an alternative source of capital to the traditional financial system. In particular, the presence of a secondary market and the absence of any precise identification of the target sectors should favour fundraising.

Two critical aspects have been found in relation to credit risk and liquidity risk mitigation process established by P2P lending platforms. It has been investigated whether platforms select and evaluate projects before they are approved for online funding. These processes are essential in reducing credit risk before and after a loan has been issued. Therefore, the role played by the platform in assessing projects before uploading them (ex-ante screening) and in providing adequate information during the life of the loan (ex-post monitoring) is critical. In contrast, platforms may provide investors with the ability to sell their loans to other lenders before the loans have reached maturity, which reduces

liquidity risk (secondary market). The trading of loans on the secondary market is even more used by European platforms than in the past. Moreover, the adoption of a protected and secured model that safeguards lenders in the case of borrower's insolvency is considered a positive feature (also by the borrower) that could lead to lower interest rates. Further, the borrower prefers having the flexibility of early repayment.

The results of the analysis are of interest to banks and other providers of financial services that could participate in supporting retail operations or in offering advisory services. P2P lending platforms are electronic platforms that mediate between borrowers and lenders of loans. Although for the majority P2P lending platforms, loans are not collateralised and lenders face an inherent risk of default, the majority of participants are private individuals, although institutional lenders are also investing through P2P lending platforms. Retail investors need to understand the nature of the investment, and it is important that appropriate controls are established.

Even if P2P lending platforms have a natural tendency to self-regulate, government regulation of the sector is uneven across Europe. While the UK as the market leader has introduced dedicated regulation for alternative finance providers, many other countries either have not applied regulation or are applying existing regulations that were not designed to cover this kind of activity. However, at the European Union level, P2P lending largely remains an unregulated activity. Regulation represents a critical issue that may affect the development of P2P lending. The Financial Stability Board (FSB) in particular is considering adjusting the supervision and regulation of lending activities of non-banks to avoid unintended regulatory arbitrage across EU countries (Financial Stability Board 2013).

5.4 Mini-Bonds

Several economies and industries, particularly in the US, European and emerging markets (such as China), are witnessing the emergence of new alternative financing channels and instruments outside the traditional banking sector and capital markets. The past 10 years have witnessed the creation of examples of alternative financing such as P2B lending,

mini-bonds, private placements and alternative financial (virtual) currencies (such as Bitcoin) that seem to operate as part of the so-called shadow banking sector. Mini-bonds are the focus of this section.

Mini-bonds are small units of debt issued by a company. Mini-bonds work in a similar manner to traditional bonds issued by listed companies. As with P2P lending and other P2P lending securities, investors obtain regular interest payments and have the face value of their investment returned at maturity. Mini-bonds have two main differences from corporate bonds: they are not traded, and therefore, must be held to maturity; and in general, issuers of mini-bonds are SMEs, although, in some countries, such as the UK, issuers can be also or seed companies. This implies that they are not subject to the same scrutiny as ordinary bonds or have lower collateral and guarantees for investors. Only a limited number of European countries have regulated this innovative financial market to limit the risk for investors and foster retail investors. It is widely known that the paradigm associated with capital access, consumption and GDP, is stronger if the borrowers are SMEs that are seeking capital for their business. In this context, some P2P lending platforms permit companies to raise credit for their business through mini-bonds.

Identifying the regulatory environment in which platforms that issue debt-based securities operate is important in understanding which factors can foster this alternative funding source and consequently reduce the funding gap typically faced by start-ups and SMEs. As anticipated, each European country has moved in a different way to improve debt opportunities for SMEs. Although mini-bonds have become popular with retail investors, this sector still attracts criticism for the lack of investor protection and few regulatory requirements for the issuer. Investors' capital is at risk but, unlike listed retail bonds, mini-bonds cannot be transferred or traded. Therefore, regulators across Europe have implemented singular initiatives to address the financing squeeze for SMEs.

This section analyses the mini-bonds market in the largest European countries: the UK, Italy, Spain, Germany and France.

According to the UK's regulator (Financial Conduct Authority 2015), mini-bonds are an unlisted bond typically issued directly by a company to its customers or to investors (retail and professional). It is not uncommon for the issuing company to offer incentives along with cash interest,

for example, credits or discounts that can be used to pay for goods. Mini-bonds are authorised by the FCA and are usually unsecured and non-convertible. Although the process for issuing mini-bonds in the regulated market is complex and expensive (as in the rest of Europe), this financial instrument has found space in the UK's financial market. Moreover, in the past two years three of the previous 51 crowdfunding platforms have begun to issue mini-bonds through their platforms: Crowdcube, Wellesley & Co. and UK Bond Network. Crowdcube is the most important equity crowdfunding platform in Europe, and since June 2014 has moved its activity into debt markets with mini-bonds. Crowdcube was the first equity crowdfunder to offer mini-bonds through its platform. The first company to take advantage of this debt instrument was Chilango, a Mexican food chain that was seeking to raise £1 million to boost its growth through establishing seven locations in Central London. Wellesley & Co. is a P2P lending platform that began to offer mini-bonds through a separate entity named Wellesley Finance plc. In August 2015, Wellesley Finance plc issued a £22 million mini-bond, becoming one of the biggest fundraisers. It is important to note that Wellesley Finance raised money through three-year and five-year mini-bonds that have so far been used for loans through its P2P lending platform (which specialises in asset-backed loans to residential property developers). It is necessary that a platform adopts adequate incentive mechanisms to avoid moral hazards and similar risks witnessed in the pre-crisis originate-to-distribute securitisation models. Finally, UK Bond Network is the UK's first P2P mini-bond auction platform.[8] All bonds are structured under the guidance of an independent law firm, and each business is vetted before its bond is listed on the auction page. Eligible companies can access business funding from £0.5 million to £4 million for institutional investors, wealth managers and High Net Worth Individuals (HNWIs).

[8] On the UK platform Bond Network, during the mini-bonds auction investors make bids in an auction, which are ranked by interest rate from most to least competitive. At the end of the auction, the most competitive bids are successful, and the interest rate for all bids is set at the rate of the highest successful bid. This means that most investors achieve a better rate than that of their bid, and may also be offered a fixed interest rate. This means that all participating investors will bid their desired amount of money at the established interest rate and earlier bids take precedence over later bids if the issue becomes oversubscribed.

In the mini-bonds sector, the UK is also the market leader in Europe because of its dedicated regulation for alternative finance providers, which is lacking in many other countries, where there is either no regulation or the country is applying regulations that were not designed to manage this kind of activity. The lack of specific regulatory frameworks represents a critical issue that could limit the capacity to reduce the funding gap for start-ups and SMEs.

The Italian mini-bond market has developed more recently and is more restricted than that of the UK. The following lists some of the most important differences between the UK and Italian mini-bond market:

- Italian issuers should be SMEs, as defined in Recommendation 2003/361/EC.
- Italian issuers should provide financial statements filed for the last two financial years, of which at least the latest must have been statutorily audited.
- Italian mini-bonds must be traded on a multilateral trading facility (ExtraMOT Pro) or held by professional investors that are not shareholders and not residents in white-listed countries.

As of September 2015, the Italian mini-bond market had issued 134 mini-bonds for a total value of €5.2 billion. However, in the past two years, about 30 private debt funds with a focus on Italian SMEs mini-bonds have been launched, but only 10 of these are working and have invested €300 million in total.[9] These debt funds are managed by teams of specialists that make a financial evaluation and spread the level of risk taken by investors. To support SMEs, in 2014, the Italian government, acting though Cassa Depositi e Prestiti, invested €250 million in the launch of a mini-bond fund intended to foster the creation, through a selective process, of mini-bond funds and to leverage the resources deployed in support of Italian SMEs.

[9] The most active funds are those managed by Duemme sgr (Banca Esperia) with €76 million invested; Anthilia Capital Partners sgr (€70 million), by Finint Investments sgr (€55 million) and by PensPlan Invest sgr (€52.5 million).

In 2013, Spain created the Alternative Market for Fixed Income—Mercado Alternativo de Renta Fija (MARF). MARF is a trading platform for financial instruments from companies not listed on an official market. The market's aim is to facilitate the issuance of SME debt (commercial paper, mini-bonds and notes). Currently, the overall size of the market is just €1 billion of listed mini-bonds because listing rules are too strict to allow the market to take off. In fact, all mini-bonds listed on MARF have a rating, which is a compelling rule created by Spanish law. In contrast, in the Italian market, 60 % of listed mini-bond issues do not have any rating. However, as in the Italian market, the Spanish mini-bond market does not allow retail investors to buy any financial instrument on MARF.

German SMEs have enjoyed simplified requirements for larger companies with respect to disclosure in securities prospectus. Moreover, the mini-bonds market in Germany does not necessarily require the presence of collateral; therefore, it is able to represent a real alternative to bank loans. Given the less rigorous requirements, Germany has experienced the opening of three rival mini-bond markets: in 2010, the Mittelstandbond (M-bond) was established in Stuttgart, soon after the Mittelstandsmarkt was established in Düsseldorf and the Entry Standard market in the regulated exchange was established in Frankfurt. M-bond has attracted more retail investors than competitors by using the opportunity to obtain high interest rates and by investing in the famously reliable German SMEs sector. According to Scope Rating, M-bond issued 192 SMEs bonds that raised nearly €7 billion to 2014, but in 2011 the early default of the struggling solar panel industry occurred, and financial difficulties soon spread across other sectors. Although the majority of the listed mini-bonds had a credit rating[10] issued by one of the four local rating agencies or by one of the three big international rating agencies (Fitch, Moody's and Standard & Poor's), the M-bond market ceased its activity in March 2015 after 34 issuers defaulted on coupon payments with retail investors.

As with the other European countries discussed, the French government, through the Rameix-Giami report, encouraged initiatives to allow SMEs to take advantage of a new source of finance. Therefore, in July 2012,

[10] The rating is not compulsory for listing the bonds on the market but obtaining the rating is considered good practice.

NYSE Euronext[11] established a new public offering of bonds named initial bond offering (IBO) to allow listed and unlisted SMEs to issue mini-bonds to retail investors on NYSE Euronext Paris (regulated market) and NYSE Alternext Paris (multilateral trading facilities [MTFs] market). The IBO is open to all SMEs listed on the French market whose capitalisation is below €100 million, as well as to all SMEs that are not listed but comply with the definition of SMEs under the European legislation The advantage of the IBO is that it enables SMEs to obtain financing similar to bank credit but with diminished requirements. The following are the distinctive admission requirements:

- The IBO process lasts for 2–3 months from launching the offer to admission to trade.
- The maturity date varies between five and 10 years.
- The nominal value is set at €100 (or any multiple of €100), which aims to facilitate liquidity on the market (but in the NYSE Alternext Paris, it is necessary to have a listing sponsor in the pre-listed phases).
- The absence of guarantees, collateral and financial covenants.
- A mandatory rating that can be provided only by one of the accredited rating agencies registered with the European Securities and Markets Authorities (ESMA) (with the exception of the three big rating agencies).
- Fiscal incentives to the bond issuer.

However, since its launch in July 2012, only three companies have used IBO to obtain finance: Agrogeneration (€9.4 million); Capelli Group (€11.7 million); and Homar Vacances (€15 million).

Despite such national initiatives, mini-bond markets remain fragmented for SMEs, partially due to problems of asymmetric information because of which public SMEs mini-bond markets end up with higher, under-priced risk. If regulators intend to support the opportunity for SMEs to access additional alternative sources of finance, and potentially longer maturities than those ones offered by traditional bank lending, it

[11] NYSE Euronext is a Euro-American multinational financial services corporation that operates securities exchanges, including the New York Stock Exchange, Liffe, Euronext and NYSE Arca.

is necessary to consider the interests of potential (retail) investors, who are attracted by higher interest rates and by the purpose of supporting local SMEs for social purposes. In contrast, professional and institutional investors can benefit from attractive returns and secure access to the SMEs mini-bond market, which is difficult to tap.

Supranational policymakers should consider the low levels of cross-border investment by institutional investors that could be attributed to different securities laws, bankruptcy laws and tax incentives, demonstrating that national regulators have tended to use regulatory powers to protect domestic businesses from foreign competition to ensure stable economic growth locally.

5.5 Conclusion

This chapter identified the main features of European alternative funding agents that issue debt-based securities. These features are highly significant in boosting investors' participation in the process of funding individuals, start-ups and SMEs. This chapter analysed the most important alternative funding agents in two ways: first, it focused on European P2P lending platforms and their business models; second, it focused on mini-bond markets across the largest European countries: UK, Italy, Spain, Germany and France.

P2P lending platforms are electronic platforms that mediate between borrowers and lenders of loans. Although, for the majority P2P lending platforms, loans are not collateralised and lenders face an inherent risk of default, the majority of participants are private individuals, although there are institutional lenders investing through P2P lending platforms. The P2P lending industry has been experiencing yearly exponential growth rate since 2005. P2P lending platforms are considered an innovator that can compete with banks in a 'David versus Goliath' battle[12] and provide

[12] Professor Clayton Christensen (Harvard Business School) highlights four common characteristics of disruptive innovation that seem to be of interest in the P2P leading market. His extensive cross-country, cross-industry, cross-time studies demonstrate that no industry is immune to the force of disruptive innovation and that in the business equivalent of David versus Goliath battles, 'there is repeated evidence the level of resources committed often bears little relationship to the outcome'.

credit during financial crises because money is not lent according to economic interests, but also through examination of soft information that can reveal social and qualitative perspectives of the borrower. However, institutional investors are also beginning to consider P2P loans as a new alternative asset class with prospectively appealing characteristics of low correlation, low volatility allied to an attractive yield, and are now supporting P2P lending platforms to feed capital and receive loans.[13] In the UK, senior directors at the Bank of England continue to foster P2P lenders as a means of promoting effective competition in the interests of consumers and boosting the robustness of the financial system. Since 2013, the UK government has begun to lend public money through Zopa and other UK P2P lending platforms as part of its efforts to encourage lending to SMEs. Therefore, surging institutional and government investors interests in P2P loans as a new asset class is now having the effect of turbo-charging the rate of growth experienced by P2P lenders. As such, there seem to be reasons to believe that P2P lending platforms (at least in certain loan businesses) will reduce the predominance of the traditional banking activity but only in a limited number of countries such as the UK. Even if P2P lending platforms have a natural tendency to self-regulate, government regulation of the sector is uneven across Europe. While the UK as the market leader has introduced dedicated regulation for alternative finance providers, many other countries either have not applied regulation or are applying regulations that were not designed to cover this kind of activity. At present, other European countries seem to look with interest at the P2P lending phenomenon in the UK with the aim of defining and adjusting their policies. Therefore, P2P lending platforms know that they cannot establish spontaneously in bank-centred financial systems (France, Germany, Italy and Spain) as they might do in the UK, because regulators apply tough and costly policies with the aim of protecting the savings of retail investors (individuals).

[13] In September 2013, BlackRock, the largest fund manager in the world with $4.3 trillion in assets under management, purchased an equity stake in Prosper.com, the second-largest P2P platform in the US. In February 2014, the hedge fund Arrowgrass spent £15 million on an equity stake in Zopa. In October 2013, New York based Eaglewood Capital did the first securitisation of a P2P loan and sold a tranche of securitised P2P loans to institutional investors such as pension funds and insurance companies.

The other alternative finance instrument analysed in this chapter regards mini-bonds in the largest European countries (UK, Italy, Spain, Germany and France). Mini-bonds are small units of debt issued by a company. Mini-bonds work in a similar manner to traditional bonds issued by listed companies, although they have differences with respect to corporate bonds: (1) mini-bonds are not traded, hence they must be held to maturity; and (2) in general, issuers of mini-bonds are SMEs, although in some countries, as in the UK, issuers can be also start-up companies. Mini-bonds carry the same risks as traditional corporate bonds and, as a consequence, regulators across Europe have implemented singular initiatives to address the issue of mini-bonds by SMEs. If regulators intend to support the opportunity for SMEs to enjoy an alternative source of finance, and potentially longer maturities than those offered by traditional bank lending, it is necessary to consider the interests of potential (retail) investors, who are attracted by higher interest rates and by the opportunity to support local SMEs for social purposes. However, professional and institutional investors can benefit from attractive returns and secure access to the SMEs mini-bond markets, which is difficult to tap. Despite such national initiatives, mini-bond markets remain relatively fragmented for SMEs, partially due to problems of asymmetric information where public SMEs mini-bond markets end up with higher, underpriced risk. The low levels of cross-border investment by institutional investors that could be attributed to different securities laws, bankruptcy laws and tax incentives, demonstrate that national regulators have been using their regulatory powers to protect domestic businesses from foreign competition to ensure stable economic growth locally. Supranational policymakers should consider this evidence.

The results of the analysis are of interest for banks and other financial services providers that could participate in supporting retail operations or, offer their advisory services. Modelling the factors that have fostered this market's emergence and growth, as well as its characteristics is challenging.

6

Competitive Frontiers in Equity Crowdfunding: The Role of Venture Capitalists and Business Angels in the Early-Stage Financing Industry

Vincenzo Capizzi and Emanuele Maria Carluccio

6.1 Introduction

The issue of the stimulation and funding of young or newly created small and medium-sized enterprises (SMEs) has been mainly debated in recent years by professionals, academia, bankers and policymakers. They have also considered the capital constraints resulting from the economic recession that has followed the 2007–2008 global financial crisis.

Furthermore, whether in developed or developing market economies, each financial system shows a certain amount of allocative inefficiency, consisting of a gap—called the 'funding gap' or 'equity gap'—between demand for financial resources by start-up companies and supply of early-stage equity capital. The groups that are supposed to invest in these kinds of entrepreneurial projects, which offer high returns at a high risk, are institutional investors such as private equity and venture capital funds, thanks to the combination of professional screening, intensive monitoring, value-added contribution, and incentivising control rights provided to the invested venture. However, several studies show that venture capitalists (VCs), based in both the US and Europe, prefer to invest in highly innovative firms, and that the minimum investment amount is usually

R. Bottiglia, F. Pichler (eds.), *Crowdfunding for SMEs*,
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over €1,000,000. The investment policies private equity and venture capital tend to cut off SMEs from these investments. This is because the SMEs require smaller amounts of capital (usually between €50,000 and €300,000), evaluating their business plans is time-consuming and their cash flow generation pattern is difficult to predict, generating sustainable yields eventually only in the long run.

For these reasons, it is crucial to shed light over an opaque segment of the capital market industry that is well suited to filling the equity gap, whose actors are institutional as well as non-institutional investors, such as technology parks, venture incubators, business accelerators, academic spin-offs and the recently emerged equity crowdfunding platforms. However, the major actor in this segment of the capital markets is the business angel, a private investor who finances predominantly early-stage firms with own savings in the form of equity capital. The main purpose of the business angel is to realise a financial gain when selling shares as well as to obtain non-pecuniary benefits. This economic player has evolved and can be considered as a sophisticated investor, often associated with networks of business angels and able to invest in syndication with other investors to supply financed firms with higher amounts of capital (more than €1,000,000), to diversify the investment risk and to reduce the unit screening cost. Business angels—also called 'informal venture capitalists'—are therefore crucial in stimulating and supporting entrepreneurs in an economic system. They deserve much greater attention and investigation than has been given in the past, despite their informational opacity, from finance literature as well as by practitioners, bankers and policymakers.

This chapter presents the features, investment policies and risk-return profiles of institutional and informal investors operating in the very early stages of the lifecycle of SMEs. The aim is to try to identify potential opportunities for banks, on the one hand, and policymakers, on the other hand, to create joint growth strategies and innovative financing facilities that can support EU industrial systems, in particular the start-up sector, therefore stimulating the recovery process from the recession. A comparative empirical analysis performed over the Italian capital market will provide a snapshot of the size and expected qualitative and quantitative trend

of the investigated phenomenon, making reference to business angels, as the main informal investors, and venture capitalists, as the main institutional investors.

6.2 The Early-Stage Financing Industry: The Funding Gap Issue

Following the company lifecycle approach, small and medium-sized enterprises tend to follow a four-stage pattern during their growth.

The first part is the *seed stage*, during which the entrepreneur has a revolutionary idea that has to be turned into a profitable project. In this phase, the idea remains an abstract concept; the feasibility of the product or service has to be tested with a specific prototype.

Next, the start-up stage lasts for less than a year. Here, the idea has just been translated into a proper project or service. Moreover, the entrepreneur has tested the innovation; the only thing that remains uncovered is its effective commercialisation to an interested audience.

In the third, *early stage,* a sure profit for the enterprise is still yet to be clear. The early stage status takes place over two to five years. During this period, consumers can buy the innovation, sometimes giving a feedback after the first use.

During the later stage, feedback from early adopters is useful to modify the products or services to comply with the market needs. If the company is able to express its full potential in a limited period, the enterprise can be sustained by continuous growth and high profits.

However, to shed light on the introductory (or early) stage of a company's lifecycle, going beyond standard business and financial concepts, it is crucial to segment it further, identifying still different stages with specific features, business and revenue models, and risk-return profiles (Fig. 6.1).

In addition, there are strong differences between the start-up and early stages, especially concerning both 'scalability' and 'equity gap' issues. Particularly, scalability refers to the act of growing larger, while keeping intact the ease with which the business is done and the business's profitability. All businesses are scalable to a given point, but some

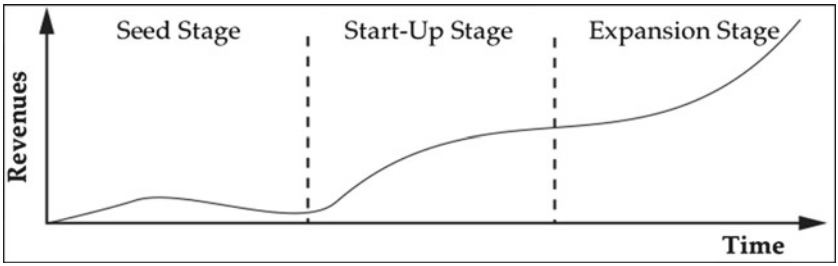

Fig. 6.1 Early company lifecycle.
Source: Mukherjee (1992)

have to make significant changes to their models to grow further, and choices may have to be made concerning high or low upfront investments, capital against labour-intensive technologies, tailor made or standardised products, and so on. In a few cases, it is also possible that the entrepreneur is not able to adapt the company to the dynamic environment or is not able to understand these changing needs. Moreover, not all entrepreneurs have the desire and capability to scale up to a large organisation, preferring a comfortable living for themselves, family and friends; or majority equity stakes; or low-risk strategies (so-called lifestyle companies).

The equity gap represents another problem that start-ups and especially early-stage companies have to cope with. The typical monetary investment need in the very early stage of a company lifecycle is often limited not because of a lack of 'ambition', but because of the lack of 'marketability' of the company's output, which is yet to be tested, industrialised or promoted. The possibility of stimulating innovation and technology breakthroughs relies on being able to offer clear solutions to the primary funding gap, whereas successive rounds of financing aimed at letting innovative companies grow at the domestic and international level ('secondary funding gap') best match venture capital investment targets (Fig. 6.2).

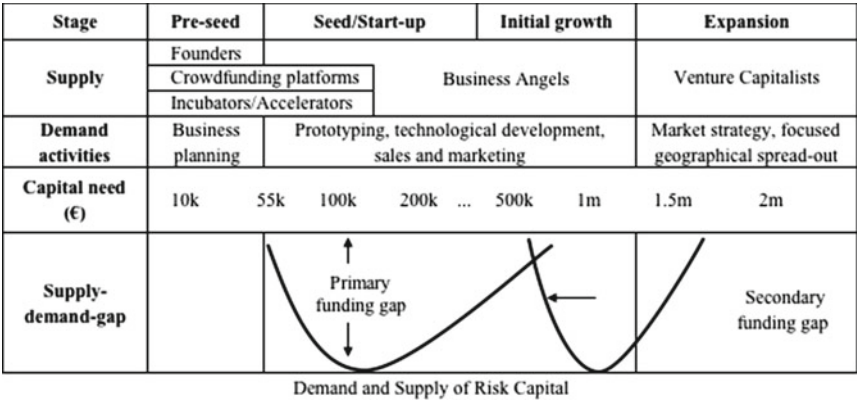

Fig. 6.2 The primary and secondary funding gaps.
Source: Elaboration from Sohl (2007)

The equity gap issue can be faced by giving young SMEs access to the most recent, opaque and unregulated segment of the capital markets, the early-stage financing industry (Fig. 6.3).

Many players in the market—extensively analysed in the following paragraphs—such as incubators, accelerators, science parks, crowdfunding platforms, business angels and venture capitalists can raise this kind of capital. Incubators' business consists of gathering early stage companies and helping them solve their technical problems thanks to specialised consultants and researchers. At the same time, each company is included in a network formed by potential suppliers, clients and investors. The accelerator (usually run by entrepreneurs and mentors) operates during the company's seed stage and provides mentorship and services required for growth by defining the business model, preparing seed rounds, prototyping services or products and commercial tests. Science parks support such activity by offering premises and services to start-ups during their delicate development phase. Through an initial selection of ideas, the science park provides technological, commercial and economic sustenance.

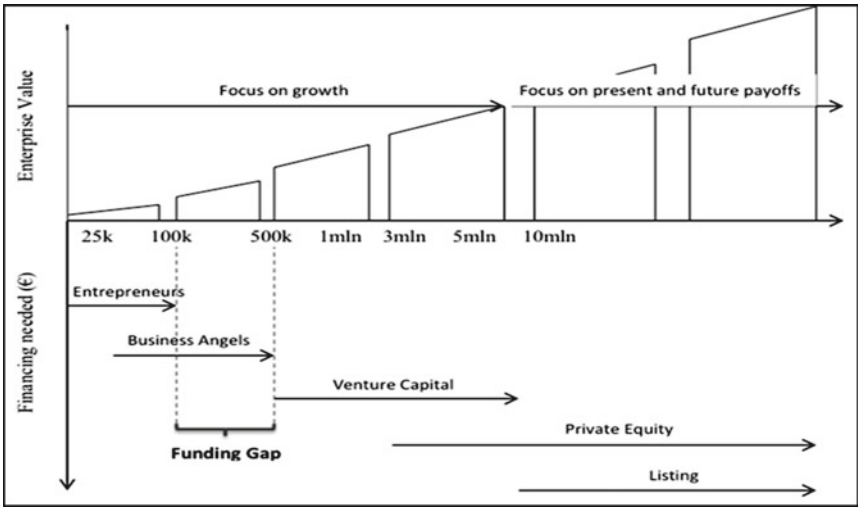

Fig. 6.3 The relationship between company lifecycle and typologies of equity investors.
Source: Elaboration from Sohl (2007)

Crowdfunding platforms' role consists in using websites to raise capital from people with common interests to finance a project or an initiative. In this context, the elements that make up the sector are information or capital exchanges among people by using computer tools or social medias.

6.3 The Main Actors in Early-Stage Financing

As mentioned above, the opaque segment of the capital markets referred to as the early-stage financing industry can be represented as a combination of different and heterogeneous categories of actors, whose operations, investment policies and type of contributions offered to start-up companies will be described in the following sections (Table 6.1).

6.3.1 Equity Crowdfunding

As extensively analysed in Chap. 2, crowdfunding is quite an innovative source of fundraising aimed at supporting a wide range of ideas and ventures.

Equity crowdfunding is an element of early-stage equity financing. The founder's assets are essential for the existence of the new venture and are the first source of entrepreneurial financing. In addition, seed-stage enterprises finance themselves with the aid of family and friends (the so-called FFF: family, friends and fools), plus business angels could intervene during the phase going from seed to start-up. As we will see in the next paragraphs, business angels are usually senior managers and experienced entrepreneurs who, for different reasons, invest significant amounts of money in new ventures they feel have the potential for growth or they feel close to (a sentimental involvement). Business angels fill the gap between finance coming from FFF and then venture capital. If the start-up shows it can achieve substantial growth, ideally ending with a stock market listing from an initial public offering (IPO), that would lead to important financial returns. What can entrepreneurs do if the seed-stage venture cannot find enough money through these traditional channels? Or don't they need the high amount of money VCs are normally willing to invest? Given that debt financing is extremely hard to achieve for a start-up because it lacks assets to use as collateral and it has a high intrinsic risk of failure, the company is destined to remain in the founder's mind.

In the past few years, thanks to the advent of communication technologies that help people from different geographical areas, culture, age and gender to interact, new financing means have been born. Early-stage

Table 6.1 The main actors of the early stage financing industry

Equity crowdfunding
Informal investors
• Business angels
• Networks, syndicates, groups and clubs of business angels
• Incubators and accelerators
Informal investors
• Venture capital firms
• Corporate venture capitalists
• Seed venture funds
• Private equity funds
Institutional investors
• Gatekeepers
• Non-profit foundations

Source: Authors' categorisation

ventures can now make an open call for equity over the internet that can potentially reach anyone who has access to the World Wide Web. This technique, known as crowdfunding, has gained popularity recently and drawn the attention of small investors, entrepreneurs and regulators (due to the fact this open call can overlap in the IPO and listing phases).

Equity crowdfunding consists of a round of equity financing through an online crowdfunding platform. Investors can choose which project to fund and, in exchange, they receive equity shares in the venture. Being equity-based, national governments are starting to create regulations. The first reason for regulation is to protect investors. Another reason is not to make equity crowdfunding look like a public offering for a listing, which would require a huge monetary effort for start-ups. Through this model, new owners will also be customers and customers will be owners too.

Various parties, each one with a specific role, are part of the equity crowdfunding world: investors, who have funds to invest; entrepreneurs, or proponents, who have a project in which they believe and have the ambition to make it a profitable venture; platforms, or portals, that help connect fund providers and fund takers. In some countries, the regulator or the financial market supervisor is involved too.

Many scholars have identified the motivations behind the establishment and development of equity-based crowdfunding. Schwienbacher and Larralde (2012) argue that the demand for this kind of financing is driven by those start-ups that cannot access debt financing, not having either the necessary collateral or stable and forecastable cash flows. On the same topic, Stemler (2013) advises early entrepreneurs that have limited assets and are struggling to raise money from traditional means of financing (family, banks and VCs) to consider equity crowdfunding. Heminway (2014) defines the advent of crowdfunding as natural and non-planned, driven by the evolution of social media (as part of Web 2.0 technologies), combined with traditional corporate finance. This phenomenon is seen as a 'democratisation of capital', because subjects usually cut off from private financial markets can now access them directly. Schwartz (2013) affirms that the crowdfunding of securities is a valuable chance to lower the cost of capital for the proponent, by an open call to the public for relatively small amounts of capital. A theoretical pillar of sustainability for crowdfunding is the 'wisdom of the

crowd', a phenomenon which has been widely studied. This is based on the assumption of the efficiency of the crowd, whose diversity and power of aggregating ideas and solutions leads to a better solution overall, as well as on the assumption that collective intelligence is superior than any individual's (Surowiecki 2004; Brabham 2008). Heminway (2014) considers crowdfunding's crowd as a 'wise' actor, being diverse, independent and decentralised, and able to take decisions by aggregating vast specialised knowledge. Furthermore, the author argues that the concept of the 'lottery effect' resides in equity crowdfunding, which encourages people to invest small amounts of money given the possibility of massive payoffs (as identified by the Prospect Theory proposed by Kahneman and Tversky 1979).

On the supply side, that of investors, when comparing the investment made by equity crowdfunding with that made by professional equity investors, such as venture capitalists and business angels, it is clear that equity-based crowdfunding is on a lower rank in the risk-reward scale than the latter. Venture capitalists and business angels usually look for higher-growth start-ups denoted by a higher risk of default, and, in addition, the expected return of the investment is higher too. In addition, invested amounts are significantly different since the average equity crowdfunding campaign raises $190,000 while VCs usually invest at least $1,000,000 in a deal. Business angels tend to invest similar amounts, but seek higher risk-return investments; additionally, they share another element with equity crowdfunding investors (mainly small, unsophisticated investors): both investors want to gain a financial return but also have a social and intrinsic aim (Collins and Pierrakis 2012). Eventually, VCs tend to invest in latter stages (start-up and early stage), while business angels and equity crowdfunding are mostly concentrated in the seed stage (Biffi and Columbaro 2014).

Another interesting question is whether crowdfunding can coexist with established participants in the venture equity market, such as venture capitalists and business angels. It has already been shown that the risk-return profile of these categories of investors does not match that of equity crowdfunders and that the magnitude of investments is much bigger for the traditional players, especially in the case of venture capital. Moreover, Manchanda and Muralidharan (2014) highlight how

venture capitalists can exploit information coming from equity crowdfunding. They argue that equity crowdfunding can help venture capitalists discover promising start-ups to be funded, after a preliminary round through the web platform. Through crowdfunding, venture capitalists can gather public opinions and have a better long-term idea on the business. Equity crowdfunding can also help to improve best practices in the venture capital industry, such as the valuation process. Finally, venture capitalists could open an online platform themselves to enlarge their network and gain information about start-ups. Even Business Angels Europe (2013) advises its members to see equity crowdfunding as an opportunity: it can validate deal flows and offer opportunities for co-investment. Business Angels Europe (2013) also adds that equity crowdfunding cannot be regarded as a substitute for business angels because they provide different sets of expertise and networks, but it must be seen 'as a helpful additional financial resource for early financing'. Internet platforms and funders must be reminded that both venture capitalists and business angels tend to gain access to the best deals and will use equity crowdfunding as a secondary channel to identify deals they might have missed. This is extremely important; first because it will be unlikely that the new Facebook will come out of this mean of financing; and second, because projects' quality might be slightly lower than the one that can be found in venture capital rounds. In addition, equity crowdfunding works with standard contracts, while established investing groups use customised contracts in their deals (Biffi and Columbaro 2014).

6.3.2 Informal Investors

6.3.2.1 Business Angels

As shown in Table 6.1, the main actors of the early-stage financing industry are represented by informal investors, and, among them, the most visible and known are by far business angels.

Conventionally, they are defined as wealthy individuals who invest their own money, along with their time and expertise, directly in unquoted companies wherein they have no family connection, hoping

for a financial gain (Capizzi and Giovannini 2010). Business angels can be looked as the only practical source of risk or venture-type for most of entrepreneurs, once their capital needs surpass family resources.

Even if business angels have common characteristics, it is relevant to profile the types of private investors; many contributors in different studies tried to differentiate their behaviours by using quantitative criteria (Feeney et al. 1999; Capizzi and Giovannini 2010). Here, a classification is based on the willingness of the business angel to play an active role in the informal venture capital field:

- *Serial angels*: because of their extensive angel investing background, they are able to deal with proposals more than twice a year and they are actively in various firms. They know the rules of playing and, in the largest deals, they have a seat.
- *Active investors* invest in one or two opportunities a year and tend to be entrepreneurs, or former entrepreneurs, and managers of firms other than those wherein they have previously invested.
- *Occasional investors*: individuals who invest less frequently than once a year. They tend to be lawyers, accounting professionals or entrepreneurs with a potential not fully expressed.
- *Potential investors*: currently without active investments but interested in doing some. This category comprises individuals who have already been private investors in the past.
- *Latent investors*, better known as 'virgin angels', with no experience in angel investing, ready to make their first investment.

Differently from the other actors of the early-stage financing industry, these business angels do not focus just on seed and start-up investments: their intervention can allow young as well as mature small companies to grow and alter their business models. They are often businesspeople who have sold a business, and provide not only finance but also their experience, business skills and relationship network to the entrepreneurs with whom they are in contact. What is unique about the intervention of many business angels is their willingness to support the entrepreneur in operational and managing activities: in fact, many business angels consider themselves as 'co-entrepreneurs'.

Despite the low level of attention paid to business angels by both researchers and policymakers, overall, the amount of capital invested is very close to that of venture capitalists' ones (Table 6.2).

6.3.2.2 Business Angel Networks, Syndicates, Groups and Clubs of Angels

Business angel networks (BANs), business angel syndicates (BASs) and business angel groups (BAGs) are either formal or semi-informal associations of angel investors aimed at facilitating the matching of investment demand and supply. They create links between angels, attract prospective investors to angels and match both parties for deals. Such networks come in a number of forms: some are structured as formal associations or federations of BANs on a national basis, while others are set up on a regional or local basis. Other networks resemble investment clubs (sometimes exclusive ones). Some angel networks are focused on a certain industry, technology or market.

BANs provide benefits to individuals, and, among them, the most important is co-investment, which allows each member to share the entrepreneurial risk. We can assume that the perceived risk in bargaining with an investee firm in a sector far from the member's own background is high and a co-investment offers a possible solution to go beyond the first barriers.

Also, there is a knowledge sharing effect, in that individual investors who are members of an angels' network usually can support start-ups with advice or services far from their background and competencies.

Table 6.2 Angel investing and venture capital in 2013

	USA		Europe	
	Angel investors	Venture capital	Angel investors	Venture capital
Invested capital	US$24.8bn	US$29.6bn	US$5.5bn	US$7.3bn
Number of investors	298,000	548	n.a.	108
Total deals	71,000	4050	18,500	1344

Source: Elaboration from Angel Capital Association (2014) and IBAN data

Another advantage provided to single investors by BANs is the volume and quality of deal flows and this is essential in the informal market where angels find it difficult to learn about prospective deals and originate investment opportunities.

BANs' operating tools consists of dedicated platforms where both business angels and early stage firms can contact each other. This kind of platform can work through the internet, magazines or organised events. Besides, such networks give start-ups direct access to another source of finance alongside bank financing and risk capital.

6.3.2.3 Incubators and Accelerators

Business incubators and accelerators can play a vital role in start-up success, providing the jumpstart that companies need during the critical start-up phase. The main goal of these institutions is to strengthen local and national economies by creating jobs, enhancing the entrepreneurial climate, sustaining businesses, and accelerating growth in various industries.

By helping an entrepreneur to start a company, incubators and accelerators give the community the ability to benefit from an increase in the number of available jobs and from the additional revenue that is brought to the city or town as a result of the new business activities.

To help new companies to develop and launch products, incubators or accelerators may simply offer a business facility or an office space that can be used to help the start-up secure and manage its first customers—similar to the role of science parks. Other incubators or accelerators also use experienced mentors and volunteers to run classes and seminars that focus on relevant topics, such as: business planning; setting up accounting procedures and records; tracking customer orders; marketing a new business to particular niche markets; developing a go-to-market strategy; and internationalisation strategies. Additionally, they enable entrepreneurs to develop networks among the surrounding business and financial community. However, there are some relevant differences in the kind of support provided to entrepreneurial ventures.

Starting with an 'official definition', a business incubator is an organisation designed to encourage the growth and success of start-ups through

the provision of multi-disciplinary professional support. Incubators are typically run by non-profit organisations, public entities frequently supported by governmental initiatives aimed at spurring job creation and innovation such as official bodies, economic development agencies, business alliances and academic groups through a variety of services and training schemes, such as university spin-offs. In essence, these organisations nurture the growth of start-ups by allowing them to exist for a couple of years (the incubation period) with favourable operating and economic conditions, making them ideal for entrepreneurs who want to develop a company gradually. Some universities also offer incubation centres where entrepreneurs can tap into the research activities on campus or take existing research and turn it into a commercial business. Incubators usually provide many resources for member companies, including business facilities, office services, marketing assistance, legal advice, mentorship, networking opportunities and, sometimes, equity. Some incubators can provide grants and financial support to help the company in its early stage apart from equity.

Start-up or seed accelerators are fixed-term, cohort-based programmes centred on highly scalable companies entering a national or global market. These programmes offer to 'portfolio companies' executive education and mentoring sessions, as well as hands-on training that can culminate in a public pitch event or 'demo day'. Moreover, the portfolio companies set up with an accelerator have offices and common spaces to share with other growth-oriented companies. In this sense, accelerators serve as a type of boot camp that focuses on rapid growth and a successful product launch. Business accelerators are therefore more suitable for start-ups that want to reduce time to market, rather than growing gradually. In contrast to incubators, accelerators:

- Are mainly held and sponsored by private organisations.
- Provide high-intensity programmes over a few months (whereas the incubation period could last years) ending with a 'graduation' at the demo day.
- Select companies through a competitive application process.
- Provide financial support to the portfolio companies with an investment of €10,000–€50,000 in exchange for equity, raising finance mainly from venture capital funds.

- Focus on small teams, rather than on individual founders.
- Do not provide resources 'on demand', believing in the peer support, feedback and networking originated inside the classes.
- Focus on a wide range of industries while incubators usually specialise in biotech, medical products and clean-tech.

When compared with venture capitalists, business incubators and accelerators are particularly well suited to filling the equity gap, because of both the stage of the start-up and the small size of the equity capital provided. The amount of money that the incubator or accelerator typically grants or invests in participant companies usually helps just to build a prototype or first version of the product or service.

The conditions and the level of initial funding will also depend on many other factors, including the idea, the market and the number of founders. Regardless of the amount of seed capital offered, it is important to know what demands are made in exchange for the money. Many accelerators or incubators will provide funding in exchange for an equity stake in the company, most often in the range of 6–10 %, and some may also require a convertible note.

Greater equity holdings could create troubles in later rounds of financing, decreasing the availability of shares to offer to new investors. Furthermore, several empirical studies show that the relationship among different actors of the early-stage financing industry is ambiguous, particularly because of issues generated by financial contracts: therefore, small shareholdings subscribed by incubators and accelerators could make it easier for mutual funds to invest in the expansion stage of the company lifecycle.

6.4 Institutional Investors

Unlike the investors described previously, this category is made up of professional investing institutions, raising and investing funds under the supervision of financial regulation. These investing institutions, not rarely listed on the capital markets, are professionally managed by qualified asset managers and are subject to tight information disclosure

requirements. They include pension funds, investment banks, commercial trusts, endowment funds and hedge funds.

6.4.1 Venture Capital Firms

Venture capital is a large segment of the equity financing industry, alongside private equity and capital markets. Such firms are institutional investors focused on start-up companies as their preferred asset class in which to invest the capital they raise. The most widespread legal structure adopted all over the world is by far constituted by mutual investment funds and closed-end funds, which are managed by dedicated management companies.

Another common legal structure allowing venture capital activity is the 'limited partnership', where general partners manage the capital raised and the investment/divestment process and limited partners just provide capital as financial investors.

Venture capitalists focus most on high-tech, entrepreneurial ventures with the potential for high growth in domestic and international markets. For this reason, they usually operate individually in the start-up stage and on a collective basis in the seed stage (through syndicate/club deals).

The high profitability expectations in terms of internal rate of return (IRR), which compensates for the intrinsic high operating risk of the target investment, is pursued by supporting companies in their value creation path (a 'hands-on' approach). This implies, among others, sharing relationships with the business and financial community, supporting the board in making strategic decisions, opening new markets, involving better quality company managers and stimulating growth strategies through mergers and acquisitions.

Governments can support this sector for specific country/industry development goals through 'state-owned' venture capital funds or directly underwriting shares in existing venture capital funds ('privately-owned' ones).

Two goals pursued by venture capitalists that strongly influence their operations are creating value and minimising risk.

To reduce the adverse selection and moral hazard problems stemming from the asymmetric information associated with start-ups, venture capitalists implement the following strategies:

- Portfolio diversification.
- Deal syndication.
- Covenants (veto rights).
- Staged financing.
- Preferred stocks.
- The ability to appoint board directors.
- Exit timing.
- Mentoring.

6.4.2 Corporate Venture Capitalists

Corporate venture capital activities are carried out by dedicated departments or financial companies controlled by multinational corporations wishing to invest in innovation but not inside their own organisation (often to avoid risk or reputation issues). It is common in the pharmaceutical or high-tech industries and it is a way to provide incentives to potential entrepreneurs as well as monitoring mechanisms.

There are two models of corporate venturing: in the first, the company invests indirectly via venture capital funds, especially in funds focused on technologies. In this model, the corporate venture capital firm plays the role of a limited partner of a venture capital fund that specialises in a few specific sectors.

The second form of corporate venturing involves direct investment in small unquoted firms for strategic reasons. Corporate venturing provides the large firm with a 'window on new technologies' and is an efficient form of research and development thanks to the greater efficiency of SMEs in their use of advanced technical resources.

6.4.3 Seed Venture Funds

Seed venture capital funds are focused on the very early company development phases. The amount of money is usually relatively small because the business is still in the idea or conceptual stage and such initial capital is used to start a business, after the founders have used all their own assets and capital from friends and family. Such a venture is generally at

a pre-revenue stage and seed capital is needed for research and development, to cover initial operating expenses until a product or service can start generating revenue, and to attract the attention of venture capitalists. These funds can be used to pay preliminary operations such as market research and product development.

Of course, this kind of investment comes with a high risk, but the return can be high if the company becomes a growth enterprise. Usually, the money is invested in exchange for an equity stake in the enterprise, although with a lower level of contractual overheads than standard equity financing in more advanced and mature companies.

Compared with normal venture capital funds, a higher risk is involved with seed funding. This is because the investor does not see any metrics or data on the projects, so the skills and history of the founders play a central role and investors make the decision whether to back a project financially based on the perceived strength of the idea. In terms of the amount invested, for similar levels of stake in the company, generally seed investments are lower (€10,000–€100,000) than usual venture capital investments (€100,000–€1,000,000).

6.4.4 Private Equity Firms

Private Equity firms are much older entities in terms of history and development than most actors in the equity financing sector, being evolved from the British merchant banks of the nineteenth century. Thanks to important partnerships with investment banks, endowments, pension funds, insurance companies, financial institutions and even corporations wishing to foster new products, businesses or technologies, these firms obtain conspicuous levels of financial resources to manage. They can adopt one of several business models and legal structures, ranging from a holding company to a closed-end fund managed by an advisory company (as is the case with venture capital funds) and a limited partnership vehicle.

Unlike venture capitalists—and similar to business angels—private equity investors do not focus on start-up companies as a preferred asset class, focusing instead on existing SMEs. Their equity investment, therefore,

is aimed at giving the invested company the opportunity to implement a development plan, change a competitive strategy, change corporate ownership and governance, or, implement a turnround plan. In addition, they may also use debt in their financing structures, especially when they are participating in a leveraged buy-out (LBO) or they are involved in structured finance operations such as a management buy-outs (MBO) and or management buy-in (MBI).

Focusing on SMEs, the great part of private equity firms' transactions is in the lower-middle market (deals worth between €10 million and €50 million) and middle market (€50 million to €500 million). There is also an upper market, defined as supporting operations in excess of €500 million. The middle market is underserved because the best investment bankers prefer the larger deals.

The fact that the middle market companies can offer financial opportunities to their private equity owners is an important point to highlight. The small companies used to fly below the radar of multinational conglomerates and provide a better quality of the customer service, niche products and services far from the ones offered by large corporations. This situation is attractive for private equity firms that possess the insights to exploit such opportunities and bring companies to a higher level. A small company that sells niche products in a particular region has the prospect of growth from cultivating its international sales channels. On the other hand, a fragmented industry can undergo consolidation to create fewer, larger companies.

Growing and improving a middle market company and selling it to a large corporation to increase the profit is a common exit strategy for private equity firms. For private equity investors, it is critical to have a reliable management and so managers at portfolio companies have equity and bonus compensation as reward. Moreover, an alignment of goals is usually required before a deal is done.

Generally, by reviewing business plans and performing due diligence on investment candidates, private equity firms decide which companies to support. They seek opportunities to invest with an exit strategy within a certain period in mind, so the selection process is strict.

Several critical functions can be identified within private equity firms. The first one is deal origination, which involves creating and developing relationships with M&A boutiques and investment banks to secure a flow

of quality deals. To generate transaction deals, some firms hire staff to identify and reach out to company owners. In a competitive M&A landscape, to ensure that the funds raised are successfully deployed and invested, sourcing proprietary deals can help. In addition, the internal sourcing could reduce costs by avoiding an intermediary's fees. When financial services professionals represent the seller, they usually run a full auction process that can diminish the buyer's chances of acquiring a particular company. As such, deal origination professionals (typically at the associate, vice-president and director levels) attempt to establish a strong relationship with transaction professionals to secure an early introduction to a deal.

The transaction execution involves assessing the management, the industry's historical and forecast financials, and running valuation analyses. After proposing an acquisition candidate to an internal investment committee, the deal professional is given the go-ahead to submit an offer to the seller. The deal professionals work with transaction advisors to include investment bankers, accountants, lawyers and consultants to execute the due diligence phase. This phase includes a deep analysis of both the target company's financial figures and management team. Due diligence is critical in identifying potential liabilities and risks.

Another function involves supervision and support of the firm's portfolio companies and their management teams. They can support management in applying best practices in financial management and strategic planning. Above all, they can help creating accounting and IT systems to increase the investment's value.

The 'exit' is considered, probably, the most important part of a private equity firm along with plans for selling its investment in a company. Frequently it happens after three to 10 years through the merger or sale of the company or via an initial public offering.

6.5 Non-investing Institutions

6.5.1 Gatekeepers

Gatekeepers can be considered specialist and independent advisors who assist institutional investors and companies in their investment decisions. In the old and dyadic relationship between founders and investors, they

can be identified as a third part, and act as bridge for the equity financing gap, supporting entrepreneurs in matching a good fit investor and vice versa. As an intermediary, gatekeepers can use their reputation in the equity financing market to address the problems of investors' adverse selection and moral hazard in future portfolio companies. They are legitimate controllers of information flows and they can influence surrounding networks. They are equipped to give information about companies better than most investors. Investors trust them and market confidence suffers when independence and integrity are compromised.

6.5.2 Non-profit Foundations

Similar to accelerators and incubators in terms of the services provided, non-profit foundations could be considered as special advisors that help and spread entrepreneurial knowledge. These organisations are not interested in making money and net profits; instead, their objective has a social and ethical nature. Their goals are:

- Helping to increase country economic growth.
- Reducing unemployment rates.
- Supporting inexperienced and young entrepreneurs.
- Fostering business education for potential start-up entrepreneurs.
- Spreading entrepreneurship culture inside economic and social systems.

Together with non-profit foundations, these institutions operate in a similar way to university research centres, chambers of commerce or other public-private organisations sharing the goal of encouraging entrepreneurship and entrepreneurial ventures.

Non-profit foundations try to develop a support network for prospect entrepreneurs. The strength and effectiveness of the network can be assessed in several ways, such as capital raised to date, paying customers acquired, and local or national partnerships. They help establish a robust equity financing market, both formal and informal.

Hence, this type of foundation and organisation can connect entrepreneurs with relevant mentors and investors close to their network, and

create fertile ground for the creation of a modern culture of entrepreneurship. They use educational initiatives inspired by winning entrepreneurial models and best practices, and in the past 20 years awareness about this topic has started to spread alongside the number of start-ups around the world.

It should be noted that there are other non-investing actors involved in early-stage financing, such as lawyers, advisers, former entrepreneurs ('serial entrepreneurs'), experienced professionals and policymakers wishing to support start-ups on their path to growth.

6.6 Business Angels and Venture Capitalists: A Comparative Analysis

6.6.1 Business Angels and Venture Capitalists: Similarities and Differences

Business angels and venture capitalists are the most significant actors in the early-stage financing industry, as part of, respectively, the category of the informal and institutional investors.

Focusing a bit more on the former investors, it is worth recalling that business angels are usually private minority investors who back predominantly early stage firms with their own private savings in the form of equity capital. Their purpose is to realise a financial gain when selling their shares as well as to obtain non-pecuniary benefits related to their non-institutional nature. Furthermore, they provide financed firms not only with equity capital, but also with knowledge and their personal networks, filling not only the funding gap, but also the reputational and experience weaknesses that normally affect start-ups (Harrison and Mason 1992; Landström 1993). They respect a code of ethics including, among others, rules for confidentiality and fairness of treatment (vis-à-vis entrepreneurs and other business angels), and compliance with anti-money laundering rules.

Although there are similarities with formal venture capitalists as far as equity investment activity is concerned, business angels and venture

capitalists are very different investors. The first difference, and maybe the most important given its direct effect on their interaction with the invested company, is that business angels invest their own capital and not funds committed by others (Freear et al. 1992; Coveney and Moore 1998). The second difference is that business angels usually invest a small amount of capital compared with the sums that venture capitalists have at their disposal, and thus prefer small companies. However, in recent years, business angels have started financing larger projects thanks to syndication investments (Mason and Harrison 2000; Sohl 2007). The third difference between business angels and venture capitalists is the reason why they invest: venture capitalists invest exclusively to achieve financial returns, with predefined evaluation models, risk-gain profiles and investment strategies; in contrast, business angels are driven by financial returns as well as by non-pecuniary benefits such as playing an entrepreneurial role, working with and mentoring talented and creative people, discovering new technologies, being invited to pitch presentations, interacting with other angels and actors of the financial community, and being perceived as a sophisticated investor (Haines et al. 2003; Morrisette 2007; Ibrahim 2008; Hsu et al. 2014). As a fourth difference, business angels have no or limited diversification strategies, nor do they commit themselves simultaneously to many investments, thus limiting their potential losses by only committing a small proportion of capital from their total personal assets (Freear et al. 1992; Mason and Harrison 1996a; Van Osnabrugge 2000; Johnson and Sohl 2012). As a fifth difference, because of the high opacity on business angels' operations, the deal flow of potential opportunities—and therefore the match between them and entrepreneurs—is much more limited when compared with formal venture capitalists, who can benefit from their higher visibility (Mustilli and Gangi 1999; Paul et al. 2007; Shane 2008; Kerr et al. 2014). Finally, the evaluation and due diligence process, as well as the negotiation stage, are different and require a big personal commitment for the angels, who lack the financial resources needed to give mandates to independent auditors, and professional and legal advisors (Mason and Harrison 1996b; Harrison and Mason 2000; Wiltbank et al. 2009; Mitteness et al. 2012).

Since the 1990s, informal venture capitalists have tried to increase the quality of their operations by gathering in semi-formal associations or

groups of angels. These groups tend to form syndicates usually focused on a territory or industry, that can share presentation pitches from potential entrepreneurs, spread the cost of due diligence over the potential investment opportunities, and share the transaction costs involved in investment deals (Mason 2006; Sohl 2007; Paul and Whittam 2010; Kerr et al. 2014). The BANs have grown to regional, national and even continental proportions. National networks include the Angel Capital Association (ACA) in the US, the UK Business Angels Association (UKBAA) and the Italian Business Angels Network (IBAN); and covering Europe is the European Trade Association for Business Angels, Seed Funds and Early Stage Market Players (EBAN). The previous generation of BANs were associations of business angels whose members were selected and had to face a ripening process (or prove to be professional angels). Potential entrepreneurs submitted business plans to the networks, which selected the best projects according to angels' preferences, ultimately generating an investment deal for a given group of angel members. Unlike the weakly structured, informal networks of the 1990s, today's BANs are interactive and much less fragmented (for example, in Italy there is only one network at a national level, the IBAN), following mostly similar templates and operating procedures; thus entrepreneurs who submit their projects are aware that they will be analysed by the best angels, which ensures professional screening of the projects and the best contribution of either monetary or non-monetary resources (among others, advisory, reputation, and connections with the financial community).

Although these angel networks and surveys covering their activities have contributed to the visibility of business angels, there is still a lack of reliable databases that allow the identification and analysis of representative samples of the population of business angels at both the national and the international level. This obviously limits the possibility of extending all the many research areas and empirical analyses conducted on venture capital and private equity to this segment of financial markets, including the issue of the identification and measurement of the factors that drive the performance of business angels' investments.

6.6.2 Business Angels and Venture Capitalists: Empirical Evidence from the Italian Capital Market

To provide an overview of the role played by business angels and venture capitalists in the early-stage financing industry in Italy, we will make reference to recent research performed jointly by IBAN and VeM, the Venture Capital Monitor based at LIUC University in Castellanza (Venture Capital Monitor and Italian Business Angels Network 2015). Throughout 2014, the research monitored 159 target companies that received funding, an increase from the previous joint VeM–IBAN report (2013), which analysed 125 target companies. In particular, venture capitalists invested in 27 companies, syndication investments (venture capitalists and business angels) backed 22 companies, and business angels invested in 110 companies (Figs. 6.4 and 6.5).

The total number of investments is 283, of which 32 were made by venture capital funds, 57 by syndication operations, and the remaining investments by business angels.

The operations in syndication (two or more investors with the same target) do not show any new trends: the first category of investments, syndication

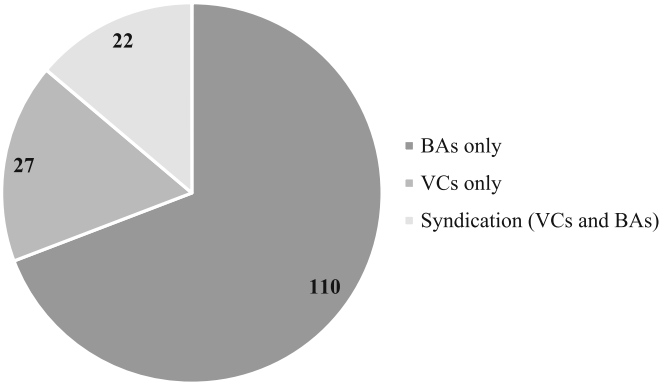

Fig. 6.4 Number of target companies.
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

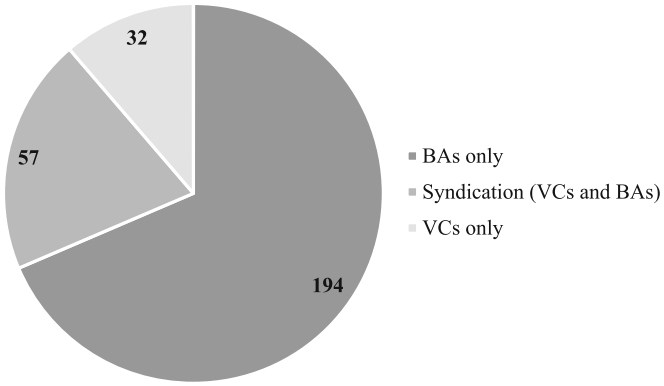

Fig. 6.5 Number of deals.
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

among venture capital funds, shows four operations of this kind out of 27; while two-thirds of business angels' operations involve a syndication approach, thanks to the huge increase in the number of investment clubs.

The interaction between venture capitalists and business angels is the most interesting finding of the 2014 analysis: 22 operations involved both investors, up from 14 of 2012.

Fig. 6.6 shows the minimum and maximum number of investors per single investee company.

The total amount invested in the Italian early stage market stands at about €90,000,000, excluding follow-on and investments by public entities. The value of this market increased considerably from 2012 (12 %), consistent with the increase in the number of target companies. In detail from Fig. 6.7:

- Institutional investors (venture capitalists) invested about €40 million.
- Syndication investments involving both venture capitalists and business angels accounted for €21.5 million.
- Business angels invested €29 million.

In the following section the main features of the venture capitalists and business angels investments are presented.

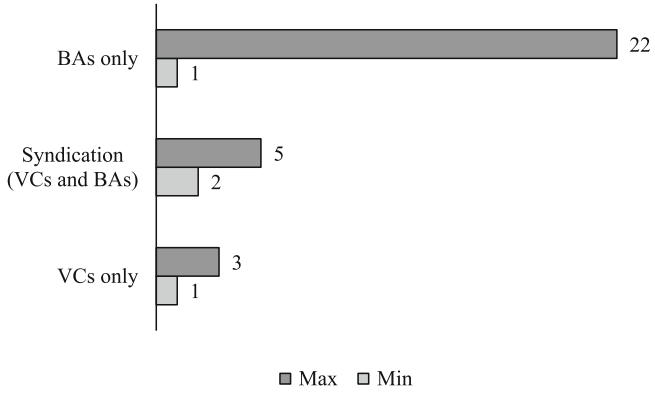

Fig. 6.6 Number of investors.
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

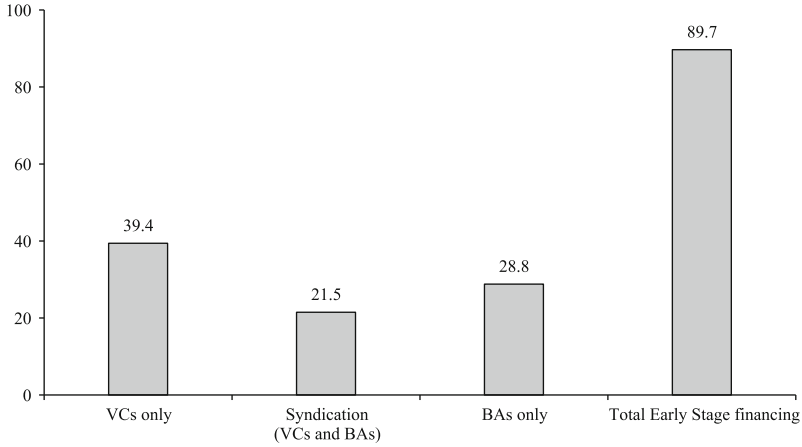

Fig. 6.7 Total amount invested (€m).
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

6.6.2.1 Deals Performed by Institutional Investors

As shown earlier, the total number of investments performed by institutional investors (venture capitalists) is 27. All the investors are Italian entities exception for an Anglo-Saxon investment fund (Fig. 6.8).

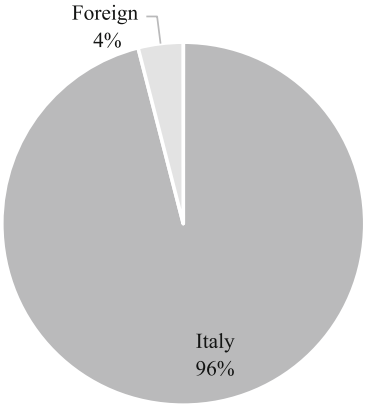

Fig. 6.8 Nationality of investors.
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

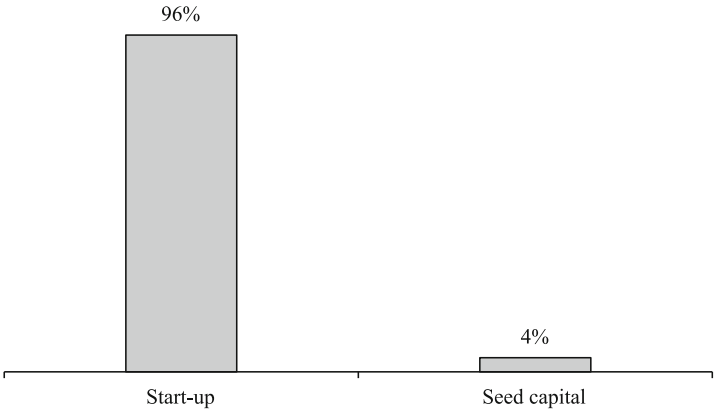

Fig. 6.9 Stage of development.
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

As far as the development stage of the target company is concerned, most of the operations (96 %) targeted start-up companies. This result is no surprise, because venture capitalists are more keen to join medium-to-high size deals. Regarding the ownership of the target companies, about 93 % of them are privately owned, while the rest are university spin-offs (7 %) (Figs. 6.9 and 6.10).

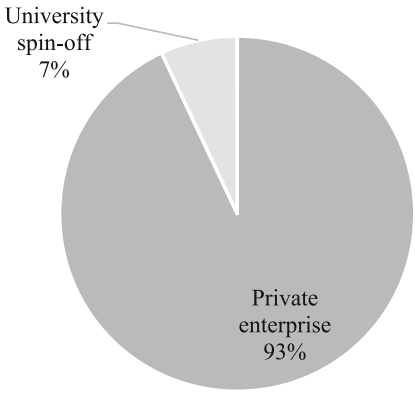

Fig. 6.10 Ownership of target companies.
Source: Authors' elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

Table 6.3 Amount invested and stake purchased

	Average value	Median value
Amount invested	€1.46 m	€0.87 m
Stake purchased	26 %	22 %

Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

As expected, the average investment of institutional investors is well above €1,000,000, while the average stake purchased is 26 % (Table 6.3).

The geographical distribution of the investments show a prevalence of target companies located in Lombardy (59 %), while Campania, Sardinia and Lazio follow with a share of 7 % each. This result is a confirmation of the importance of new technology companies set up in northern Italy, particularly the region of Lombardy (Fig. 6.11).

Consistent with the data shown above, the most financed sector is ICT (44 %), followed by professional services, excluding financial services (37 %) (Fig. 6.12).

Finally, the average age of financed companies is three years. This finding is consistent with the preference of institutional investors for companies, with a successful, though short, track record.

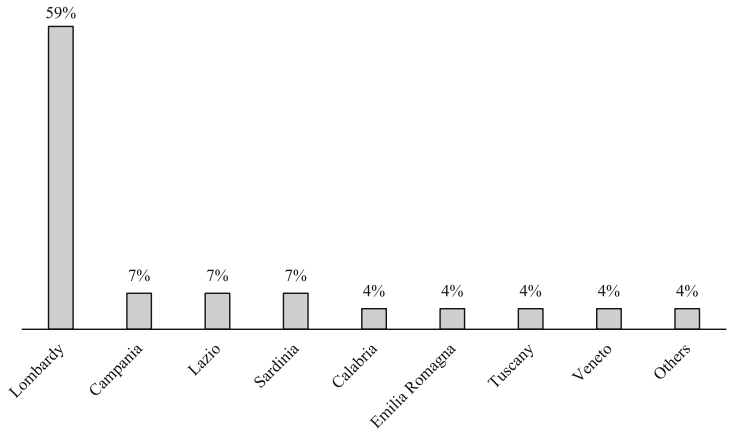

Fig. 6.11 Geographical distribution.
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

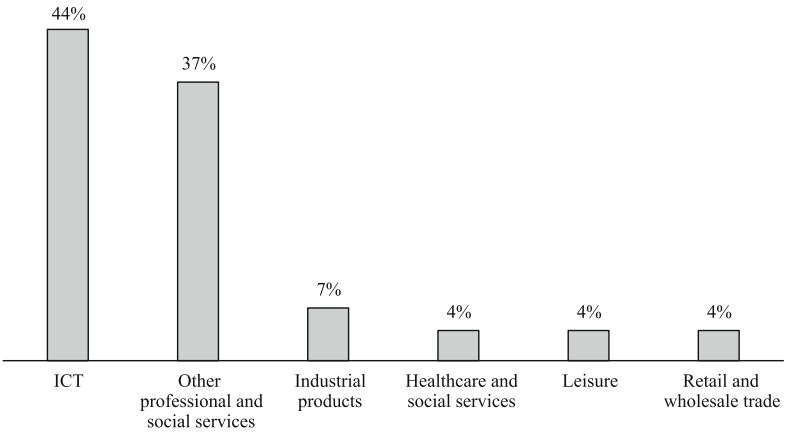

Fig. 6.12 Investments by industry.
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

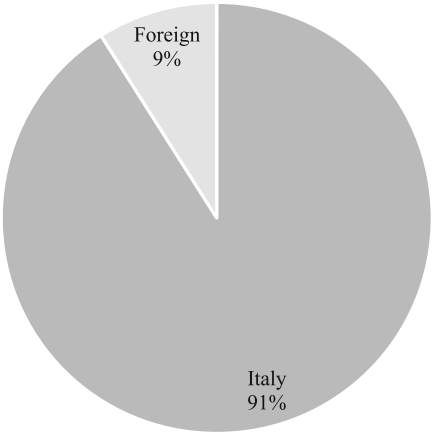

Fig. 6.13 Nationality of investors.
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

6.6.2.2 Deals Performed by Institutional Investors and Business Angels in Syndication

Turning our attention to operations made through syndication between venture capitalists and business angels, there were 22 transactions.

Again, it is confirmed that the most active players in this category of transactions are, in almost all cases, Italian entities, except for two situations where we see the participation of institutional investors of Anglo-Saxon origin (Fig. 6.13).

Referring to the type of investment, and specifically the distinction between seed capital and start-up operations, the deals concerned reveal a predominance of start-up funding (77 %). However, in contrast to what was previously said in relation to transactions carried out by venture capitalists, the data for seed capital (23 %) gains a certain significance. The data on seed capital highlights the presence of business angels, certainly more willing to undertake investments in companies still in their very early stages.

Regarding deal origination, private initiative is confirmed as the main source of opportunities for investors (90 %), with university and corporate spin-offs accounting for the remaining 10 % (Figs. 6.14 and 6.15).

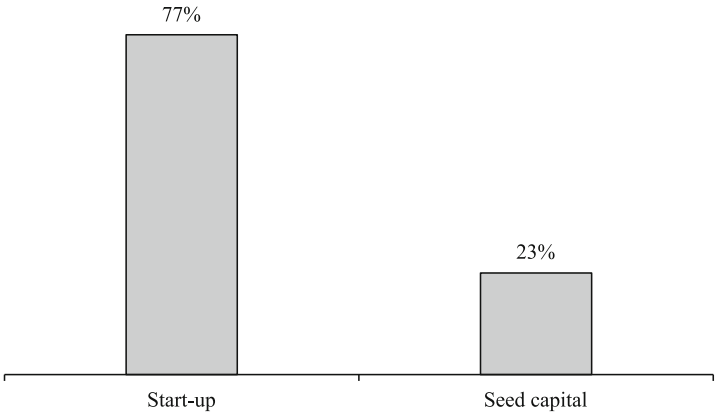

Fig. 6.14 Stage of development.
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

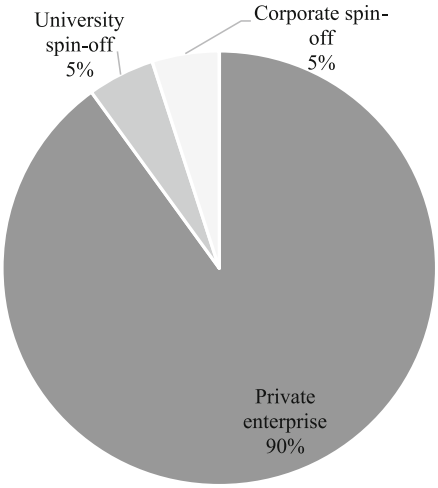

Fig. 6.15 Ownership of target companies.
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

In relation to the amount invested, Table 6.4 shows the mean and the median. The mean is certainly the most indicative data regarding the total amount invested per transaction, while the median reflects the

Table 6.4 Amounts invested by venture capitalists and business angels and stake purchased

	Average value (€m)	Median value (€m)
Total amount invested	0.98	0.50
Amount invested by venture capitalists	0.97	0.38
Amount invested by business angels	0.35	0.13

Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

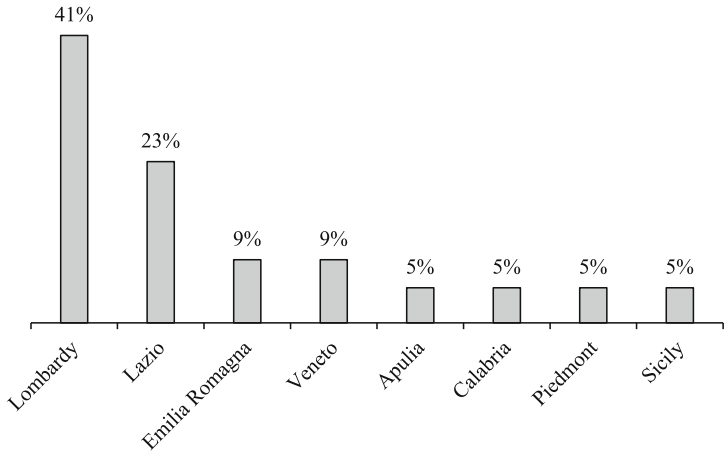

Fig. 6.16 Geographical distribution.
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

financial structure of each deal in terms of contribution ratio of the two types of investors.

Analysis of the geographical distribution of the target companies produces a clear, though less pronounced, predominance of investments made in Lombardy (41 %), followed by Lazio (23 %), Emilia Romagna and Veneto (9 % each). In this context, it seems to increase the attention towards companies located in Central and Southern Italy, probably due to the greater influence of the business angels network (Fig. 6.16).

Referring to the sectorial distribution, the ICT sector plays a primary role (59 %), a figure that is even more pronounced when compared with what was seen in relation to transactions carried out by venture capitalists.

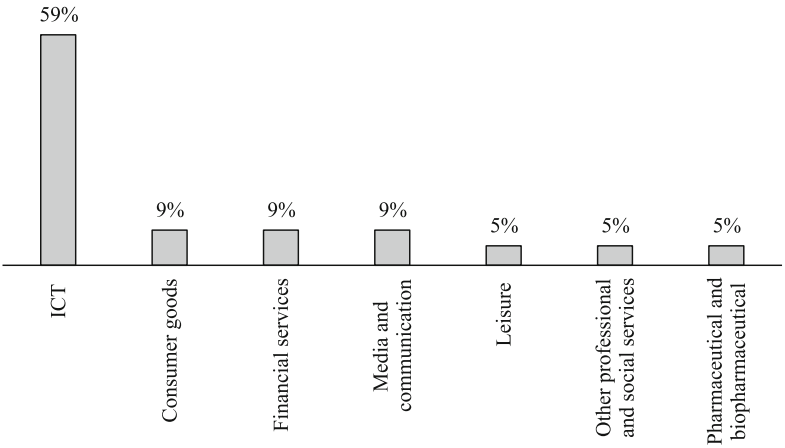

Fig. 6.17 Investments by industry.
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

Other sectors that appear to be particularly relevant (9 %) are consumer goods, media and communication and financial services.

It should be noted that the presence of business angels 'convinces' some venture capitalists to invest more in the pharmaceutical and biopharmaceutical segment that, recently, has been overlooked by institutional investors. This can be seen as an advantage deriving from the cooperation between formal and informal investors: in the presence of a convincing business plan, the industrial skills of some angels may be crucial in persuading venture capitalist about the potential of an operation (Fig. 6.17).

Finally, this investment category focuses on target companies that are about two years old on average. This number, which is lower than the one reported with reference to the transactions carried out by venture capitalists alone, is explained by the higher frequency of seed capital interventions and by the greater attention that angel investors give to entrepreneurs in the early stages of the companies' lifecycle.

6.6.2.3 Deals Performed Only by Business Angels

Regarding operations carried out solely by business angels, there are 110 target companies for a total of 194 investment deals, all funded by Italian informal investors. The gap between the number of companies invested

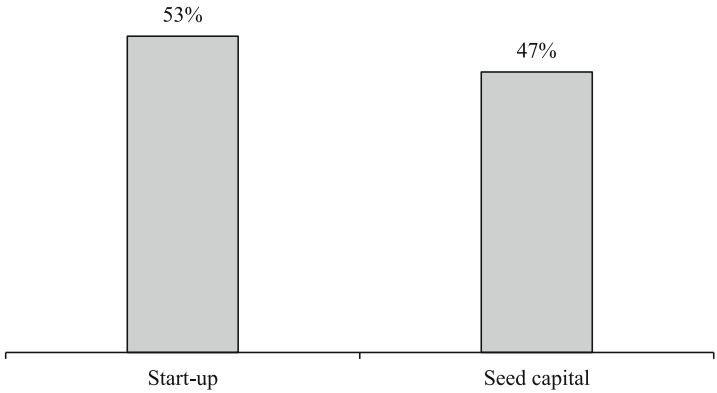

Fig. 6.18 Stage of development.
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

and the number of business angels shows a trend, even in the international context, according to which investors tend to stick together in syndication as a way of increasing the financial supply and to reduce the overall financial risk for each investor.

Focusing on the type of investment, the survey reveals that the average amount invested in each target company is €261,000, almost equally spread between investments in companies in the start-up phase (53 %) and in pre-seed or seed phases (47 %), demonstrating, once again, that business angels focus on investments in companies in the early stages of their lifecycle. Out of the total sample analysed, the contribution of capital by business angels occurred mainly through the subscription of equity, and only in a minority of cases through a shareholder loan or as a bank guarantor (Fig. 6.18).

The majority of the investments (54 %) refers to companies with headquarters in Northern Italy, with Lombardy (26 %) in first place, followed by Lazio (15 %) and Emilia Romagna (10 %). Less important is Southern Italy, able to attract only 12 % of investments. Also it is noteworthy that 8 % of investments were made abroad, mainly in Switzerland and in the US (Fig. 6.19).

The profile and characteristics of the typical business angel have changed little in recent years. The business angel is an Italian entrepreneur, male, with a past as a manager, aged between 30 and 50, who has a degree, is affiliated with IBAN, or one of the territorial BANs, or club of investors in Northern Italy, with assets generally not exceeding €2 million of which

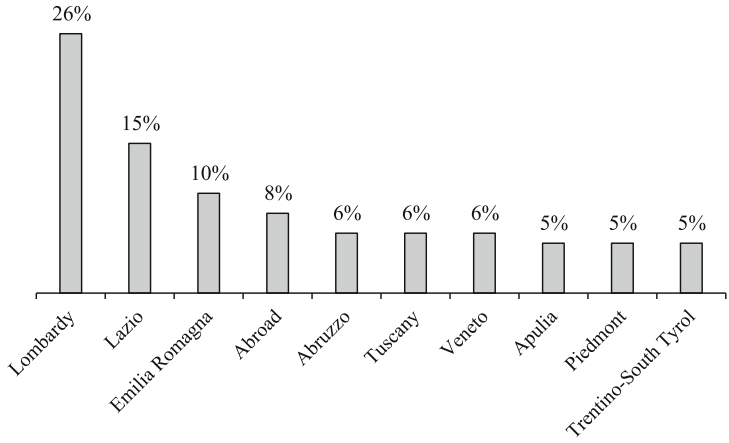

Fig. 6.19 Geographical distribution.
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

10 % is devoted to investments in target companies. In the evaluation of entrepreneurial projects, the main criteria the business angel takes into account are the potential growth of the market (33 %), the quality of the management team (22 %) and the characteristics of the product/service (16 %). Moreover, compared with the results of previous years, there is a much greater consideration given to the exit strategy (9 %).

In 2014, as in the previous years, the industry that has benefited the most from Italian business angels financing was ICT (40 %), followed by 'Advanced Services' (15 %) and 'Sales and Distribution' (10 %) (Fig. 6.20).

Finally, it is interesting to note that, in addition to financial resources, business angels provide the target companies primarily with strategic skills and contacts in the business and financial community, needed to develop the business: the level of business angels' involvement in funded companies is high or very high in 57 % of cases, extending beyond a purely financial contribution.

The 2014 survey confirmed the profound change in the relationship between institutional and informal investors, a sign of good health, growing awareness and maturity of the early stage Italian ecosystem. A positive signal comes from the greater collaboration between venture capitalists and business angels, an element of change that, until 2012, only appeared

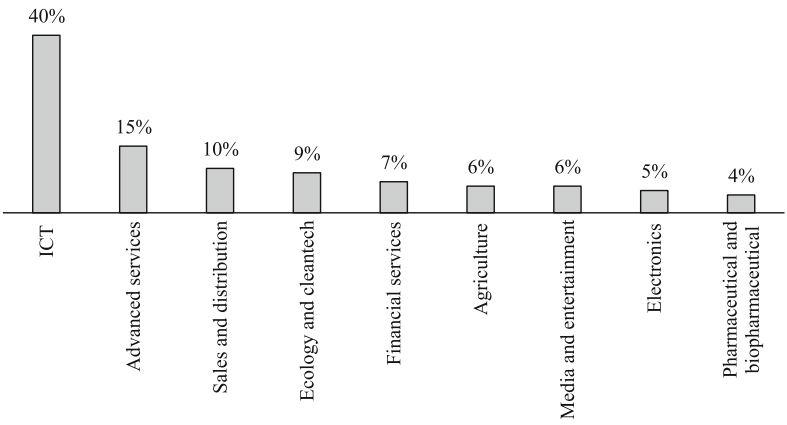

Fig. 6.20 Investments by industry.
Source: Elaboration from Venture Capital Monitor and Italian Business Angels Network (2015)

as desirable. This increased cooperation between the two universes of investment and the unique characteristics of each subject has succeeded in giving a greater impetus to the entire Italian early stage market.

In terms of operating procedures, business angels are gradually approaching some of the characteristics of institutional operators, starting from an increase in the average value of the investment, which allows greater economies of scale. This is also due to the establishment of several clubs of investors, thanks to which it is possible to carry out more structured investments.

Venture capital funds, on their side, have become closer to a world that previously had been little explored: the main evidence is the increase in the number of operations carried out together with business angels or clubs of investors.

Less comforting signals are found in the analysis of the total amount invested in the Italian early stage sector: the market is still not comparable with more developed markets like Germany, France and the UK, despite a 12 % increase in the past two years, with a total amount invested of about €90 million. The 2014 survey also confirms that few deals are coming from corporate and university spin-offs. This evidence confirms there are difficulties in bringing together the investment market, on the one hand, and industry, academia and research, on the other. Certainly, an

improvement in this sense appears to be a vital factor in increasing the volume of investment, as well as achieving maturity of the early stage market in Italy.

6.7 Conclusions and Policy Suggestions

This chapter provided a comprehensive picture of a still opaque and minimally regulated segment of the capital markets, which is nevertheless crucial to filling the funding gap and boosting the creation of start-up ventures.

The standard framework used in finance literature dealing with the fundraising issue of start-ups is based either on venture capital investors and their relationships with start-up ventures, or on equity crowdfunding platforms as unique investors. Rather than take that route, the research presented here takes a different and wider perspective, focused on the ecosystem in which start-ups operate. To improve our understanding of the financial needs, investment and value-generating opportunities associated with entrepreneurial ventures, we have to recognise the presence of the heterogeneous actors in the very early-stage financing industry, each one contributing valuable and specific resources—not just capital—to the growth and competitiveness of start-ups. It is difficult to stimulate the creation of start-ups without a holistic approach to the early financing industry and without considering the potential benefits coming from the reciprocal interactions.

Therefore, crowdfunding platforms, science and technology parks, business incubators, start-up accelerators, business angels and business angel networks, non-investing actors such as banks, non-profit organisations, government and government-owned institutions, and regulatory authorities are all part of a unique system or, better, innovative segment of the capital markets, either at the domestic or international level. It should be noted that, in many cases, these entities are unaware of their role, their reciprocal existence and their mutual, potentially interconnected and beneficial role in incentivising start-ups and entrepreneurships.

Obviously, there is a lot of research to be done as well as a number of measures and action to be implemented by policymakers and all other relevant actors in such an innovative industry.

Starting from the research side, very early-stage financing is an opaque industry with sample biases and methodological issues in identifying and analysing its participants. Our suggestion is to create tight connections among the many research centres dealing with start-ups and entrepreneurship in a given region or to integrate the existing ones, making them exchange datasets, methodologies and analysis at a regional, national and international level.

As far as business angels and their networks are concerned, this chapter, by making reference to focused empirical analyses, allows the identification of potential public policy interventions. These would aim at stimulating the size and expected profitability of the domestic informal venture capital market, given the role played most of all by experience and by a selective investment approach. Two instruments allow angels to gather experience without paying a price in terms of a lower rate of return. The first is to invest alongside other angels through syndicates. In this way, angels can learn from more experienced peers and lower their risk exposure. Furthermore, the advice of co-investors and network members can limit the risk of overconfidence that threatens expert angels' performance. The second is participation in training courses offered by BANs, with financial aid coming from public policy measures, to give angels strategies to improve the way they evaluate business plans and the quality of their screening processes. In fact, a recent contribution (Capizzi 2015) demonstrates the existence of a positive relationship between rejection rate and IRR, implying that angels with more stringent 'killer criteria' will earn more from their equity investments. Furthermore, syndication and BANs play a key role in the refinement of angels' criteria and in their ability to evaluate business plans with an eye to potential IRR.

Stimulating angels' affiliation in officially tracked and legitimated BANs would also increase the possibility of joining a wider set of investment opportunities that have been pre-screened by BANs themselves, thus building on the possibility of implementing highly selective approaches.

Unfortunately, BANs in Italy are still not thoroughly organised or officially approved and do not have the financial availability to offer the educational services that angels would benefit from so much. If public incentives were focused on both stimulating network membership and building their competence, BANs would be able to gather the financial

resources needed to offer educational services and angels would be pushed to participate. Moreover, angels would improve their ability to evaluate business plans by benefiting from sharing experience inside BANs: higher levels of experience and better evaluation skills, together with higher rejection rates, would lead to higher performance and, therefore, to a more efficient informal venture capital market. This, in turn, could increase the financial resources available to start-up businesses, stimulating the growth of the economic and social systems as well.

Coming to the banks, the arguments developed in this chapter suggest they have a number of business and non-business reasons for looking at the early financing industry and becoming more sensitive to entrepreneurial ventures' needs. For this reason, banks could exploit their distribution networks, using their branch and subsidiaries as 'virtual' crowdfunding platforms and 'virtual' incubators/accelerators, creating relationships between potential entrepreneurs and investors as well as sharing financial education and mentoring.

On the other hand, public policymakers and public-owned financial institutions should focus on more effective funding programmes for start-ups, coupling capital injections with other non-financial resources and implementing the same staged financing mechanisms used by venture capitalists to allocate funds in the most efficient way. It is crucial to base the selection and monitoring process on experienced professionals, if we want to use scarce financial resources in more and more focused and effective ways aimed at supporting industrial growth and social welfare.

As far as regulators are concerned, to support policymakers in designing and implementing innovative industrial policies aimed at stimulating the creation of entrepreneurial ventures, they should supervise and monitor the early-stage financing industry, including some of its opaque actors (most of all, business angels and business angels networks). As such, the possibility for policymakers to incentivise start-up funding through focused and favourable fiscal policies requires a clearer identification and control of angel investors' behaviours as well as competences. This raises the possibility of a 'licence' for business angels.

If we accept that stimulating start-ups implies fostering a culture of entrepreneurship, there are also opportunities for universities, business schools, chambers of commerce and other non-profit organisations:

despite the imbalance towards business administration programmes at undergraduate and postgraduate level, 'entrepreneurship' can be taught either at university or through on-the-job training.

Finally, we stress that crowdfunding platforms, business incubators and accelerators, business angels and angel networks, banks and financial institutions, regulators and policymakers should be thought as an 'ecosystem for start-ups'. Such a holistic approach could help generate financial innovations to fill the equity gap, for example, by designing financial securities to be issued by the 'ecosystem' itself (such as district or incubator-based mezzanine bonds). Another approach would be designing contracts for start-ups with a specific contribution given by each actor in the ecosystem, such as start-up structured leasing contracts or contingent-based collateralised working capital credit lines.

In the next few years, the capability to address the above questions and issues will make the difference and contribute to the realisation of countries' entrepreneurial potential as well as in promoting their economic and social development.

7

The Role of Equity Crowdfunding in Financing SMEs: Evidence from a Sample of European Platforms

Veronica De Crescenzo

7.1 Introduction

Crowdfunding is a new phenomenon that has been growing rapidly and consistently. Crowdfunding can be defined as an open call to the public to finance specific projects (European Commission 2013, p. 3). It refers to a way of raising money from a multitude of people, often living in different geographical areas, to finance a project, usually through an online platform that acts as an intermediary.

Elements in understanding the phenomenon include: the small amount of money each person can provide; the role of the social media aspects of web technologies (often termed Web 2.0); and the presence of an online platform to facilitate contact between providers and users of funds.

There are several crowdfunding models, and the most widely used classification is based on the presence of a type of return for providing the funds. This classification distinguishes between non-financial crowdfunding (also termed community crowdfunding), where investors do not expect any financial return, and financial return crowdfunding (Kirby and Worner 2014, p. 8). Financial return crowdfunding includes

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loan-based crowdfunding and securities-based crowdfunding (also termed investment crowdfunding).

The focus of this research is equity crowdfunding, which refers to a type of investment crowdfunding. Investors in equity crowdfunding platforms buy shares in companies whose projects are proposed online, and thus become shareholders of the companies. This crowdfunding model typically includes the German crowdinvesting platforms that use mezzanine financial instruments such as profit participating notes, cooperative certificates, convertible bonds, and profit-participating loans (termed *partiarisches Darlehen*) (Hornuf and Schwienbacher 2015, p. 6).

Equity crowdfunding could become a new funding source for small and medium-sized enterprises (SMEs), and for businesses in the seed as well as start-up stage. Indeed, a central issue for SMEs and start-up firms is how to obtain external funds outside the traditional finance sector, thus reducing the funding gap.

Equity crowdfunding remains the least widespread model of crowdfunding in Europe (Wardrop et al. 2015, pp. 17–18), but it has the potential to play a critical role in job creation and economic growth through financing SMEs and start-up firms.

To analyse equity crowdfunding, it is essential to consider the potential risks of this channel of raising funds. First is the risk of project failure. Investors can lose the entirety or part of the amount of money they invested. Second, people who invest in equity may not be completely aware of or prepared to exercise the voting rights they have acquired; this is principally due to the geographical distance that generally exists between the investors and entrepreneurs. Finally, it is important to consider the liquidity risk that exists when investors decide to sell the investment without a liquid secondary market (European Commission 2013, p. 6).

In this context, the increase of the number of equity crowdfunding platforms that have different business models, and the lack of a common European regulatory framework together create concerns about potential adverse implications for investor protection. The lack of a common European regulatory framework has led some countries in the region to design specific regulations for equity crowdfunding. The purpose of these regulations is to attempt to find a trade-off between

investor protection and supporting the growth of the crowdinvesting sector (European Commission 2014, p. 7).

Regulation can influence the potential of equity platforms to provide an alternative source of capital to start-up firms and SMEs. In particular, regulation for investor protection may be invoked to limit investments through equity crowdfunding to professional clients, to investors with specific competences, or to High Net Worth Individuals (HNWIs), thus reducing the number of potential investors through online platforms. An analysis of the principal European Union equity crowdfunding regulatory framework is presented in Chap. 8.

To assess the fundraising potential of equity crowdfunding for SMEs and start-up firms, this chapter first analyses the organisational structure and the business model of a sample of equity crowdfunding platforms active in the European Union. The principal aim is to investigate the functions that equity platforms accomplish. Indeed, existing equity crowdfunding platforms exhibit heterogeneous organisational structures and perform many functions. These characteristics need to be discovered and analysed. The empirical analysis presented in the chapter identifies relevant variables reflecting the characteristics of platforms and the counterparties, that is, target companies and investors. The identification of the key features of European equity crowdfunding platforms is an important step in understanding the role that this model of crowdfunding may play as a new channel of fundraising and in pinpointing the types of firms that would be more likely to succeed in an equity fundseeking campaign. Moreover, the identification of these features is fundamental to selecting a sample of European equity crowdfunding platforms for the second step of the research. The chapter also presents an analysis of the features of a sample of funding campaigns seeking funds on the platforms previously selected. This analysis is divided into two phases: first, funded projects are separated from the unfunded ones, and, later, only the successful funding rounds are considered. The aim was to investigate whether there are significant factors that make a funding round successful.

Ultimately, the analysis aims to discover whether equity crowdfunding could reduce the funding gap experienced by start-up firms and SMEs, and whether it could be a viable supplement or substitute for traditional funding.

The chapter is organised in six parts. After this introduction, Sect. 7.2 covers the organisational structure and business models used by European equity crowdfunding platforms. Sect.s 7.3 and 7.4 describe the methodology used and discuss the results of the analysis of the funded and unfunded projects, and the analysis of the funded projects exclusively. Finally, Sect. 7.5 presents the conclusions and possible policy implications.

7.2 The Business Model of Equity Crowdfunding Platforms

When investigating the organisational structure and business models of equity crowdfunding platforms, it is important to assess the potential of equity crowdfunding as a complement or alternative to traditional sources of finance for SMEs and start-up firms.

Such investigation is important given that platforms exhibit heterogeneous operating models and perform many functions in an environment where there is a lack of a common European regulatory framework. Further, there is no database that lists all the European crowdfunding platforms, which limits the potential to gain a deeper understanding of crowdfunding.

To investigate which factors are most significant to the success of an equity crowdfunding campaign, it is first necessary to identify a sample of platforms. To achieve this, the research relied on websites that each list some of platforms. Active equity crowdfunding platforms that have legal residence within the EU and were listed on Crowdsourcing.org and Thecrowdcafe.com at the end of December 2014 were considered. A platform was regarded as active if it provided investment opportunities. Approximately 50 platforms were identified.

The features of the business model of equity crowdfunding platforms then needed to be identified. To achieve this, Borello et al. (2015) classification method of the business model of European equity crowdfunding platforms was followed. Using this method, relevant variables reflecting the characteristics of each equity platform and the platform's counterparties (that are target companies and investors) were classified. These variables are presented in Table 7.1.

Table 7.1 Main features of equity crowdfunding platforms

Platform characteristics	
Country	Country in which the platform is legally established
Activation date	Date when the platform was either created or began its activity
Active in other countries	Whether the platform is active in other countries and where
Due diligence	Platforms may assess the initiatives seeking funds before they are made available to investors on the platform
Secondary market	Investors may want to buy or sell shares on a secondary market
Target company characteristics	
Target companies	Defines which companies are allowed to post their funding initiatives on specific platforms
Investment amounts	Minimum and maximum amounts that can be raised through the platform
Overfunding	Initiatives may be allowed by the platforms to raise more money than the target
Early closure	Investors can decide to close the funding round as soon as the target amount is reached
Acceptance of shareholders	Platforms may provide target companies with the opportunity to accept or reject an investment made by a specific shareholder
Investor characteristics	
Target investors	Defines the allowed investors on specific platforms
Investment amounts	Minimum and maximum amounts that each investor can invest on the platform
Investment withdrawal	Investors may be allowed to withdraw the investment before the target funding is reached

Source: Borello et al. (2015)

This is an important step in understanding whether equity crowdfunding can be considered an alternative funding source. Indeed, this analysis is fundamental for achieving the second step of the research related to factors that are the most significant for an equity funding round to be successful.

The information relating to the variables presented in Table 7.1 was retrieved from the websites of the platforms. In particular, the following sections of the websites were examined: the section explaining how the platform works; frequently asked questions; and terms and conditions. Several of the most important features presented in Table 7.1 were

selected to create a sample of projects that attempted to raise funds via an equity crowdfunding platform.

The first feature considered was the cross-border aspect of equity crowdfunding and this led to the variable 'active in other countries'. The next question was whether the target companies (the firms that promoted the funding campaigns) were expected to have legal residence in the platform's home country. The majority of the European equity crowdfunding platforms accept only target companies from their country of origin. To investigate the factors most significant for a funding round to be successful, it was fundamental to select platforms that also accept target companies with legal residence outside their home country.

The second variable considered was the type of firms accepted by the platforms, the 'target companies'. The majority of European equity crowdfunding platforms accept start-up firms exclusively (neither the size of the firm, nor its field of business appear to be significant for platforms to accept ideas seeking equity capital). However, some platforms accept every type of firm. These platforms were considered essential for the sample.

The choice of the platforms was also based on the country in which the platforms were legally established, naming this variable 'country'. The share of the alternative finance market, led to the more representative countries being selected. According to a pan-European benchmarking study (Wardrop et al. 2015), the countries of considerable importance in the alternative finance market are the UK, France, Germany, The Netherlands, the Nordic countries and Spain. The UK is the market leader in alternative finance. Indeed, it dominates the European crowdfunding market both in its number of platforms and in the sophistication of its alternative finance instruments (Wardrop et al. 2015, p. 13).

To create the sample of projects, the final fundamental feature considered was the platforms' level of disclosure. A great difference was found both in the amount and in the type of information that every platform made available on its website in relation to the projects seeking equity capital. As such, the sample included those platforms whose available information about projects was most complete. Moreover, a focus was placed on the platforms that provided information on their most recent and their past funding rounds.

Finally, the platform's level of disclosure was another critical aspect. Some platforms changed their disclosure policy while the data was being

collected by removing some elements from their websites. This made it difficult to achieve a complete database.

Considering all these features, five equity crowdfunding platforms were selected: Invesdor (Finland), Fundedbyme (Sweden), Companisto (Germany), Seedmatch (Germany) and Crowdcube (UK). If a platform offered other crowdfunding models in addition to equity crowdfunding (for example reward crowdfunding or loan-based crowdfunding), only the projects raising equity capital were included in the sample.

The analysis is divided into two phases. The first phase focused on a subsample of the selected equity crowdfunding platforms because this analysis concentrates on successful (or funded) and unsuccessful (or unfunded) projects, and only two of the selected platforms provided this information. The second phase considered all the selected platforms and analysed only the successful projects.

7.3 Factors for Success of a Funding Campaign: an Explanatory Study

The objective of this analysis is to understand which features of a crowdfunding project are fundamental to the success of an equity crowdfunding round. Given the lack (so far) of sufficient data, the following analysis consists of an explanatory study. We provide a statistical descriptive analysis by comparing the successful funding rounds with those that were unsuccessful.

Consequently, the first analysis considered the two Northern Europe equity crowdfunding platforms of the sample exclusively (Invesdor and Fundedbyme) because they provide on their websites information about funded and unfunded projects. A dataset was compiled by hand of 127 funding campaigns closed by 31 July 2015. As such, the dataset consisted of 75 closed projects that had succeeded and 52 unsuccessful closed projects (that is a project that did not reach the target amount).

For each fundseeking project (funding campaign), the following qualitative and quantitative variables were considered: year of firm's foundation; firm's home country; fields of business; amount of money needed (goal or target amount); amount of money raised; length of funding

window (number of days between the first and the last investment made); number of investors; presence of rewards in addition to financial returns for investors; availability of the business plan and updated information; and language used to describe the funding campaign to potential investors.

The year of the firm's foundation was used to discover whether equity crowdfunding is a new funding source for start-up firms only. Start-ups firms were regarded as those established no more than five years before the funding round began. This classification criterion is in line with the definition of a start-up firm by the German Startups Association's (Bundesverband der deutschen Startups e.V.) and with the Italian regulations, which, before 2015, were particularly restrictive because they only allowed start-up firms to use equity crowdfunding.

The analysis of the firm's home country was included to determine whether there exists geographical proximity between the fundseeking firms and the crowdfunding platform.

The decision to use English to describe the fundseeking project to potential investors is a choice consistent with the presence of many investors from all over the world. Consequently, the analysis of this variable was included to determine whether fundseeking firms that used English to described the idea to be funded collected equity funds from investors from all over the world.

We included the firms' fields of business to investigate whether there is a prevalence of innovative and technological projects seeking funds via an equity crowdfunding platform. For example, Italian regulation restricts the use of the equity crowdfunding to firms that have elements of process or product innovation.

Table 7.2 presents the features of the 127 funding campaigns, distinguishing between the successful and unsuccessful projects. Other variables are considered in the second phase of analysis.

Start-up firms represent the majority of the all the firms seeking funds via an equity crowdfunding platform (106 of 127). While only 55 % of the sample of start-up firms (58 of 106) succeeded in reaching their funding goal, the success rate of the non-start-up firms was approximately 81 % (17 of 21).

Further, data reported in Table 7.2 demonstrate a predominance of start-up equity crowdfunding rounds both for successful (58 of 75

Table 7.2 Main features of a sample of successful and unsuccessful funding campaigns

Features	Successful	Unsuccessful
Start-up	58	48
Home country	56	25
Field of business		
Art & design, fashion	2	3
Consumer products, manufacturing	14	9
Education	0	3
Film, TV & theatre	1	1
Finance	3	2
Food & drink, restaurant & café	10	8
Health & fitness, healthcare	4	3
Internet business, IT & telecommunication	2	2
Media & entertainment, media & creative services	6	6
Other	6	3
Professional & business services	3	1
Retail	2	0
Services	5	4
Sport & leisure	6	1
Technology	11	6
Business plan	61	41
Updates	28	8
Reward	7	9
Language (only English)	42	34

campaigns) and unsuccessful projects (48 of 52). The greater percentage of start-up firms among the unsuccessful funding campaigns (92 %) compared with successful funding campaigns (77 %) confirms investors' perception of a higher risk for investment in a start-up firm regardless of the fields of business.

Nevertheless, because the number of non-start-up firms that reached the funding goal is not negligible (17 of 75), it is a particularly interesting phenomenon. Equity crowdfunding is commonly evaluated as an alternative source of capital for start-up firms only because the existence of a funding gap is typical of firms in the early stage of their life cycle. It is relevant to consider that until 2014, Italian regulation prevented non-start-up firms from using equity crowdfunding. Conversely, as the data reported in Table 7.2 demonstrate, equity crowdfunding is also considered

an alternative new type of fundseeking by firms that are not in the early stages of their life cycle.

Firms seeking funds generally (81 of 127) come from the same country in which the platform is established. This feature is far more common in successful funding campaigns (75 %) than in unsuccessful campaigns (48 %), which highlights the importance of geographical proximity between the crowdfunding platform and the firm promoting the campaign in the success of a funding round. Moreover, in most cases, the projects promoted by firms established in a country different from that of the platform are related to a neighbouring country, even if this is true more for unsuccessful campaigns than for successful ones.

Each platform presents a list of their fields of business and this list varies notably between the two platforms. Moreover, in our opinion, the funding rounds' classification with respect to the fields of business tends to differ between platforms. Each funding campaign indicates only one field of business (this is most likely what is required by the platform), but in some cases, the use of more than one field of business would be necessary. For example, many funding campaigns classified as Consumer Products revealed the presence of important technological elements in the process or in the products. These critical aspects were considered in the analysis.

The fields of business most representative among the fundseeking projects were Consumer Product and Manufacturing, Food & Drink and Restaurant & Café, and Technology. Technology represented 15 % of all the successful funding campaigns. Firms classified as technological attained success in 11 of 17 (65 % of the all technological funding rounds), which was the best result among the most representative fields of business.

Table 7.2 demonstrates the presence of innovative and traditional firms seeking funds. Nevertheless, given the critical aspect of the field of business classification described before, it is not entirely clear whether the field of business is an important feature for the success of a funding round. In fact, analysing the description of the projects in detail, regardless of the classification of the firm's field of business, demonstrated that the element technology was strongly present even in projects classified as Consumer Products and Services.

To deepen the analysis, certain fields of business (Internet Business, IT & Telecommunication, Media & Entertainment, Media & Creative Services, and Technology) were grouped because it was expected that they would be characterised by a higher level of process or product innovation. Thirty-three of the 127 funding campaigns were related to this grouping of the fields of business. However, it is not accurate to state that the target firms for an equity crowdfunding round are innovative and technological firms. Indeed, as demonstrated in Table 7.2, there are 20 funding rounds belonging to more traditional fields of business such as Food & Drink, Restaurant & Café, and Film, TV & Theatre. If funding projects for Consumer Products were included, this number would be greater. Nevertheless, as stated, the judgment of the technological innovation of the firms in the classification of Consumer Products is discretionary. The success rate of the two groups (innovative and technological firms and traditional firms) was similar: 58 % of the innovative firms and 55 % of the traditional firms reached the target amount.

It is interesting to note that none of the few funding campaigns (three) of the Education field of business was successful.

To examine the importance of the level of disclosure about the idea to be funded to achieve the funding goal, another factor considered was whether the website made available a business plan and updates for the project (see Table 7.2).

It seemed to be very common practice to include a business plan; this was made available by 81 % of the successful funding campaigns and by 79 % of the unsuccessful funding campaigns. These figures relate to the availability of an actual business plan, as some funding campaigns included a file named Business Plan for potential investors, but the content was not in line with the information typically included in such a document.

The practice of providing updated information on the project during the fundraising campaign was much less widespread than providing a business plan. In any case, a more significant role would be ascribed to the presence of updated information: 28 of 75 successful funding campaigns made updates available, and providing this information was less common in the unsuccessful funding campaigns (only eight of 52).

As presented in Table 7.2, funded and unfunded projects also differ in their provision of an element of reward for investors. Only 16 funding campaigns of the 127 offered rewards to investors such as perks, rebates or the final products, in addition to future financial returns. However, this less common provision does not seem significant to the success of the funding campaign because only 9 % of the total successful projects had this feature; in fact, the unsuccessful projects had a higher percentage (17 %) for this feature.

The feature of the language used to describe the idea to be funded was also compared between the successful and unsuccessful projects. As demonstrated in Table 7.2, the majority of the funding campaigns used English as the only language to describe the idea to be funded. More of the unsuccessful funding campaigns (65 %) used English to describe the idea than did the successful funding campaigns (56 %). A significant number of the funding campaigns used English and the home country language (26 of 75 for successful projects; and 15 of 52 for unsuccessful projects). As noted, the preference for using English is consistent with reaching potential investors coming from countries other than that of the platform or entrepreneurs' home country. Unfortunately, neither of the websites of the two platforms provided information about investors' nationality.

To understand which features are more important to the success of a funding round, it is also interesting to analyse the relationship between the amount of funds raised and the number of investors, and between the amount of funds raised and the funding window's length.

The data refer to successful funding campaigns exclusively.

For the first relationship, it is reasonable to expect that higher fund-raising would be characterised by having a greater number of investors. Fig. 7.1 demonstrates that among the successful projects there is a high concentration of funding campaigns that raised no more than €150,000–€200,000 through the participation of no more than 150 investors.

This first result is consistent with the idea that equity crowdfunding is a new funding source for SMEs.

Among the largest funding campaigns (that are those characterised by raising at least €200,000 and attracting more than 200 investors), there are more non-start-up firms (five) than start-up firms (four). Furthermore,

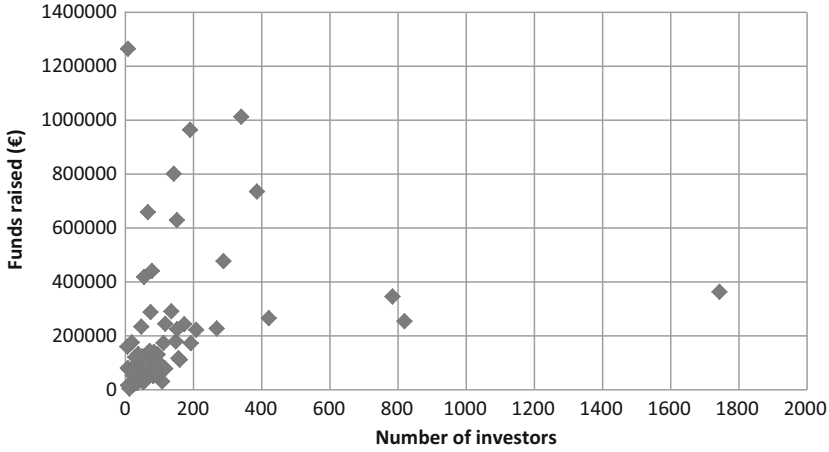

Fig. 7.1 Amount of funds raised and number of investors for successful funding campaigns

the majority of the large funding campaigns did not offer any type of reward and did not belong to the technological field of business.

As noted, the typical successful equity crowdfunding round seem to be one that raised no more than €150,000–€200,000 from the contributions of no more than 150 investors. Fig. 7.2 presents the relationship between the amount of funds raised and the number of investors for such funding campaigns.

Fig. 7.2 demonstrates the presence of a positive relationship between the amount of funding raised and the number of investors. For the smaller funding campaigns, the number of investors could be one of the relevant elements for obtaining more money.

The average investment (amount of money invested per investor) varies considerably among the funding campaigns: from €286 to €26,655 (and a median of €1389). The amount of the largest investment is so large that it cannot be considered in line with a typical crowdfunding investment.

The second relationship is that between the funds raised and the funding window's length (that is the period—number of days—between the first and the last investment). The length of the funding window varies considerably among the funding campaigns: from one day to 133 days, with a modal value of 46 and a median of 57.

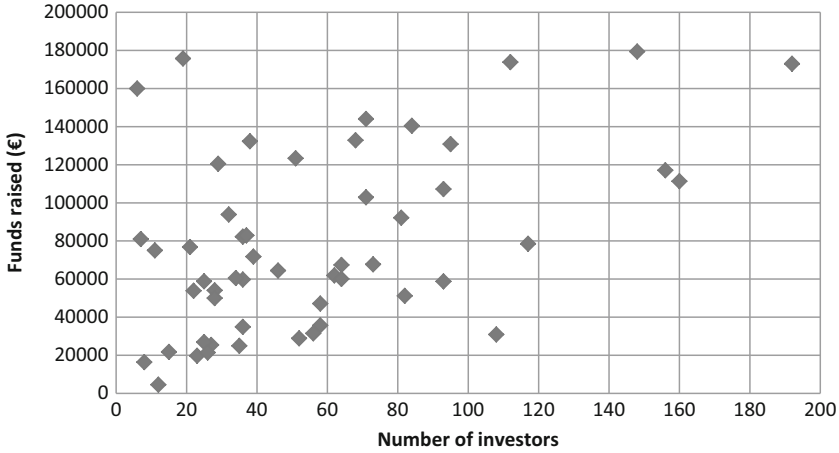

Fig. 7.2 Amount of funds raised and number of investors for smaller successful funding campaigns

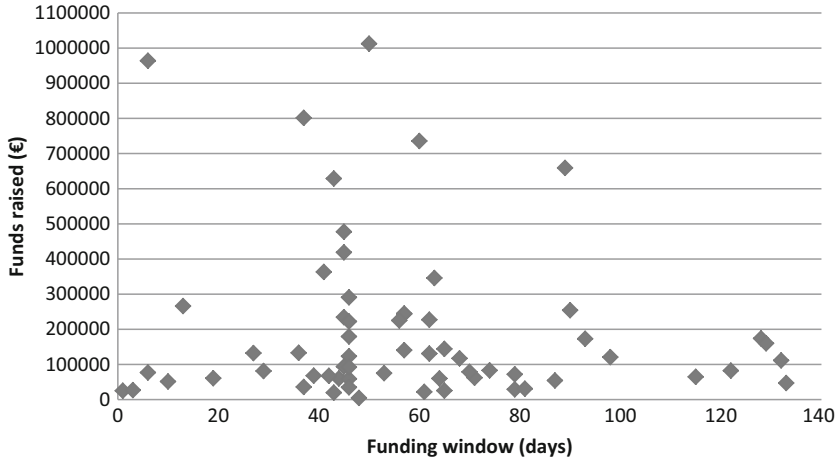

Fig. 7.3 Amount of funds raised and funding window for successful funding campaigns

It could be assumed that the longer the funding window, the greater the amount of funds raised. Fig. 7.3 presents the relationship between the funds raised and the funding window, to follow this hypothesis. This

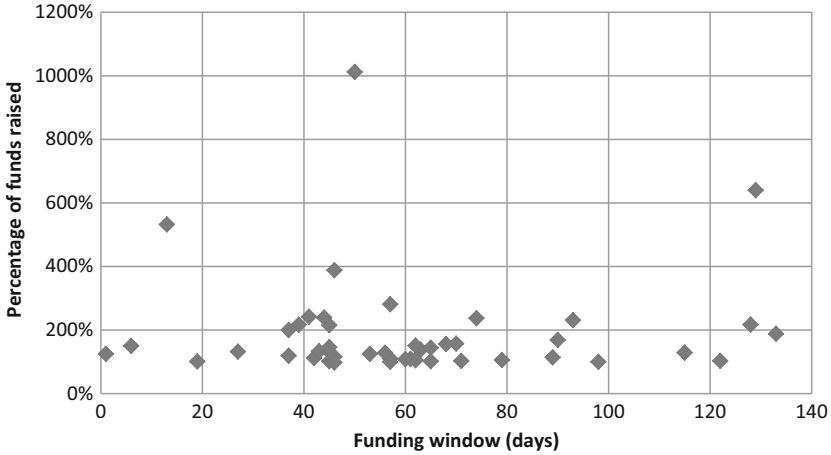

Fig. 7.4 Percentage of funds raised and funding window for successful funding campaigns

analysis included only the 62 successful funding rounds for which complete information was available in relation to the funding window.

The relationship between the level of funds raised and the funding window does not seem to be significant from a statistical point of view. In fact, the majority of funding rounds that managed to raise a large amount of money (more than €300,000) exhibit a funding window varying from 40 to 60 days. Conversely, the funding campaigns with the longer funding windows (more than 90 days) raised less than €200,000.

It could also be assumed that the longer the funding window, the greater the percentage of funds raised compared with the target amount would be. The percentage of funds raised compared with the target amount is often considered a signal of the success of a funding campaign. Fig. 7.4 presents the relationship between the percentage of funds raised compared with the target amount and the funding window.

This analysis included only the 47 successful funding rounds for which complete information about the percentage of funds raised compared with the target amount was made available. Presenting the data of this subsample, Fig. 7.4 reveals that there is no correlation between the

percentage of funds raised compared with the target amount and the funding window.

7.4 Features of a Sample of Successful European Equity Crowdfunding Campaigns

In the previous section, we tried to understand which types of features can facilitate the success of an equity fundraising campaign, by comparing funded and unfunded projects promoted on two Northern European crowdinvesting platforms.

The analysis now focuses on the features of the complete sample of successfully funded campaigns. The purpose of this analysis is to attempt to identify the principal features of the funding projects that were able to reach the fundraising goal via the equity crowdfunding platforms' intermediation in Europe since 2011. Using this information, it was possible to highlight the equity crowdfunding's type of evolution in relation to the amount of funds needed and raised, and the number of investors.

Data comes from the five previously selected equity crowdfunding platforms: Invesdor (Finland), Fundedbyme (Sweden), Companisto (Germany), Seedmatch (Germany), Crowdcube (UK). Similar to the method used in the previous analysis, a dataset of 434 funding campaigns that closed by 31 July 2015, and were successful on the above platforms, was compiled by hand.

For each fundseeking project, the following qualitative and quantitative variables were considered: year of firm's foundation, firm's home country, fields of business, amount of money needed (goal or target amount), amount of money raised, length of funding window (number of days between the first and the last investment made), number of investors, and presence of rewards for investors in addition to financial returns.

For this analysis, using English to describe the project was not investigated because the presence of the British platform Crowdcube in the sample makes this variable less significant. In addition, the availability of a business plan and updates about the project were not considered. This decision was reached because in most cases a business plan was not

available for funding campaigns that had already closed, and the variety of the content in the updates was so great that it was concluded that this variable was irrelevant for the analysis.

All the amounts are expressed in euros. The Crowdcube's amounts expressed in pounds were converted into euros by using the exchange rate of the date of the last investment made.

Given that the platforms have different levels of transparency, some clarifications are needed. A start-up firm is regarded as having been established no more than five years before the funding round began. Some platforms declare that they accept only projects seeking funds for start-up firms but might consider a start-up as having begun earlier than five years ago. For the purposes of this study, we adhere to our definition of a start-up. As noted, this definition is in line with that of the German Startups Association and with Italian regulation. Sometimes, the date of the last investment instead of the start date was used because of the lack of the latter.

There are two fundamental aspects to consider for the variable of field of business. First, two platforms (Companisto and Seedmatch) do not make this information available on their website. As such, from analysis of information about the idea to be funded the field of business was evident in the project description and these funding campaigns were categorised according to the fields of business used by the other platforms. Second, one platform (Crowdcube) indicates more than one field of business for each funding campaign. To follow uniform criteria, we used only the first field of business indicated to classify the fundseeking projects.

Table 7.3 presents the principle features of the entire sample of 434 successfully funded campaigns. It is based on the following qualitative variables: year of firm's foundation, firm's home country, fields of business, and presence of rewards for investors.

Start-up firms represent the great majority of the firms that are successful when seeking funds via an equity crowdfunding platform (369 of 434). Only 15 % of the successful funding campaigns came from non-start-up firms. An analysis of the features of this minority of funding campaigns will be performed later.

As with the results of the previous analysis, the firms seeking equity capital are almost entirely (94 %) from the same country in which the

Table 7.3 Main features of successful funding campaigns

Features	Number	Percentage
Start-up	369	85.0
Home country	407	93.8
Field of business		
Art & design, fashion	18	4.1
Consumer products, manufacturing	51	11.8
Education	11	2.5
Environmental & ethical	6	1.4
Film, TV & theatre	3	0.7
Finance	10	2.3
Food & drink, restaurant & café	91	21.0
Health & fitness, healthcare	17	3.9
Internet business, IT & telecommunication	45	10.4
Leisure & tourism	3	0.7
Media & entertainment, media & creative services	14	3.2
Other	15	3.5
Professional & business services	42	9.7
Retail	37	8.5
Services	13	3.0
Sport & leisure	9	2.1
Technology and software	49	11.3
Reward	259	59.7

crowdfunding platform is established. This feature is particularly true for the British and German funding rounds.

Table 7.3 demonstrates that innovative and traditional firms are seeking funds. Indeed, the fields of business most representative among the equity crowdfunding campaigns are: Consumer Product and Manufacturing; Food & Drink and Restaurant & Café; Technology; and Internet Business and IT & Telecommunication. Despite the fact that the sample for the present analysis is larger, this result confirms that of the previous analysis. It is interesting to observe that a traditional field of business such as Food & Drink and Restaurant & Café accounts for 21 % of the sample of successful funding campaigns.

To deepen the analysis and understand the importance of being an innovative firm when participating in a crowdinvesting initiative, we grouped some fields of business (Internet Business, IT & Telecommunication, Media & Entertainment, Media & Creative Services, and Technology),

Table 7.4 Summary statistics of the main variables for successful funding campaigns

Variable	Mean	Median	Std. Dev.	Min.	Max.	Observations (no.)
Target amount (€)	267,053	127,000	612,933	14,040	8,280,000	388
Raised amount (€)	410,514	193,295	825,243	4527	8,777,512	434
Number of investors	244	136	342	1	2702	433
Funding window (days)	70	60	53	1	442	212

for which it is easier to assume a more specific characterisation of a high level of process or product innovation. The group of firms with innovative projects seeking funds via an equity crowdfunding platform accounts for about one-quarter of the entire sample of successful funding campaigns. This result is comparable with the data on the presence of more traditional fields of business such as Food & Drink and Restaurant & Café (21 % of all the successful fundseeking projects).

We also grouped firms that can be classified under services management. This group was composed of the following fields of business: Professional & Business Services; and Retail and Services. This group accounts for 21 % of the sample of successful funding projects. This group typically had projects characterised by important technological elements.

The provision of an element of 'reward' for investors is a common practice. Sixty per cent of all of the successful funding rounds provided investors with a type of reward in addition to future financial returns. Providing rewards is particularly widespread in the UK.

Table 7.4 presents the principal quantitative variables of all the successful funding campaigns.

The first features that emerged by analysing the data reported in Table 7.4 were the amount of funds raised and the number of investors; acquiring information for these features was easier than for any other features. Conversely, finding data relating to the target amount of money and the

funding window can be more difficult, particularly for funding rounds that have already been closed.

In the period 2011–2015, European firms that raised equity funds via an equity crowdfunding platform on average required €267,000, and were able to collect €410,000 in 70 days thanks to the contributions of 244 investors. Nevertheless, these features disguise a great deal of variability.

The analysis per years of this phenomenon leads to a more significant result (see Table 7.5).

Based on the data available, we assert that the expansion of equity crowdfunding in Europe as a new channel of fundraising began in the second half of 2011. Given the shortage of data for the early years analysed, funding campaigns that reached their goal in the period 2011–2012 were grouped.

Examination of the number of observations available per each variable in the single years of the observed period separately (2011–2015), leads to the conclusion that there has been a gradual and continuous growth of equity crowdfunding in Europe. First, the number of successful funding campaigns is growing rapidly. A certain set of data takes on a particular meaning: the number of successful funding rounds closed in 2014 (149) is approximately equal to the number that closed in the first half of 2015 (130). Second, as presented in Table 7.5, there has been an increase in the average target amount and in the average amount raised: the former increases from just over €100,000 in 2011–2012 to approximately €390,000 in 2015, while the latter increases from €125,000 to €700,000 in the same period. Considering the median rather than the mean achieves the same result.

In addition, the average number of investors tends to increase in the period under analysis: the funding rounds that reached their goal had an average of 139 investors in the two-year period 2011–2012, 233 investors in 2013, 213 investors in 2014 and 349 investors in 2015. In line with the higher raised amount and higher average number of investors, the data also reveal an increase in average investment per investor.

The conclusion is slightly different for the length of the funding windows. The median for the funding window tends to increase from 30 days in the first two-year period (2011–2012) to a maximum of 70 days in 2014. In 2015, the median period was 60 days, which represents a slight

Table 7.5 Summary statistics of the main variables for the successful funding campaigns each year

Variable	Mean	Median	Std. Dev.	Min.	Max.	Observations (no.)
2011–2012						
Target amount (€)	104,224	50,000	190,801	14,040	1,160,000	49
Raised amount (€)	124,392	100,000	171,767	14,040	1,160,000	57
Number of investors	139	136	116	1	491	57
Funding window (days)	39	30	32	1	114	28
2013						
Target amount (€)	173,610	100,000	245,239	20,000	1,190,000	73
Raised amount (€)	270,408	160,000	358,170	24,750	2,347,346	85
Number of investors	233	130	228	1	890	85
Funding window (days)	64	60	42	1	145	40
2014						
Target amount (€)	261,082	150,000	602,635	20,000	6,300,000	134
Raised amount (€)	365,427	200,229	641,256	4527	6,300,000	149
Number of investors	213	121	286	7	1982	149
Funding window (days)	84	70	65	6	442	58
2015						
Target amount (€)	389,312	169,200	821,015	25,000	8,280,000	129
Raised amount (€)	699,553	261,708	1,247,420	47,091	8,777,512	130
Number of investors	349	180	486	25	2702	130
Funding window (days)	73	60	49	6	344	86

decrease from 2014 but an increase from 2011–2012. However, there was an increase in the average amount raised per day within the funding window. As such, the results demonstrate that during the period 2011–2015, the equity crowdfunding rounds were able to raise more money in less time.

At the end of this analysis, the features of the 53 firms that were not start-ups was investigated. Unfortunately, the year of firm's foundation was not available for 12 funding rounds and so these funding rounds cannot be classified by this variable.

As demonstrated in Table 7.6, the variable that differs most from the analysis of the entire sample is the field of business. Indeed, the two fields of business most represented among the firms that were not start-ups were Consumer Product and Manufacturing (26 % of all the non start-up firms) and Food & Drink and Restaurant & Café (17 %).

Conversely, there were very few technological non start-up firms; the Technology field of business accounted for only 3.8 % of the sample of non start-up funding campaigns.

Table 7.6 Main features of successful funding campaigns for non start-ups

Features	No.	Percentage
Home country	51	96.2
Fields of business		
Art & design, fashion	1	1.9
Consumer products, manufacturing	14	26.4
Education	1	1.9
Environmental & ethical	0	0.0
Film, TV & theatre	0	0.0
Finance	1	1.9
Food & drink, restaurant & café	9	17.0
Health & fitness, healthcare	6	11.3
Internet business, IT & telecommunication	4	7.5
Leisure & tourism	0	0.0
Media & entertainment, media & creative services	3	5.7
Other	3	5.7
Professional & business services	4	7.5
Retail	1	1.9
Services	0	0.0
Sport & leisure	4	7.5
Technology and software	2	3.8
Reward	30	56.6

Table 7.7 Summary statistics of main variables for successful funding campaigns of non start-ups

Variable	Mean	Median	Std. Dev.	Min.	Max.	Observations (no.)
Target amount (€)	385,529	156,250	502,304	25,000	2,820,000	49
Raised amount (€)	679,799	288,162	1,062,601	4527	4,932,860	53
Number of investors	395	132	593	8	2702	53
Funding window (days)	77	62	35	41	180	29

Table 7.7 presents the principal quantitative variable of the non start-up projects. Compared with the results presented in Table 7.4, we observe that the mean of all the variables (target amount, raised amount, number of investors and funding window) for non start-up firms was higher than the means of the entire sample (start-up and non start-up firms) of successful funding rounds. As far as target amount and raised amount are concerned, this conclusion is valid also for the median.

This result suggests that established firms have a greater need for financing than start-ups.

Nevertheless, the funding round average investment per investor in 2011–2015 (€1721) for the non start-up firms was similar to the average investment per investor in the same period (€1682) for the start-up firms. This result suggests that funding crowds demonstrate uniform investment decisions for the funding campaigns of start-up and non start-up firms.

7.5 Conclusions

Crowdfunding is commonly considered a new funding channel to complement traditional sources of finance, and to enable long-term investments, and consequently, economic growth. Despite equity crowdfunding being the least widespread crowdfunding model in Europe, it is regarded as

having the potential to play a critical role in contributing to financing SMEs and start-up firms.

In this analysis, we questioned whether equity crowdfunding could be an appropriate method for reducing the funding gap faced by start-up firms and SMEs, and whether it could be considered a supplement to or a substitute for traditional funding sources.

To assess the fundraising potential of equity crowdfunding for SMEs and start-up firms, we investigated the features of a sample of European projects seeking equity funds from 2011 up to July 2015.

This analysis suggests some conclusions. The spread of equity crowdfunding in Europe as a new channel of fundraising began in the second half of 2011 and since then there has been a gradual and continuous growth in terms of funds required, funds raised, and number of investors that became involved in the funding campaigns.

Equity crowdfunding seems to be a newly emerging financing model, especially for start-ups having legal residence in the same country in which the crowdfunding platform is established. Indeed, the majority of funding rounds that succeeded in reaching the goal were firms in the early stage of their life cycle, and the geographical proximity between the platforms and these firms asking for funds seems to be a fundamental element.

From a theoretical perspective, crowdfunding is typically considered a method of facilitating the fundraising activities of start-up firms and SMEs because of its potential to reach a greater number of investors from outside the country of origin of the firm seeking funds. While the websites of the equity crowdfunding platforms did not provide information about investors' nationality, the analysis of the relationship between the geographical location of the firm seeking funds and the equity crowdfunding platform reveals the importance of territorial homogeneity for the funding rounds to be successful.

The analysis also confirmed the presence of innovative and traditional firms seeking funds via a crowdinvesting platform. A particularly interesting factor noted was the presence of a significant number of investors interested in endorsing funding campaigns for Food & Drink firms.

The analysis also found that there was a minority (with reference to the number of firms seeking funds and to the amount of money raised)

of established firms that reached their funding goal through equity crowdfunding.

The results reveal that, in Europe, technological start-up firms are not the only type of firm that has successfully sought equity crowdfunding in the past four years. As such, equity crowdfunding can also be considered a new type of funding model for non start-up firms and for firms operating in more traditional fields of business.

In light of this, we can also affirm that the ways in which equity crowdfunding is regulated will affect its capacity to supplement traditional sources of finance. Limiting the use of equity crowdfunding to start-ups (as was the case in Italy until 2015) or innovative firms could inhibit the potential of equity crowdfunding and prevent its complete development as a newly emerging funding model for all types of SMEs. Providing different sets of rules for equity crowdfunding should be considered: one for start-up firms and the other for SMEs, particularly because regulating funding for start-up firms requires more attention to be paid to investor protection.

8

Financial Crowdfunding Regulation in EU Countries

Paolo Butturini

8.1 Introduction

Equity-based crowdfunding is not comprehensively regulated in the European Union. The absence of specific European regulations on crowdfunding may inhibit some entrepreneurs from using crowdfunding to raise capital, because entrepreneurs must comply with other, more complex, regulations on raising capital, and also need legal advice in each country in which they want to use crowdfunding.

It would seem to be worthwhile analysing the judicial framework in the European Union that regulates this innovative means of funding entrepreneurial activities. To do this, the focus of the chapter will be regulations specific to crowdfunding, where these exist; if there are none, the focus will be the effect on financial crowdfunding of national financial regulations.

In particular, we have chosen not to study all European countries, but just six countries that seem especially relevant in terms of the general importance of these countries as well as the volume of funds raised through platforms based in these countries.

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In some of these countries, crowdfunding is presently a work in progress. This should be a warning, since we are sometimes taking into consideration drafts or projects that could change in the future.

A further goal of this chapter is to define some standard rules that seem effective in the light of the different interests related to the phenomenon, such as protection for investors and the need for entrepreneurs to find funding. We hope that these rules could become a common model across the European Union, and perhaps constitute an example for the European Union itself.

8.2 France

Before the recent reform of crowdfunding, general rules on bank activities and investments used to apply to platforms. These rules imposed strict conditions, and required control by the competent authorities (Autorité de Contrôle Prudentiel and Autorité des Marchés Financiers), even for platforms dealing with small amounts of money (Alvisi 2014, p. 15; Daniel 2013). This situation was criticised, particularly by professionals, as an obstacle to the development of the phenomenon (Daniel 2013).

The French government tried to solve the problems arising from the application of the general regime mentioned above, and specific rules have been applicable since 1 October 2014. Such rules are considered to have been a benefit for the market, even if it is clear that they also tend to impose limits, primarily to protect investors (European Crowdfunding Network 2014a, p. 91).

There are now two specific statuses for platforms: '*conseil en investissement participatif*' (CIP), a crowdfunding investment advisor; and '*intermédiaire en financement participatif*' (IFP), a crowdfunding investment intermediary. These statuses are optional, because an operator could choose instead to be registered or licensed as a '*prestataire de services d'investissement*' (PSI) or a credit institution, if it is worthwhile for it to incur this expense, given the services that it will offer to its clients (European Crowdfunding Network 2014a, p. 93). The result is that, on the one hand, it is possible to adopt a legal status that is cheaper and more

flexible than the traditional ones (Daniel 2013), and, on the other hand, it is still possible to adopt a traditional status, if this is suitable.

As to the lending model, IFPs are legal entities, and it is not necessary for them to be established in France, which is an important feature for foreign investors. However, while the registration rules are substantially similar to those applying to CIPs, and include insurance duties, very low limits apply, in particular to interest-bearing loans, and specific requirements are established for borrowers and lenders, who are often assumed to be individuals and/or acting in a non-professional capacity.[1] From the point of view of a foreign investor, it seems that the possible advantage of using a branch of his own company to register as an IFP should not be over-valued, given the other limits to the lending activity that have been mentioned. Furthermore, if it is true that banks have lost their monopoly on remunerated loans to companies (Hornuf and Schwienbacher 2014c, p. 22, note 18), these limits will tend to limit the potential size of the crowdfunding phenomenon.

As to the equity model, there are strict requirements about the registration and activity of CIPs; in particular, it is worth emphasising the duties to take out specific insurance policies and to provide the investor with adequate information about the risk being taken on.[2] These tend to protect, by different means, the same interest. There is also another limit that probably acts in the same direction: only ordinary shares ('*actions ordinaires*') and fixed interest bonds ('*obligations à taux fixe*') can be issued through the platforms (European Crowdfunding Network 2014a, p. 95). It seems that forbidding platforms to be used to issue securities such as warrants and convertible bonds tends to protect investors. Such means of investment certainly involve different rights in comparison with shares and fixed interest bonds, and it might perhaps be more difficult for the investor to understand this difference. In general, it has been highlighted that the new discipline tends to make portals into gatekeepers, and this could lead to a reduction in the frequency at which investments are

[1] See European Crowdfunding Network (2014a, p. 96), detailing the rules about registration and requirements, and distinguishing between interest-free loans and interest-bearing loans with regard to limits and the personal qualities of lenders and borrowers.

[2] European Crowdfunding Network (2014a, p. 94), which also describes the registration obligations and requirements, and highlights that CIPs must be legal entities established in France.

issued and, at the same time, to a widening of their amounts (Hornuf and Schwienbacher 2014c, p. 29).

A relevant prospectus exemption is established for the offering of equity and fixed interest bonds on crowdfunding websites: this will not be considered as a public offering if the amount is lower than €1 million per issuer over a 12-month period. As a counterbalance to this exemption, investors must be provided with adequate information by the CIP or the PSI (and the information has to be provided 'in a language accessible to a lay person' [European Crowdfunding Network 2014a, p. 98]). This information must cover not only the risks involved in the investment, but also the rights the investor will have, the possibility of selling the securities, financial projections and the level of participation of the management of the issuer in the project (European Crowdfunding Network 2014a, p. 98). These last two aspects seem particularly interesting: the investor has to be aware of the rules, of both legal and contractual origin, applicable to the securities. The definitions of voting and information rights will clarify the powers that the investor will have in the organisation of the issuer. Specifying essential rules about the liquidity of the securities will allow the investor to understand how easy it could be to disinvest in the future; this is a very important condition, one that fundamentally distinguishes this form of investment from a traditional investment in a listed company.

There are also two other new exceptions to public offering rules that are worth highlighting: a '*société par actions simplifiée*' (SAS) is now allowed to make a public offering through a crowdfunding platform; and platforms are forbidden to hold shares in the companies for which they collect funding.[3]

The new discipline has received a positive evaluation from professionals, particularly because it does not over-govern the platforms, providing a flexible and specific status for them (Daniel 2013; European Crowdfunding Network 2014a, p. 100). Beyond this, it has been argued

[3] European Crowdfunding Network (2014a, p. 95), underlining the flexibility of the SAS, often used for venture capital, and the consequence of the prohibition mentioned in the text, and also stating that the former practice of crowdfunding platforms collecting proxies from the investors for general shareholders' meetings will no longer be possible under the new rule.

that the limits on the amounts that it is possible to raise on a platform will avoid pressure from the banking system, since platforms are not likely to threaten banks' activities (European Crowdfunding Network 2014a, p. 101). But do the banks have the right to object to crowdfunding platforms even if they do represent a threat to their activities? It does not seem that banks need to be protected, while investors do. In general, such limits could also be considered as a means of protection for investors, with regard to the needs not just of investors as individuals, but also of the public as a whole.

The discipline of the prospectus exemption has also been judged to be a positive innovation (European Crowdfunding Network 2014a, p. 101); this is also true when one considers the duty to provide the investor with adequate and complete information, which could be even more effective than a prospectus in protecting the investor's interests. It can be difficult to furnish simple and clear information about the very complex subject of the risks and rights related to the investment, but trying to do this could very much help the investor to understand the consequences of his choice.

Finally, it is worth highlighting the interesting rule about insurance, as this seems suitable for the effective protection of investors to a greater extent than the other duties. Even if the information is complete, it is not necessarily the case that the investor is able to understand the information or to understand anything more than how complex it is, so that this duty looks like a useful supplementary guarantee. The insurance rule also seems original when looking at other national regimes.

The other aspects of this discipline that could be discussed basically concern the governance of the issuing company. The limit on the types of securities that can be issued through the platforms could lead to a dilution of the rights of the company's funders, which would be avoidable if preferred shares or convertible bonds were issued; this could make these means of funding less attractive. Forbidding the platforms to hold shares in the companies for which they collect funding would require a modification of the proxy advisor regulation, in order to provide satisfactory solutions to the organisation of votes at general shareholders' meetings (European Crowdfunding Network 2014a, p. 101).

8.3 Germany

The importance of crowdfunding is often emphasised with regard to the German market by noting that it gives self-employed people and micro-firms a chance to fund themselves, given that many banks tend not to find it attractive to lend in small volumes (particularly because of the administrative costs involved [Dapp and Laskawi 2014, p. 2]). Furthermore, there is the fact that the sector has seen rapid growth in recent years.[4]

As in other countries, crowdfunding regulation in Germany has recently been modified, and it is probably going to be modified again, with a review that is scheduled for 2016 (European Crowdfunding Network 2015). Consequently, it is worthwhile analysing the legislation (the German Small Investor Protection Act–*Kleinanlegerschutzgesetz*) enacted in 2015, and the modifications made to the bill, which tried to solve criticisms made by scholars and the crowdfunding industry (Klöhn et al. 2015, p. 2). In general terms, it seems that German legislators took into account stakeholders' opinions (European Crowdfunding Network 2015).

Starting from the licensing requirements and the exemptions, in general terms a crowdfunding platform, facilitating the offering of securities, provides financial services, and accordingly its operator requires a licence from BaFin (*Bundesanstalt für Finanzdienstleistungsaufsicht*, the German financial supervisory authority). A statutory exception to this licensing requirement is available if subordinated profit-participating loans are offered and other specific conditions are met, but a licence under the German Trade, Commerce and Industry Regulation Act will always be necessary.[5] The need for the platform to be an investment service enterprise or to be subject to monitoring by the general trade regulatory authorities arises from the legal obligation to monitor the subscription

[4] See Grummer and Brorhilker (2012): 'Just since the beginning of 2012, the number of websites that act as interfaces between start-ups and investors have more than doubled'; see also Dapp and Laskawi (2014, p. 7), reporting a growth of 253 % in crowdinvesting in 2013.

[5] European Crowdfunding Network (2014a, pp. 106–7) mentions the exception requirements regarding the activities carried out by platforms and the investment products that can be offered, as well as the prohibition on owning customers' funds or shares (unless a specific licence is obtained to do this).

limit, which will be mentioned below (Klöhn et al. 2015, p. 7 and footnote 29).

It is worth underlining that subordinated profit-participating loans ('*partiarisches Nachrangdarlehen*') will qualify as investment products ('*Vermögensanlagen*') under the German Investment Products Act (European Crowdfunding Network 2014a, p. 105), and this represents a big difference from the previous regulation, under which this form of participation did not represent a form of security. In the past, when the definition of what constitutes a security did not include specific forms of profit-participating loans ('*partiarisches Darlehen*'), this type of form was often adopted to avoid the restrictions on raising funds.[6]

As to the limits established for investors, the bill proposed two regimes, for investments up to €1,000 and investments of more than €1,000, and an absolute maximum of €10,000 per investor (European Crowdfunding Network 2014a, p. 108), without distinguishing between potentially different types of investor (Klöhn et al. 2015, p. 9). The legislation did introduce such a distinction, allowing corporate entities to invest more than the limits usually provided for other investors, which are those limits mentioned above. The choice made by the legislators does not seem very convincing. It has been argued that the provision is, at one and the same time, over-inclusive, since qualified investors such as business angels are not covered by it unless they are corporate entities, and under-inclusive, since it applies to a corporate entity whether or not that entity is a sophisticated investor (Klöhn et al. 2015, p. 18). Indeed, this concept of qualified investor does not seem to have any justification, since the qualification does not seem to be related to the legal character of the investor. Besides this, a corporate entity could need protection. Comparing the rule with those enacted in other EU countries on this subject, this criterion does not seem likely to produce an effective balance between the interests involved.

[6] Weinstein (2013, p. 447) mentions the use of profit-participating loans by some platforms to raise more than €100,000 per project. Hornuf and Schwienbacher (2014c, p. 23) remind us that 'the definition of what constitutes a security is not all-encompassing and leaves out specific forms of profit participating loans (e.g., *partiarisches Darlehen*)', and consequently that offers of unlimited amounts could be possible if the financial contract is structured in a certain way.

Significant limits were also established in the legislation with regard to the advertisement of investment products, which could prevent platforms from reaching a broad public through social networks (European Crowdfunding Network 2014a, p. 109), and consequently limit their chances. These limitations could be considered reasonable, in particular with regard to social networks, given that offering investment products through these tools could, in practice, lower the risk awareness of investors, who might receive the advertisement during their free time, and probably pay less attention to what they receive or read. However, the legislator has radically changed the regime in this area, allowing advertisements, and merely requiring a warning of the risk of a total loss of the investment to be published together with the advertisement (or to be reachable through a link if the advertisement on electronic media contains fewer than 210 letters) (Klöhn et al. 2015, p. 9).

As to prospectus requirements, offering profit-participating loans no longer represents an exception to the requirement for a prospectus (Klöhn et al. 2015, p. 7). At the same time, significant exemptions are established, and a prospectus will not be required if profit-participating loans or subordinated loans are offered through a crowdfunding platform, for a maximum amount of €2.5 million, which must be monitored by the platform (European Crowdfunding Network 2014a, pp. 108–9; Klöhn et al. 2015, p. 7). The maximum amount proposed was €1 million and the increase to €2.5 million is sometimes considered as a beneficial change, since it eliminates a restriction that was both stringent (Tordera 2015) and criticised (European Crowdfunding Network 2015). However, other authors tend to disregard the effect of this change, in the light of empirical data showing that a minimal number of crowdinvestments exceeds €2.5 million (Klöhn et al. 2015, p. 11), so that this change cannot be deemed to be very significant.

Some further remarks are worth making with regard to the prospectus exemption mentioned above, which is available if profit-participating loans or subordinated loans are offered to the public. It has been emphasised that for these types of investment there is also a need for investor protection, since this protection can be ensured only by taking into account the specific terms of the investment (Klöhn et al. [2015, pp. 11–2] highlight the paradox arising between the discipline applying to an issuance of profit-participating loans in an amount of €2.5 million

and that applying to an issuance of equity shares in an amount of less than €100,000). This remark seems more persuasive than another made by the same authors about this matter. They argue that making the crowdfunding exception available for all investments would not harm investor protection since investors can evaluate a project and an issuer and share their opinions on them (Klöhn et al. 2015, p. 13). Even if this does happen, it is not obvious that the crowd really has the ability to evaluate the project; nor it is obvious that, by virtue of the intermediation of the crowdfunding platforms, financing contracts will be set up that meet investors' and issuers' combined needs in the best way (although this is considered to be 'very plausible' by Klöhn et al. [2015, p. 13]).

It has been pointed out that the regulation conveniently provides for exemptions from requirements for crowdfunding and for lighter regulation for crowdfunding platforms (European Crowdfunding Network 2014a, p. 112, with regard to the proposed regulation that then entered into force).

Other aspects of the draft legislation that were criticised included the reduction of the regulatory requirements just for profit-participating loans, and the establishment of strict limits of investment per investor (European Crowdfunding Network 2014a, p. 112). In the final legislation, the first investment limit was confirmed, and the regime applicable to the investment limit was changed, but not in a persuasive way, as mentioned above. An appropriate change could consist in raising the limit provided for investors without relating this to their income, and exempting professional clients from the limits (defining such clients following the rules contained in the Securities Trading Act, and so without reference to corporate entities [Klöhn et al. 2015, p. 20]). Other possible suggestions are a widening of the scope of the application of the exception to the requirement for a prospectus, and the introduction of an investor education test to be carried out by the crowdfunding platforms (Klöhn et al. 2015, p. 20).

8.4 Italy

Italy was the first European state to enact a specific regulation on crowdfunding (Hornuf and Schwienbacher 2014c, p. 19). There is also a further regulation enacted by Consob (the Italian securities market authority)

following guidelines established by the Italian legislator. Despite this, crowdfunding has not, so far, grown in the same way as in other countries, as Consob has highlighted (Consob 2015, p. 2).

In particular, the rules established in the specific regulation have a limited scope of application. First, they apply only to equity-based crowdfunding (Piattelli 2013, p. 57). Lending crowdfunding platforms operate under the authorisation of the Bank of Italy as payment institutions and financial intermediaries (and the kind of authorisation required depends on the activities undertaken by the platform [European Crowdfunding Network 2014a, p. 140]). Second, the rules used to be applicable only to companies that met strict requirements (so-called 'innovative start-ups') (Piattelli 2013, p. 57). However, they were then applied to other entities such as innovative SMEs and others, following further reforms. Even so, the entities to which they apply have always been identified through specific criteria. This does not mean that other companies cannot offer their securities to the public; however, if they do this, general rules will be applicable (the Italian Consolidated Financial Act), and a preferential treatment will not be available (Alvisi 2014, p. 6).

Specific rules apply to platforms: their management can be conducted only by investment companies and banks, or by companies that have obtained a specific authorisation from Consob (European Crowdfunding Network 2014a, p. 139; Fregonara 2014, p. 9; it has been highlighted that heterogeneous entities are allowed to manage platforms [Vitali 2014, p. 381]).

In this second case, there are special prohibitions: platforms cannot process orders regarding the underwriting of financial instruments or collect money from investors, and in general terms are subject to a lighter regulation than that applicable to other entities that are allowed to manage platforms (such as investment companies and banks) (European Crowdfunding Network 2014a, p. 139). It has been underlined that for this reason platforms tend to become mere 'shop windows', given how strictly their activity is limited (Laudonio 2014, p. 23). Beyond this, if the company that manages the platform wants to raise funds not only for innovative start-ups but also for other entrepreneurs, separate platforms will be required (Pinto 2013, p. 824).

There is a general limit on the amount that it is possible to raise for each project (€5 million) (Ferrarini 2013, p. 217; European Crowdfunding

Network 2014a, p. 136). This limit has been established to exclude the application of general rules about public offerings of securities, but at the same time it could obstruct the potential growth in crowdfunding (Troisi 2014, p. 529). There is also a remarkable limitation with regard to the securities that can be offered through the platform: only shares in public or private companies, and not bonds and other debt securities.[7] This could make equity crowdfunding less attractive for investors who are not inclined to make risky investments (Fregonara 2014, p. 23).

The participation of a professional investor is also required for the offering to be successfully completed: at least 5 % of the offered share capital has to be paid in by a professional investor (Weinstein 2013, p. 444; European Crowdfunding Network 2014a, p. 139; Fregonara 2014, p. 20).

Scholars have criticised this rule for several reasons. The concept of professional investor does not encompass business angels and venture capitalists, who are naturally interested in start-up investments (Culicchi 2013, p. 4; Fregonara 2014, p. 21). It does not seem likely that professional investors will always be found, especially for minor offerings (Piattelli 2013, p. 61; Fregonara 2014, p. 22). Last but not least, the presence of professional investors does not really protect retail investors, given, in particular, that the latter do not have the right to know anything about the due diligence carried out by the former before participating in the offering.[8] In conclusion, this rule could limit the chances of crowdfunding (Culicchi 2013, p. 4; Troisi 2014, p. 531; Vitali 2014, p. 402),

[7] See European Crowdfunding Network (2014a, p. 139), highlighting the great difference between securities that can be offered through a crowdfunding platform and the general definition of securities. Also, Vitali (2014, p. 391), who points out that excluded from the offering could be bonds, convertible bonds and the particular kind of bonds issued by limited liability companies. For greater detail see Ottolia (2014, pp. 49–50), who points the particular choice of the Italian legislator and argues that the important feature of the securities that a platform can offer is the participation in the entrepreneurial risk. This should make it possible to offer the securities governed by article 2346 of the Civil Code, which are hybrid securities that could be considered similar to shares from this point of view.

[8] Vitali (2014, p. 399) also underlines the fact that while professional investors could participate in the offer, even if they considered it risky, by lessening the risks through other investments, retail investors are not generally able to do that. Laudonio (2014, p. 26) harshly criticises the rule as not likely to guarantee retail investors. Other critical remarks are made by Fregonara (2014, p. 22) and Piattelli (2013, p. 60), who argue that crowdfunding should be an alternative means of funding, so that the need for professional investors is strange. See also Culicchi (2013, p. 3).

without guaranteeing that the company issuing securities can be relied on by investors (Consob 2015, p. 10).

As mentioned above, the Italian legislator made the peculiar choice to make crowdfunding initially available only for 'innovative start-ups' that meet the specific requirements set forth in law 221/2012 (Piattelli 2013, p. 26; Weinstein 2013, p. 443; European Crowdfunding Network 2014a, p. 139; Fregonara 2014, pp. 7–8). It is worth briefly analysing these requirements to help understand the extent to which it is possible to use equity crowdfunding in Italy. Apart from other conditions, the company must have been in existence for no longer than 60 months, must not have distributed any profits, and must carry out a hi-tech activity. Considering in particular the technological requirement and the prohibition on sharing profits, it is clear that a limited number of companies will be able to access crowdfunding. This approach has been criticised by scholars, given that many innovative entrepreneurs will be excluded from using the new funding tool, regardless of the fact that they could easily attract investors (Culicchi 2013, p. 1). This limitation does not seem to be justifiable, since it is not clear why investors cannot choose, from a much larger number of entrepreneurs, the one that they want to fund (Alvisi 2014, p. 4; Laudonio 2014, p. 19), and it also seems to contradict 'the clear intention of the European Commission to support the Crowdfunding raising on a wider basis' (European Crowdfunding Network 2014a, p. 141).

New rules have been enacted concerning this aspect, which widen the application of the regime, but the scope still seems limited. Following modifications brought in by law 33/2015, innovative SMEs, particular investment entities ('*organismi di investimento collettivo del risparmio*') and companies whose main financial assets are shares in innovative start-ups or innovative SMEs are now allowed to use crowdfunding. If one considers the legal definitions of such entities, and the strict requirements with which they have to comply to be considered as such, the approach has not actually changed in a significant way.

With regard to innovative SMEs, two out of three features are required: innovation expenses have to represent at least 3 % of the total income or the total costs related to the core business (whichever is highest), and this ratio would seem to be quite easy to reach; a certain percentage of

employees who are taking a PhD course or have a PhD qualification (1/5), which does not seem to be common; and the ownership of a patent directly related to the core business, which is also quite a specific condition. All of these features are consistent with the concept of innovation, and, at the same time, they also limit the concept of innovation.

With regard to the particular investment entities mentioned above (*organismi di investimento collettivo del risparmio*) and companies whose main financial assets are shares in innovative start-ups or innovative SMEs, these assets must represent 70 % of the company's total financial assets, which seems a high level.

As mentioned above, even if the scope of application of the regime is now wider, significant limits to the possibility of using crowdfunding persist for Italian enterprises, since this innovative means of funding is basically only available for innovative enterprises. It is also important to underline that Consob plans to modify its own specific regulation because of these new rules (Consob 2015, p. 1).[9]

As to the investors, there are no caps on how much money they can invest (as there are in other countries), but there are information duties[10] on the platforms that tend to protect investors. In particular, a declaration is required by the investor, which certifies that he or she understands the risks related to the investment and the possibility that there might even be a total loss of the capital invested (Crucil 2013, p. 1061; Manzi 2013, p. 403; Querci 2014, p. 37). Brief and clear information should be provided, avoiding the use of technical words, on a maximum of five pages. Scholars have argued that achieving this goal when potentially complex information is involved is unrealistic, in particular considering the required features of the language-not technical or containing jargon, and clear and succinct (Laudonio 2014, p. 25).

[9] The specific regulation has been modified through a Consob resolution adopted on 24th February 2016 and which has come into effect on 5th March 2016. Due to publishing needs, it has not been possible to update this paragraph taking the new rules into account.

[10] See Querci (2014, p. 39), who shows that the Italian legislator wants to guarantee that investors have knowledge about investments that are particularly risky, because of their involvement in the innovative technologies field. Fregonara (2014, p. 13) underscores the fact that the protection of retail investors consists in their comprehension of the features of the investment and the risks related to it. For greater detail, including a comparison between the information required by crowdfunding platforms and that required in general, see Laudonio (2014, p. 24).

Offering securities only to qualified investors means that a different regime for required information is applied (Crucil 2013, p. 1061).

As to prospectus exemptions, the prospectus requirements do not apply to offerings of securities with a maximum value of €5 million within a 12-month period. The European Crowdfunding Network (2014a, p. 140) stresses that crowdfunding platforms, even if they are not subject to a requirement for a prospectus, will be subject to specific duties in terms of providing information. The importance of this benefit has been highlighted (Rizzo 2014, p. 304).

As mentioned above, some choices made by the Italian legislator do not seem persuasive. In particular, the need for the participation of a professional investor in crowdfunding offerings and the limited scope of application of the new discipline because of the strict requirements on which companies are allowed to use crowdfunding. Even if scholars assert that the scope of application of the discipline could be widened in the future (Weinstein 2013, p. 443; European Crowdfunding Network 2014a, p. 139), the Italian legislator has confirmed that crowdfunding will be available only for innovative companies and for companies whose main investments are in innovative companies.

8.5 The Netherlands

In the Dutch market, crowdfunding is a rapidly developing sector that is characterised by interesting perspectives of growth (Douw and Koren Crowdfunding Consultancy 2013; Autoriteit Financiële Markten 2014, pp. 12–6; Schwienbacher 2015, p. 8). Given the absence of a specific discipline applicable at this time (see below), supervisory activities are carried out by authorities such as the central bank (*De Nederlandse Bank*—DNB) and The Netherlands Authority for the Financial Markets (*Autoriteit Financiële Markten*—AFM), depending on how the platforms operate, and taking into account the fact that platform activities are in general quite similar to intermediary activities (Alvisi 2014, pp. 18–9; European Crowdfunding Network 2014a, p. 158). Some platforms are not subject to supervision by

the AFM, if their activities do not require a licence, because, for example, they just introduce clients to fund projects.[11]

When the Dutch Financial Supervision Act (FSA) applies, it is possible to distinguish lending-based and equity-based crowdfunding. For lending, the platform may need a licence as a financial services provider if its activity involves consumer credit, or an individual exemption if repayable funds are received from the public. The requirement in the first case would arise from the fact that the platform intermediates in relation to consumer credit. For equity-based crowdfunding, attracting available repayable funds is prohibited under the FSA, unless there is a banking licence, an exception or an individual exemption (European Crowdfunding Network 2014a, p. 161).

As to the equity model, the platform will require a licence as an investment firm to accept and transmit the orders of lenders because shares and bonds are regarded as financial instruments. Debt instruments normally also qualify as repayable funds, given that a debt instrument will normally have a repayment term, but the licence or exemption from the AFM that would usually be necessary will not be required if the issue is made in accordance with the Prospectus Directive (or is exempt under that directive) (European Crowdfunding Network 2014a, pp. 160–1).

As to the prospectus exemptions, there is an exception for offerings of securities or investment products with a value of €2.5 million or less within a time period of 12 months. This amount is not usually reached by offerings carried out by Dutch crowdfunding platforms (European Crowdfunding Network 2014a, pp. 161–2; Schwienbacher 2015, p. 12).

After analysing the statutory framework, it is also worth underlining a peculiarity of crowdfunding in the Dutch context that is beyond the statutory framework and depends on a specific activity of the AFM. This authority has attached specific provisions to each licence or exemption that it has given to platforms. These provisions tend to protect private

[11] Autoriteit Financiële Markten (2014, p. 32, footnote 15) mentions platforms that are 'structured as a kind of notice board where the services provided by the platform for the funding of projects is limited to the introduction of clients' (such an activity being exempt from the requirement to obtain a licence), and platforms that allow lenders to invest collectively in a legal entity that holds shares in the borrower (normally a start-up company). Alvisi (2014, p. 19) also notes this aspect, referring to the activities of platforms that fall outside the scope of the regulations.

investors, limiting the amount they can invest, educating them about how to lessen the risks when investing money, and requiring the platform not only to provide them with adequate awareness of the risks related to the investment, but also to ensure that the borrower furnishes correct and clear information and is likely to repay.[12] The extent of these provisions is remarkable, but, as the AFM admits, the fact that they are not at a statutory level makes it difficult to supervise compliance (Autoriteit Financiële Markten 2014, p. 33). More generally, and as a result of this difficulty, the authority emphasises that a statutory framework to guarantee adequate protection for lenders and borrowers would be necessary in relation to the regimes of intermediation in callable funds and in loans. Also, it calls for the licensing regime for the provision of loans should also be reformed because it does not guarantee enough protection for lenders (Autoriteit Financiële Markten 2014, pp. 33–4).

A further issue for lenders is the absence of a secondary market, which implies that they actually need to hold their financial instruments or loans until maturity, with possible consequences if their financial situation changes (Autoriteit Financiële Markten 2014, p. 22). Some platforms are trying to face up to this problem, giving their investors the option to disinvest; Symbid is an example here (Clifford 2013). As the AFM was expecting (Autoriteit Financiële Markten 2014, p. 22), platforms are starting to help investors in this way. It is worth highlighting that in this specific case the AFM does not recommend the introduction of statutory rules, but just wishes platforms to set voluntary remedies. The lack of a secondary market actually seems common to all EU countries.

What is the probable future of crowdfunding in The Netherlands?

Professionals sometimes argue that, apart from regulation, the creation by platforms of a code of conduct that contains quality standards for their activities could improve professionalism in this field (Douw and

[12] See Autoriteit Financiële Markten (2014, p. 31): investors should not invest more than 100 times and with limits of €40,000 per platform for loan-based crowdfunding and €20,000 per platform for equity-based crowdfunding. Also, the investor's education has to be carried out by the platform through advice to invest a sensible proportion of one's assets, to spread investments across different projects, and to be aware of the risks associated with a crowdfunding investment. Furthermore, the platform must ensure that the borrower provides correct communications about the projects and must carry out risk assessments and an assessment of the borrower's capacity to repay.

Koren Crowdfunding Consultancy 2013). It is important to highlight that this proposal does not at all diminish the importance of a new regulation, given that the consequences of a violation of the code of conduct would probably play out at a non-statutory level, with all the problems arising from this.

The introduction of specific rules is strongly recommended by the AFM: changes to or clarifications of the regimes that prohibit the offering of payment services and the raising of callable funds are deemed necessary to avoid potential contraventions of the Financial Supervision Act (Autoriteit Financiële Markten 2014, pp. 39–41). In particular, the most remarkable aspects of these recommendations seem to be the introduction of sub-regimes for loan-based and equity-based investments, and of a suitability test for wealthier consumers, to allow these people to exceed the generally established limits. Both of these rules are similar to those of other countries, and could probably create an effective balance between the different interests related to crowdfunding.

In general terms, a specific discipline of crowdfunding is likely to unleash the potential growth of the sector, in particular assisting foreign investors, who would otherwise face problems in trying to understand what is allowed and what is not and to follow the general rules that are often not really adequate for these new means of funding. As of today, the Dutch government has published a consultation paper that takes into account the AFM's recommendations. The main points of this paper are a ban on inducements for investment firms and the reinforcement of the exemption regime for intermediates in relation to callable funds. De Graaf and Hasker (2015) list the requirements that a platform must meet to make use of the exemption regime.

8.6 Spain

The Spanish legal system did not regulate crowdfunding until 2014. Before then, professionals had to use traditional investment means to achieve the typical goals of crowdfunding. They created such things as special purpose vehicles (SPVs), through the model of '*Sociedad Anonima*',

or '*cuentas de partecipación*', which are not companies and did not allow fast and immediate contact with investors (Vitali 2014, p. 379).

On 3 October 2014, the government approved bill XX/2014, which aimed to encourage business financing. The bill was enacted on 27 April 2015 (*Ley 5/2015, de 27 de abril, de fomento de la financiación empresarial*). Many articles focusing on the draft are useful because only minor amendments were introduced when the bill became law.

The new discipline concerns the equity and the lending models, with limited differentiation between them (European Crowdfunding Network 2014b).

There are strict requirements for platforms, starting from registration with the market authority (*Comisión Nacional del Mercado de Valores*) (see the act, articles 48, 53, 54). Platforms are supposed to have a minimum share capital of €60,000 (paid in full) or liability insurance that covers €300,000 in damages (article 56 of the act); such rules are considered to be crucial aspects of the regime (Perez 2015).

The capital requirement tends to treat platforms as financial companies, rather than as online start-ups, and the financing industry was apprehensive about the proposed legislation because of this (European Crowdfunding Network 2014a, p. 204). Also, it is worth highlighting a further requirement, which focuses on the platform's own resources. These resources have to grow when the funding collected through the platform grows: in particular, when the funding collected exceeds €2 million in a 12-month period, the platform's own resources have to be at least €120,000. This is sufficient until the funding that has been collected reaches the next cap, which is €5 million. Further growth in the funding that has been collected leads to the duty to provide the platform with more resources of its own (article 56). The application of these rules depends on the real size of the platform, in contrast to the first general rule that could be a barrier for platforms trying to enter the market. Nevertheless, platforms have to be careful about these progressive duties, periodically checking the amount of money raised to avoid any violation.

As to duties related to the activity of platforms, the most important aspect is the information for investors (European Crowdfunding Network 2014b). Besides the rules about general information on the risks related

to crowdfunding investment,[13] there are specific duties about the admission of projects to a platform because a diligent evaluation is required (article 66), and the need for a declaration by investors that they are aware of the risks.[14] The regulations aim to guarantee that the potentially high risks arising from the investment are known by investors, at both a general and an individual level, that is, by means of the information available on platform website and the specific information given with regard to the funded project.

Relevant limits are also established with regard to the maximum amount that can be raised per project. Under article 68, the general cap is €2 million, but the original proposal was for a lower figure (see European Crowdfunding Network 2014a, p. 203). A higher amount (€5 million) is allowed if only qualified investors are invited to invest in the project. With regard to the investors, article 82 provides a limit for each project of €3000 and a global limit for the platform (for the projects funded through it) in a 12-month period of €10,000. This limit also applies over all platforms (article 82.2), so that it is actually a general limit for crowdinvesting for each investor. This second limit is only applicable to non-accredited investors, while accredited ones are free to invest as much money as they want.

The notion of accredited investor is interesting, particularly with regard to individuals: accredited investors are not just supposed to have more than €50,000 of annual income or €100,000 of financial assets (European Crowdfunding Network 2014a, p. 203), but must also explicitly ask to be considered as accredited investors, clearly waiving their right

[13] See articles 60 and 61. Article 60 contains principles that address, among other things, the features of the information to be provided by the platform. Article 61 governs, in general terms, the duties of information, defining what the platform website should state with regard to the particular character of crowdinvesting. Alerts about financial risks and about the differences between crowdfunding platforms and financial institutions are always required. Depending on the kind of securities issued through the platform, more warnings are required, related to the risk of not having an effective voice in the company or to the existence of limits to the free transferability of the limited liability company's shares. The importance of this aspect is underscored by European Crowdfunding Network (2014a, p. 205).

[14] See article 84, which distinguishes between accredited and non-accredited investors, asking from the former a declaration of their awareness of their specific status, and from the latter a declaration of their awareness of the risks involved in crowdfunding and a statement about the total amount they have invested through platforms in the previous 12 months. The article also requires specific features to be contained in the declaration to avoid the risk of it being manipulated.

to be treated as non-accredited. The platform will have to evaluate the experience and knowledge of clients to be sure of their awareness of the risks: article 81.2 refers to these two conditions, that is, a certain individual wealth and a specific request by the investor, and the platform's duty to carry out an adequate evaluation. In this way, while the financial caps are quite low, an explicit request by the client should guarantee a willingness to take risks; but it is worth noting that the evaluation by the platform of the investor's awareness can be difficult.

As to the prospectus requirements and exemptions, it is not necessary to publish a prospectus if securities worth less than €5 million in a 12-month period are offered. Given the above mentioned cap of €2 million, a prospectus could be required for crowdfunding in the case that the project raises money through more than one platform, but this does not seem probable (European Crowdfunding Network 2014a, p. 205). Even if a prospectus is not required, subsidiary information has to be provided by the platform where the securities are offered through crowdfunding. Article 79 requires a description of the kind of security offered, its main features and the related risks and rights arising from it from a financial perspective, and information about the chances to disinvest.

This new discipline of crowdfunding has been criticised because it is too restrictive, providing for limits[15] and prohibitions[16] that could stifle crowdfunding (European Crowdfunding Network 2014b). Barrera (2014) has been particularly harsh, deeming regulators to be 'lacking experience or knowledge'. The caps are low, with regard to both borrowers and lenders. However, sometimes the critics focus on aspects that do not really seem to be inadequate. As an example, it has been argued that it could be possible to avoid the distinction between accredited and non-accredited investors, given that specific information about the investment

[15] As to the limits established for lenders (and borrowers) and capital (or insurance) requirements, see Barrera (2014) and European Crowdfunding Network (2014b), who consider the limits on the maximum individual contribution to be 'seemingly random hurdles'. The costs arising from the application of these new rules might not be affordable by some platforms: see Perez (2015).

[16] The platform cannot invest more than 10 % of the funding target of each project in a project published on the platform (see European Crowdfunding Network [2014a, p. 207]); platforms are not allowed to advertise crowdfunding projects outside their own platform, and the automatic allocation to projects of larger investments is also prohibited (European Crowdfunding Network 2014b).

is required (European Crowdfunding Network 2014a, p. 207). However, even taking into account this individualised notice, the distinction seems reasonable, since the mere communication of information is not likely to transform a retail investor into an accredited one.

Until now, it seems that the Spanish legislator has not always taken much account of these critics, given that the capital and insurance requirements grew in the last version of the regulations. On the other hand, the limit for projects was doubled to €2 million, and the annual global limit for each investor was increased from €6,000 to €10,000. These data come to light when comparing the caps established in the legislation with the caps mentioned by Barrera (2014) and the European Crowdfunding Network (2014b).

8.7 The United Kingdom

Crowdfunding is a fast-growing sector in the UK, whether one considers loan-based or equity-based funding. From the data collected by the Financial Conduct Authority (FCA) (2014, p. 44), it is clear that loan-based crowdfunding platforms used to raise much higher amounts than investment-based ones, but at the same time the rapid growth of the latter type is also evident, expanding more than 600 % between 2012 and 2013 and 200 % between 2013 and 2014 (Financial Conduct Authority 2015, p. 4). The rise of equity-based activities is particularly pronounced and is consistent with a similar rise in the rest of Western Europe and elsewhere.[17]

As in other countries, crowdfunding regulation is still developing in the UK, and a full review of the crowdfunding market and regulatory framework is expected by the FCA in 2016 (Financial Conduct Authority 2014, p. 7). Even if, in the view of the authority, there is no need at present to change the regulatory approach, a 'full post-implementation review' is already scheduled (Financial Conduct Authority 2015, p. 12). It seems, then, that future changes in regulation are probable, although

[17] Collins et al. (2013, p. 10) highlight the rapid development of both peer-to-peer lending and peer-to-business lending models as well as of equity-based crowdfunding. With regard to the peer-to-business lending sector, the UK is the world leader, and through it British SMEs are able to get funding in a short time and to bypass banks' lending processes.

they may consist of minor modifications, given that the general approach is considered adequate.

Starting with an analysis of the general rules, offering shares[18] or other securities will generally be subject to the financial promotion rules, and then, to reach a retail investment audience, the operator will need authorisation from the FCA or approval of its financial promotion provided by an FCA-authorised firm. The European Crowdfunding Network (2014a, p. 224) emphasises that financial promotion is often involved in crowdfunding websites and that the requirements of Chap. 4 of the FCA's Conduct of Business Sourcebook have to be met when an exemption is not available. Some exemptions are established if the promotion of investment opportunities is made to existing shareholders or to sophisticated, wealthy and professional investors.[19]

In a consistent way, the specific crowdfunding regulation also distinguishes between professional and retail investors. In particular, in the UK there are limits on the investors to whom an offer through a crowdfunding platform can be made (see the FCA's Conduct of Business Sourcebook, Sect. 4.7.7). As the FCA emphasises (2014, pp. 35–6), apart from professional clients, only certain types of retail clients should receive such an offer–clients who have a specific knowledge about the investment or for whom the influence of the crowdfunding investment on their investible financial assets is expected to be limited. The distinction is made because professional clients are assumed to be more knowledgeable about investments in start-up companies and these activities, such as backing high-tech companies, are often particularly risky (Alvisi 2014, p. 14). In other words, only retail clients who can understand

[18] As to the concept of share, see European Crowdfunding Network (2014a, p. 226), emphasising that the offer of shares in a private limited company to the public is prohibited, pursuant to section 755 of the Companies Act 2006. It is worth highlighting that in other countries, for example Italy, a specific exception to the similar rules is explicitly provided: the general prohibition on offering shares in a limited liability company to the public does not apply to 'innovative start-ups', which are allowed to use crowdfunding in Italy.

[19] European Crowdfunding Network (2014a, p. 225) specifies that in the case of sophisticated, wealthy and professional investors, there are two alternatives, since the platform could itself assess the investment sophistication of investors or it could require them to certify their own qualities, such as their total assets and investment experience. See also Collins and Pierrakis (2012, p. 21), mentioning, as examples of exempt persons, beyond wealthy individuals and sophisticated investors, and also investment professionals such as business angels.

and bear the risks involved in this investment can be invited, so that crowdfunding should become 'more accessible to a wider, but restricted, audience' of investors (Hornuf and Schwienbacher 2014c, p. 21). To give more detail on the first aspect, these clients are those who receive regulated investment advice, are venture capital contacts or corporate finance contacts, and are certified or certify themselves as sophisticated investors; the crucial point seems to be this last one, as there could be much debate as to whether it is enough that individual investors merely assume that they are qualified. As to the effect of crowdfunding investment on a client's investible financial assets, retail clients are admitted if they are certified as high net worth investors[20] or if they certify that they will not invest more than 10 % of their net investible financial assets, so that they will only invest money that does not put at risk essential resources such as their home and pension. It is also worth underlining that some platforms used to apply protective rules even before these became mandatory. Dapp and Laskawi (2014, p. 12), discuss this and propose a debate on investor protection between stakeholders and the competent authorities.

As to prospectus requirements and exemptions, the general rule requires a prospectus to be published if transferable securities are offered to the public, unless the amount offered is less than €5 million over a period of 12 months, as is often the case with crowdfunding offers.[21] It is also worth taking into account that this exemption should not be overvalued, because the promotion must meet near-prospectus standards, and consequently the related costs, which can vary from £20,000 to £100,000 (Collins and Pierrakis 2012, p. 21), will not be very different.

[20] For the concept of wealthy, or high net worth, individuals see Weinstein (2013, p. 438), detailing the income and assets required, and comparing 'the exempted groups of investors' to 'the SEC's groups of accredited or sophisticated investors who are allowed to invest in equity offerings'. From this point of view, there seems to be a remarkable convergence between European and US law.

[21] See European Crowdfunding Network (2014a, p. 226), referring to the UK Financial Services and Markets Act 2000 and pointing out that crowdfunding offers mostly fall within the exemption mentioned; see also Financial Conduct Authority (2014, p. 41, footnote 15) for more details about the exemptions established in the Financial Services and Markets Act and in the Prospectus Directive, and also distinguishing between businesses that are covered by MiFID and businesses that are not.

8.8 Final Remarks

After analysing the national regulations, it is now possible to try to define which rules are really effective for equity crowdfunding, given the need to protect the investor and the need to assist entrepreneurs who require funding. On the one hand, investors run severe risks since businesses that use crowdfunding tend to go bankrupt more frequently than other businesses. On the other hand, it is known that investor protection that is too strong may harm entrepreneurs' funding needs (Hornuf and Schwienbacher 2014c, p. 1). In other words, it is vital to protect investors in an effective way, which means a way that also takes account of entrepreneurs' interest in getting funds easily.

Here are some examples of effective rules that have been established by national regulations.

Starting from the platforms' activities, insurance duties for platforms, such as those provided by the French and Spanish regulations, seem better at protecting investors than do share capital requirements. If the platform is deemed to be liable for damages suffered by investors, insurance can immediately settle such damages. It is also worth noting that, in more general terms, the importance of share capital is diminishing in the recent company law reforms enacted across EU countries. The possibility of incorporating companies with a very low minimum share capital is becoming more and more frequent in such countries. Given this trend, trying to protect investors through duties related to minimum share capital would probably not be the best option.

Limits on the categories of security that it is possible to offer may also be helpful, at least when the rules tend to forbid offerings of complex securities (such as warrants or convertible bonds) that involve rights or powers that an investor can barely understand. The limits are not helpful when they simply exclude some kinds of securities, such as debt securities under the Italian regulations, since this exclusion is not likely actually to protect investors, but, on the contrary, could make crowdinvesting less attractive to investors who prefer securities that are less risky than shares.

Provisions aiming to provide the investor with brief and comprehensible information about investments are important (and are established in detail under the Italian regulations). Even if it can be difficult to explain

complex concepts in easy language and in a short report, clarifying the essential features of the securities and the risks involved in a comprehensible form is an important goal. Overwhelming information would actually be counter-productive.

As to the specific declarations sometimes required from investors, who have to certify their comprehension of the risks related to the investment and the possibility of losing all the capital invested, the second of these, which is required in the Italian system, seems an important rule. A declaration like this is objective: investors are not waiving some rights that they could even ignore, but have to state something that is really tangible. If they make a false statement, they alone can be deemed liable for the consequences. Unlike the agreement to be treated as a retail investor (which is required under the Spanish regime), this specific declaration does not imply any specific knowledge of rules or standards, and directly and effectively refers to the main problem, which is, the risk posed by the crowdfunding investment to the investor's personal assets. Focusing exclusively on the particular investor's immediate protection, this declaration could even be sufficient in itself, making further information duties redundant. From a wider perspective, taking into account in more general terms the public interests involved with the issue, information and education for investors nevertheless seem to be very important. Gaining information about investments could help investors gradually to obtain more knowledge and make the best choices.

With regard to the distinctions between the different categories of investors, which are provided by the British and Spanish regulations, an objective approach, like the British one, seems preferable. In particular, categories of retail investors should be admitted to crowdfunding by reference to specific, unambiguous, data that can be more easily used, avoiding legal uncertainty. By contrast, the evaluation of investor awareness that should be carried out by the platform under the Spanish regulations could be difficult.

As to the consequences of such distinctions, an absence of restriction on the investments of accredited investors is usually allowed. However, if the outcome is that one accredited investor or a few such investors buy all the securities, this may not be consistent with the concept of crowdfunding. If the democratisation of investment is considered to be a relevant

interest and accordingly deserves strong protection, a minimum number of investors should be necessary. However, taking into account the different interests involved in crowdfunding, if only one or a small number of investors participate in the offer, there are probably no relevant interests that are affected. The situation would affect the balance of power in the new company. Even so, it seems difficult to argue that the interests of the crowd in investing in that particular project deserve special protection by means of a rule that makes the presence of a minimum number of investors mandatory.

Finally, it is possible to note that a European Union regulation on crowdfunding would probably be the only way to give legal certainty and to improve the use of this instrument across the nations in the economic bloc (Schwienbacher 2015, p. 19). The enactment of such a regulation does not seem likely at the moment (Schwienbacher 2015, p. 18). An EU directive could also be useful, even if it would not be a direct answer to the problems arising from the absence of a common framework.

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