
Crowdfunding from an investor perspective

Final report

Prepared for the
European Commission
Financial Services User Group

17 July 2015

www.oxera.com

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DOI: 10.2874/61896
ISBN: 978-92-79-46659-5

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Executive summary

The Directorate General for Internal Market and Services and the Financial Services User Group (FSUG) commissioned Oxera to conduct a study on crowdfunding with financial returns in Europe. We were requested to undertake the study from the perspective of the user—the investor, rather than the fundraiser—and to include equity crowdfunding and peer-to-peer (P2P) lending.

This report presents the findings of the study. It includes a literature review (section 2), the results of market research into levels of awareness (section 3), and discussions with crowdfunding platforms (section 4).

In this executive summary, we present an overview of these findings.

Introduction

The aim of this study, as commissioned by the FSUG, was to examine two areas to help inform the regulatory debate:

1. the level of existing awareness among the general population of potential (and actual) users of crowdfunding as a form of seeking a financial return;
2. among those who are aware of crowdfunding, the level of awareness of the risks associated with it.

The key questions for the study were as follows.

- How does awareness of crowdfunding vary among selected countries¹ and across the general population? Where have people heard about crowdfunding?
- What proportion of those who are aware of crowdfunding are registered on platforms and/or actively use crowdfunding as a form of seeking a financial return?
- What are the main reasons for people deciding to use or not use crowdfunding as a form of seeking a financial return?
- How well informed are potential and actual users about the risks associated with crowdfunding as a form of seeking a financial return?
- In what ways are crowdfunding platforms helping to inform their users about the nature and risks of crowdfunding as a form of seeking a financial return?

Data was collected from existing public sources, primary research into the general population of potential and actual users, and directly from crowdfunding platforms.

Review of existing literature (section 2)

There is a growing body of literature on the rapid growth of crowdfunding in recent years. This literature provides insights into the growing awareness and use of crowdfunding, as well as a conceptual framework for understanding the nature of the risks involved.

¹ Germany, Poland, the UK and Spain were the sample of countries chosen for this report. The aim was to include countries that are representative of various geographic regions and in terms of the level of development with respect to crowdfunding.

The growth of crowdfunding is primarily linked to two factors: the growth of the Internet, which facilitates new channels linking savers/investors with borrowers/investees; and the global financial crisis that began in 2008, which reduced the availability and attractiveness of bank lending, both in terms of borrowing from banks and the rates that investors could get by lending to banks (for example, in the form of bank deposits). The literature shows that crowdfunding is complementary to, as well as a substitute for, traditional forms of finance, as it serves new as well as existing market segments (in terms of both investors and borrowers). As crowdfunding continues to grow, it is becoming more interconnected with the rest of the financial sector, potentially giving rise to concerns about systemic risk and contagion.

The volume of crowdfunding finance has been much greater in the UK than in other European countries, although crowdfunding has been growing rapidly in all of the countries considered in this study. This growth in funding volumes is also matched by the growth in online interest in crowdfunding, as measured by search terms used, which indicates that awareness continues to grow rapidly in all four countries covered by this study.

Research reports covering rates of awareness of crowdfunding are available for Spain and the UK. Awareness levels follow a similar pattern to crowdfunding volumes, with awareness levels in the UK significantly higher than those in Spain.

Benefits and risks

The literature explores a range of benefits and risks associated with crowdfunding, with a focus on those that differ from traditional options for investment vehicles. For example, one benefit is that crowdfunding can incorporate the 'wisdom of the crowd' in projects and investments, in the form of market-testing and validation, user-based innovation and customisation, marketing, networking, follow-on funding, business development and due diligence.

One of crowdfunding's primary risks to the investor is project risk, resulting in possible defaults or late payments. For large P2P lending platforms, default rates appear to be low, but for equity crowdfunding, failure rates are not yet known (as projects last several years and platforms have not been operating sufficiently long), although (given the nature of what is being funded) it is estimated that they are going to be significant.

A challenge for crowdfunding (and, indeed, other forms of lending/investing) is that information is asymmetric, with investors lacking full information about the investments they make and platforms carrying out only high-level due diligence.² This is (as least partially) mitigated by investors' ability to use of quality signals.

Before investment, asymmetric information can give rise to adverse selection, with higher-quality projects self-selecting away from platforms towards investors that carry out more thorough due diligence, thus allowing high-quality (i.e. lower risk on average) projects to be better differentiated from lower-quality ones and to obtain better financing terms. However, a significant proportion of fundraisers using crowdfunding platforms have been offered funding from other channels, implying that, for these fundraisers, crowdfunding is not a last resort.

² Moreover, the due diligence carried out by investors may be subject to freeriding.

After investment, asymmetric information can give rise to moral hazard, with funds not being used as intended at the outset. This risk can be mitigated by splitting the funding of projects into specific milestones in order to give scope for repeat interaction between funders and those receiving the funding.

Other risks (to investors) of crowdfunding include liquidity risks due to illiquid or non-existing secondary markets, platform failure, raising insufficient funds, fraud, future share dilution (for equity crowdfunding), and cyber attack.

A key concern related to the above is investor inexperience and possibly low levels of awareness of the real risks they face in participating in crowdfunding. This concern is increased by cases of 'quick funding' and potential 'herding' behaviour by investors. On the other hand, both of these phenomena can be consistent with rational responses to information signals. Empirical evidence suggests that a significant proportion of investors in crowdfunding—especially equity crowdfunding—have a relatively high income as well as investment experience. Moreover, the most frequent concerns mentioned by investors and potential investors relate to investment risk, implying a degree of awareness of the potential risks.

Platforms have incentives to address these issues by adopting measures such as bringing on board sophisticated investors, screening projects, and being transparent about projects being funded, past performance of projects that have been funded and the platforms' own business models. Other measures adopted by some P2P lending platforms include setting up a contingency fund and securing loans with collateral.

These issues have been investigated further in the discussions with crowdfunding platforms for this study (see section 4).

Market research on awareness (section 3)

Oxera commissioned market research company Millward Brown to measure awareness, usage as an investor, and risk perception of crowdfunding among the general population of Spain, Germany and Poland. Since there is recent market research on awareness in the UK,³ the UK was not included in this exercise, but is included in other parts of the study, as agreed with the FSUG.

The market research was commissioned in two stages: two questions asked as part of an omnibus survey conducted via computer-assisted telephone interviews (CATI),⁴ which aimed to reveal the level of awareness of crowdfunding in the general population; and then multiple questions in an online survey or computer-assisted web interview (CAWI) for the same three countries. The CAWI survey covered a general sample of 1,000 respondents representative of the population of regular Internet users, and a targeted sample of 400 people aware of crowdfunding, and hence able to answer the part of the questionnaire inquiring into usage and perception of risks.

Key findings

The consumer research highlights the degree of awareness of crowdfunding in the three countries, and sheds some light on the types of people who are most likely to be aware. The survey also provides insights into investor behaviour, the

³ Nesta (2014).

⁴ Where questions are asked over the telephone, and the answers recorded in a computer system.

motivations for investing, and not investing, in crowdfunding and P2P lending, as well as into how risks are perceived.

Awareness

The results of the market research into awareness, derived from the CATI survey, are summarised as follows.

- Awareness levels are highest in Germany (21.5%), followed by Spain (17.4%) and then Poland (16.6%). The difference between the latter two is not statistically significant.
- Awareness rates among males are higher than among females.
- With the exception of Poland where the age group with the highest awareness is the 34–44-year olds, there is a tendency for the youngest age groups (the 18–34-year olds) to have higher awareness rates. In all three countries the awareness rate of the 18–34-year olds exceeds that of the age group 45+ by a statistically significant level.
- Education and income (or, in the case of Spain, social class) are broadly positively correlated with awareness levels for all countries considered. In some instances there are no statistically significant differences.

Equity crowdfunding and peer-to-peer lending as a form of investing

Of those who reported that they are aware of crowdfunding, the additional questions explored their reasons for investing or not investing, as well as their investment activity where relevant. The findings, resulting from the CAWI, include the following insights.

- A greater number of respondents report that they have invested in equity crowdfunding (question 3) than in P2P lending (question 6). Reported investment levels range from 4.1% to 5.4% of total respondents (i.e. not just the aware) in equity crowdfunding and from 1.4% to 3.6% in P2P lending. These estimates suggest higher levels of investing than seems likely given the data from the platforms. Indeed, they may indicate a broader interpretation of the term 'crowdfunding' than used in this study. A similar study conducted in Spain by Two Much Research also concludes that the levels of investments found might be higher than what would be expected.
 - There is a positive correlation between responses indicating investing in equity crowdfunding and investing in P2P lending (48%).
 - Around 60% of the respondents who report that they have invested state that they have invested less than 10% of their savings in equity crowdfunding or in P2P lending (questions 4 and 7).
 - Being interested or excited about a specific company or project is the most important reason to invest for equity crowdfunding (question 5). Respondents who consider 'taking advantage of a new form of investment/increased diversification' to be important tend to consider 'higher expected financial returns' and 'disappointment/mistrust of traditional finance' to be important as well.
 - For P2P lending, no single motivation for investing appears to be more important than any other, and large confidence intervals limit the extent to which the data can be interpreted (question 8).
-

Reasons not to invest in crowdfunding or peer-to-peer lending, and perception of risks (derived from the CAWI survey)

The survey finally inquired into the reasons not to invest in either form of crowdfunding, and also looked into how people who are aware of equity crowdfunding or P2P lending evaluate the potential risks associated with these forms of investment. The findings, derived from the CAWI survey, can be summarised as follows.

- Concerns about the reliability of this form of investment, as well as the lack of regulation of platforms, is rated as the most important reasons not to invest for both forms of crowdfunding (question 9). The mean scores are highly correlated with each other (63%), compared to correlations between other questions displaying coefficients from 8% to 48%. Being concerned about poor financial returns is the least important reason not to invest.
- When asked about risks, on average, respondents consider all risk types to be of moderate to high importance
- Respondents seem mostly concerned that the fundraiser/borrower might be fraudulent (questions 10 and 11). For both equity crowdfunding and P2P lending, the second most highly rated source of concern is that the platform might be fraudulent.
- Respondents score more highly the risk of having poor ongoing information about the borrower in P2P lending, than they rate the risk of having poor information on the state of the investment in equity crowdfunding.

Discussions with crowdfunding platforms (section 4)

Further information was collected from leading crowdfunding platforms in the four countries detailed in section 4. Oxera spoke with representatives from ten crowdfunding platforms (four P2P lending and six equity crowdfunding platforms), including at least two per country.

The following findings can be highlighted.

The UK has substantially larger platforms than the other countries considered, followed by Germany, then Spain and then Poland. There is also a significant difference between P2P lending and equity crowdfunding in all the countries, with the former having much larger platforms in terms of volume of funding than the latter.

Platforms tend to be growing rapidly on all size indicators considered, including volumes, and numbers of subscribers, investors and borrowers/entrepreneurs. However, the number of subscribers in 2014 was still low (although it varied considerably between platforms) and reflects perhaps only a few percentage points of the proportion of the population who are aware of crowdfunding (as indicated by the consumer research).

Managing project risk is a key focus for all the platforms included in the discussions. Overall, as platforms become more developed, there appears to be a trend towards increased risk management, including some significant innovations. These range from better risk-spreading (e.g. more projects, and automated portfolio-building tools) to setting up insurance funds and secondary markets.

All platforms stated that they conduct initial screening, with reported rejection rates for those seeking funds ranging from 70% to 99% of received applications.

For P2P lending, the large number of projects (particularly in Germany and the UK) provides scope for risk-spreading for investors through diversification across multiple projects.

Many platforms publish past performance data, as uncertainty about project risk has negative consequences for reputation. A significant amount of information relating to investment risk has been documented, although it is not clear how well investors understand and use this information.

It should further be noted that past performance is not necessarily a good indicator of future performance. For example, past performance may be misleading if there have been changes in platforms' screening processes or in the population of applicants, or if the general conditions of the relevant economies change.

A full understanding of the project risk associated with crowdfunding is limited by the short history of this form of finance. Arguably, experience of at least a full economic cycle would be required before clear conclusions can be drawn.⁵

Final remarks

This study provides a broad range of information to help answer the questions posed by the FSUG for this study. Crowdfunding is a rapidly developing area that has attracted considerable interest from finance professionals, regulators, academics, businesses and, increasingly, the general population (as potential and actual investors). This study therefore provides a snapshot of the current state of crowdfunding in the countries reviewed here, and this picture can be expected to change quite rapidly over time.

In particular, understanding of the benefits and risks associated with crowdfunding (from the investor's perspective) is still developing among financial practitioners and academics. As such, a lack of clarity around what those benefits and risks might be for investors is to be expected. There is a growing wealth of information to help inform this understanding, however, which this report explores in more depth.

⁵ One platform does explicitly model the impact of default rates such as those that occurred during the recent financial crisis, but most of the platforms do not have a full economic cycle of past experience.

1 Introduction

The Directorate General for Internal Market and Services and the FSUG commissioned Oxera to conduct a study on crowdfunding with financial returns in Europe. We were requested to undertake the study from the perspective of the investor, rather than the fundraiser, and to include equity crowdfunding and P2P lending. The analysis excludes other forms of crowdfunding, such as donation-based crowdfunding.

This report presents the findings of the study, including from the literature review (section 2), market research into levels of awareness (section 3), and discussions with crowdfunding platforms (section 4).

This section gives an introduction to the study, setting out its primary objectives and scope, an overview of the methodology, and the structure of the report.

1.1 Background to the study

Crowdfunding is a new and rapidly growing form of financial intermediation that channels funds from investors (or 'savers'/'contributors') to borrowers (individuals or companies) or users of equity capital (companies) without involving traditional financial organisations such as banks. Typically, it involves Internet-based platforms that link 'savers' directly with 'borrowers'.⁶ There are various forms of crowdfunding, some of which have non-financial returns (e.g. donation-based crowdfunding), while others have (or are expected to have) financial returns. (These returns are usually separated into forms of lending and forms of equity investment, as explained further in section 1.2.)

The benefits of crowdfunding include innovation and flexibility, increased engagement between savers and borrowers, potentially lower transaction costs (and consequently higher net returns for savers or lower costs to borrowers), better (or at least additional) access to credit for small and medium-sized enterprises (SMEs), and additional competition for the traditional channels of financial intermediation.

However, a new form of financial intermediation such as crowdfunding inevitably also presents risks and challenges. From the perspective of the 'user'—which, for the purposes of this study, refers to the investor using the platform—the principal issues are the level of risk associated with the investments and the stability/security of the crowdfunding platform. The FSUG wishes to understand to what extent these risks are known at present. More generally, awareness of crowdfunding as a form of investment may still be quite limited. It is therefore likely that user awareness and understanding of these risks is limited, which represents an important challenge for the successful development of crowdfunding into a major channel of financial intermediation.

To address and mitigate risks, and to encourage the successful development of crowdfunding, appropriate regulation will be required. National regulators of EU member states are already considering regulation, but this is developing at different rates in different countries, and has reached different levels. This also reflects the development of crowdfunding itself, which is much more prevalent in some countries (e.g. the UK) than in others (e.g. Poland).

⁶ For simplicity, the term 'borrowers' is used here to include recipients of equity capital.

Given this background, the FSUG believes that two areas need to be examined, to help inform the regulatory debate and improve understanding of crowdfunding:

1. the level of existing awareness among the general population of potential (and actual) users of crowdfunding as a form of seeking a financial return;
2. among those who are aware of crowdfunding, the level of awareness of the risks associated with it.

The FSUG believes that these areas have not been adequately explored to date, and that more data is required to better understand future prospects.

1.2 Objectives and scope

As the purpose of the study is to explore crowdfunding as a form of seeking a financial return, it focuses on crowdfunding options that provide a financial return (rather than those acting on a charitable basis or that have other non-financial incentives); the main ones being:

- equity crowdfunding of businesses;
- P2P lending to businesses;
- P2P lending to individuals.

The objective of this study is to collect data on the two areas of interest: the level of awareness of crowdfunding as a way of seeking a financial return; and risk awareness. The key questions to be addressed are as follows.

- How does awareness of crowdfunding vary across selected countries (with crowdfunding industries at different stages of development) and across the general population (according to factors such as age, gender and broad socioeconomic group)? Where have people heard about crowdfunding?
- What proportion of those who are aware of crowdfunding are registered on platforms and/or actively use it as a form of seeking a financial return?
- What are the main reasons for people deciding to use or not to use crowdfunding as a form of seeking a financial return?
- How well informed are potential and actual users about the risks associated with crowdfunding as a form of seeking a financial return?
- In what ways are crowdfunding platforms helping to inform their users about the nature and risks of crowdfunding as a form of seeking a financial return?

Data was collected mainly from existing public sources, primary research into the general population of potential and actual users, and crowdfunding platforms. The study examines a selection of EU countries: Germany, Poland, the UK and Spain. This covers countries where crowdfunding is relatively well developed (Germany and the UK) and countries where it is less well developed (Poland and Spain).

1.3 Overview of methodology

The approach to this study is based on three core elements:

- a review of the existing literature on crowdfunding;

- market research on levels of awareness in the general population (in Germany, Spain and Poland⁷);
- analysis of crowdfunding platforms, based on discussion with representatives of the platforms and data collected from them.

1.3.1 Review of existing literature

The study includes desk research of existing literature on crowdfunding, which is based primarily on online sources. These include academic literature, industry reports and the websites of crowdfunding platforms. This research examines evidence on awareness levels for crowdfunding; risks and benefits of crowdfunding as an investment; and differences between countries, with a focus on the four countries specified. The desk research is not intended to be exhaustive, but instead seeks to identify the main sources of information.

Section 2 sets out the findings of the review of existing literature.

1.3.2 Market research on awareness

Oxera commissioned market research company, Millward Brown,⁸ to conduct a two-stage market research project comprising: two questions on crowdfunding awareness in telephone omnibus surveys of 1,000 households per country; and online-based surveys with more detailed questions on awareness and risk perceptions. The surveys were conducted among the general populations of Spain, Germany and Poland. Since there is recent market research on awareness for the UK,⁹ the UK was not included in this exercise (but is included in other parts of the study). The detail of the methodology of these surveys can be found in the appendices.

Section 3 sets out the findings of the market research.

1.3.3 Discussions with crowdfunding platforms

The study involves discussions with representatives of ten crowdfunding platforms, including at least two per country, comprising a mix of equity crowdfunding platforms and P2P lending platforms.

Section 4 sets out the findings of these discussions.

1.4 Structure of this report

This report sets out the approach to the study in further detail, as follows:

- review of existing literature (section 2);
- market research on awareness (section 3);
- discussions with crowdfunding platforms (section 4).

⁷ Market research data on consumer awareness is already available for the UK, so new market research in this country has not been conducted for this study (see section 2 for further details).

⁸ For more information, see Millward Brown's website, <http://www.millwardbrown.com/>.

⁹ Nesta (2014).

2 Review of existing literature

2.1 Introduction

While crowdfunding is a relatively new form of finance, there has been much interest in the topic in the past few years. This study includes a review of the most relevant and up-to-date literature, given that crowdfunding is a rapidly developing area.

The research for this study sought evidence on awareness levels for crowdfunding; the risks and benefits of crowdfunding as an investment; and differences between countries. The bibliography for the review is set out in Appendix A1.

This section covers the following:

- recent developments in crowdfunding as a new form of investing, including a cross-country comparison of developments for various European countries;
- awareness of crowdfunding and, where available, levels of awareness in particular European countries;
- the benefits and risks of crowdfunding as a form of investing.

2.2 Recent developments in crowdfunding

2.2.1 Crowdfunding as a new form of financing within the broader financial sector

The rapid rise of crowdfunding in recent years,¹⁰ which some see as ‘not just the latest fad, but instead a trend that is still in its infancy’,¹¹ has been attributed primarily to: the development and commercialisation of the Internet; and the financial crisis that began in 2008.¹²

The widespread use of the Internet has brought with it the convenience of online portfolio management, enabling investors to split their investments (and hence risk) more easily into a large number of parts, even where they invest only modest overall volumes.¹³ This is therefore particularly relevant for small investors that want to spread their risk.¹⁴ The Internet further reduces search costs, and facilitates information-gathering, regarding the various investment opportunities listed on platforms.¹⁵

The global financial crisis, in turn, led to a reduction in the availability of traditional financing to small businesses,¹⁶ creating a demand for alternative finance.

¹⁰ In Europe (excluding the UK) between 2012 and 2014, P2P business lending grew by 272%, P2P consumer lending grew by 113%, and equity crowdfunding grew by 116%. See Wardrop et al. (2015).

¹¹ Deutsche Bank Research (2014b).

¹² See Chaffee and Rapp (2012) and IOSCO (2014).

¹³ See IOSCO (2014).

¹⁴ In the UK, Nesta (2014) found that in P2P business lending, the average portfolio was £8,137, with an average loan of £92. In P2P consumer lending, the average portfolio was £5,606, with an average loan of £27.10. In equity crowdfunding, the average portfolio was £5,414, with an average transaction value of £1,599. Moreover, one in four P2P business lenders has lent to more than 100 businesses and 45% to between 20 and 100 businesses. Of the P2P business lenders surveyed, 88% considered the diversification of investment portfolios to be important or very important.

¹⁵ See Agrawal et al. (2013). Nesta (2014) found that platforms were the most common way for investors to find out about potential investment opportunities.

¹⁶ See Belleflamme and Lambert (2014).

The [global financial crisis] resulted in a deterioration of financing conditions. The European Commission observes in its Consultation Paper on Crowdfunding in the EU that 'European SMEs largely depend on bank financing, but since the financial crisis banks are much more restrictive in their lending.' For example, in 2012 in the U.K alone, there was an estimated gap between the demand and supply of SME lending of between £26 billion and £59 billion.¹⁷

Wardrop et al. (2015) note that '[a]ccess to finance remains one of the most pressing challenges facing European SMEs today.' Crowdfunding is thus widely seen to fill an investment gap¹⁸ and can therefore play a complementary role to traditional finance.¹⁹

Indeed, crowdfunding can serve market segments that were never fully served by traditional forms of financing. Chaffee and Rapp (2012) note that P2P lending has brought funding to recipients 'that were underserved by the credit markets even prior to the retraction of those markets in 2008'. For larger high-quality projects requiring financing, it is more likely to be worth following the detailed due diligence procedures of traditional forms of finance (from business angels and venture capitalists to banks and hedge funds). On the other hand, for smaller projects the costs of detailed due diligence may be prohibitively high,²⁰ making crowdfunding, where platforms tend to conduct only high-level due diligence and initial screening, a more feasible alternative to traditional forms of finance.²¹

In addition to expanding the range of projects that receive financing, crowdfunding has been shown to increase the relative geographic spread between investors and funded projects (in terms of equity finance, rather than bank lending).²² Nevertheless, the European (excluding the UK) alternative finance industry appears still to be largely 'domestically oriented' in terms of both inflow and outflow of funds.²³

Nesta (2014) found that, in the UK, the proportion of borrowers that thought they were unlikely or very unlikely to obtain funding from sources other than crowdfunding was 33% for P2P business lending, while 44% thought they were likely or very likely to be able to do so. The fact that a significant proportion of borrowers consider themselves unlikely to obtain funding from other sources indicates that crowdfunding and traditional finance can be complements. This is in line with the view noted above, that crowdfunding fills an investment gap.

However, the fact that there is also a significant proportion of borrowers that consider themselves likely to obtain funding from other sources indicates that crowdfunding and traditional finance can be substitutes.²⁴ This is in line with the view that crowdfunding competes with traditional finance.²⁵ In particular, by

¹⁷ See Pekmezovic and Walker (2015) and the references therein.

¹⁸ See Bow Group (2014), Deutsche Bank Research (2014a and b), Hornuf and Schwienbacher (2014b) and Meschkowski and Wilhelmi (2013). Wardrop et al. (2015) report that P2P business lending, equity crowdfunding, reward-based crowdfunding and invoice trading 'provided €385m to nearly 10,000 European [excluding UK] businesses between them in the last three years', with volumes increasing every year.

¹⁹ See Deutsche Bank Research (2014b).

²⁰ See Deutsche Bank Research (2014a).

²¹ As crowdfunding continues to grow, there may be a drive to obtain higher returns by offering riskier products, which will require higher-quality analysis. See Bow Group (2014). In addition to saving money on due diligence, crowdfunding platforms are online and hence may have lower overhead and administrative costs. See IOSCO (2014).

²² See Agrawal et al. (2011).

²³ See Wardrop et al. (2015): 50% of surveyed platforms reported no inflow, and 35% reported 1–10% inflow, with most of the remainder reporting less than 30%; 72% reported no outflow, and 15% reported 1–10% outflow; 5% reported 95–100% outflow.

²⁴ See Agrawal et al. (2013).

²⁵ See IOSCO (2014).

'disintermediating' or 'debanking' the financial sector,²⁶ crowdfunding might be capable of offering a lower cost of capital and/or higher returns²⁷ to borrowers and investors,²⁸ respectively. *The Economist* (2015) notes that savers often get low returns while borrowers pay high rates. In this context it highlights the success of P2P lending in connecting savers and borrowers.

Empirical research on the margin advantage of crowdfunding compared with other forms of finance is limited. Morse (2015) notes that: 'At least some cost savings of disintermediation seem to accrue to investors, but characterizing risk and portfolio selection are first order research needs to understand to what extent the crowd captures rents from disintermediation.'²⁹ Nevertheless, major banks have taken note of the competitive threat posed by crowdfunding. In particular, the banking group BBVA (2013) notes that:

[L]ending and equity-based crowdfunding are disruptive technologies for the banking industry with the potential to displace banks as the primary source of funding for personal and small business loans... The simplicity of crowdfunding's value proposition rests on two pillars: regulation and technology... The combination of no physical location and limited regulatory costs allows crowdfunding firms to keep operating costs low and offer better terms to their clients... [M]ainstream customers of banks... may continue to go for banks to satisfy their demand for a more complex array of financial products: credit cards, auto loans, mortgages, HELOCs, Treasury management or merchant services; products that crowdfunding platforms do not offer yet. However, things could change five or ten years in the future. Crowdfunding platforms could naturally evolve to become the primary source of financial services for young generations... It is reasonable to expect that over time, crowdfunding platforms will increase the complexity of their product offering... [T]here is a real risk that banks stop being the primary source for personal and small businesses loans... [Bank] managers should be convinced that crowdfunding is disruptive and that it represents a real threat to the core business... This is good news for individuals and entrepreneurs, who may never have to worry about not being able to access traditional lending sources or using more expensive funding solutions to finance their projects. It is also good news for small investors seeking a higher return than conventional investment products. For banks, crowdfunding poses a challenge. From here on, they will face a new competitor with lower operating costs.

Similarly, *The Economist* (2015) notes that, while the development of P2P lending will have an impact on bank profits for competing services,³⁰ ultimately, the main risk that crowdfunding poses to banks is that "a graduate who turns to a marketplace for her first loan then also shops there for services banks do care about, such as mortgages or investment advice".

Another area of interest is whether crowdfunding gives rise to systemic risk. That is, beyond 'cutting out the middle man' there is a concern that the higher returns from crowdfunding also reflect 'a financial sleight of hand borne out of regulatory arbitrage that hides risk in the system'.³¹

²⁶ See Belleflamme and Lambert (2014).

²⁷ See Financial Conduct Authority (2013), p. 13.

²⁸ See IOSCO (2014).

²⁹ Morse (2015) uses back-of-the-envelope calculations and cites figures from US platforms indicating P2P rates of return (net of failures) of around 7%. These are compared to the Barclays Capital Fixed ABS Index return of around 4% and the return for investment-grade corporate bonds of around 5.5%. Citing literature that estimates the costs of intermediation at 2–3%, Morse notes that this does not leave a significant excess return of crowdfunding to allocate to a risk premium. *The Economist* (2015) notes that, according to the founder of the US platform Lending Club, administrative costs of banks are at about 7% of the loan value, compared with 2.7% for Lending Club.

³⁰ *The Economist* cites a Goldman Sachs estimate of a possible profit reduction for US banks of \$11bn.

³¹ See Bow Group (2014).

Along with its rapid growth crowdfunding is becoming more interconnected with the rest of the financial sector—e.g. through securitisation and shadow banking activities.³² In the USA, whole loan investments have opened up P2P lending to larger investors such as banks, hedge funds and pension funds.³³ Similarly, in Europe, there is ‘a growing trend of institutional lending (e.g. by [high net worth individuals], family offices, mutual funds, pension funds and hedge funds) on major platforms’.³⁴ This trend is supported by the securitisation of loan tranches. Wardrop et al. (2015) note:

With institutional investors starting to invest and diversify through those online platforms, corporates are beginning to experiment with various forms of crowdfunding and crowdsourcing, and banks themselves are getting involved with peer-to-peer or ‘marketplace’ lending; alternative finance is creating ripples and moving increasingly into the mainstream.

Wardrop et al. (2015) further note that:

The market is now attracting bigger, more sophisticated investors and this is likely to accelerate volume growth. Funds are flowing from institutional investors into peer-to-peer consumer loans, for example, leading to the creation of new investment-grade asset classes being packaged and financed in the traditional capital markets...An ecosystem of fintech firms is emerging and providing tools and services to both alternative finance platforms and investors.

The Economist (2015) highlights that the ‘democratisation of finance’ is dampened by institutional investors making up a large share of P2P volumes.

In line with the above, IOSCO (2014) considers that the increased interconnectedness with the rest of the financial sector, as well as the lack of collateral in P2P lending,³⁵ raises concerns about systemic risk. Given the small size but high growth rate of crowdfunding, this concern is likely to become more relevant going forward.³⁶

However, crowdfunding can be seen as providing an opportunity for investors to widen and diversify their portfolios, and to ‘reduce the build-up of systemic risk’ in the economy.³⁷ *The Economist* (2015) contrasts the robustness of P2P lending to the fragility of banks (which can lead to government bail-outs) and indicates why systemic risk may continue to be limited in a P2P context: ‘[W]hereas banks are subject to runs when too many fickle depositors demand their cash, lenders on peer-to-peer platforms know they will get their money back only when borrowers repay their loans’. *The Economist* (2015) further notes: ‘the risks around [P2P] lending are borne by those who put in the money, not by the general public. As long as that remains the case, the challenge they present to banks should be heartily welcomed.’

2.2.2 Crowdfunding in Europe

The UK dominates the rest of Europe in terms of crowdfunding as shown in Figure 2.1.

³² See IOSCO (2014).

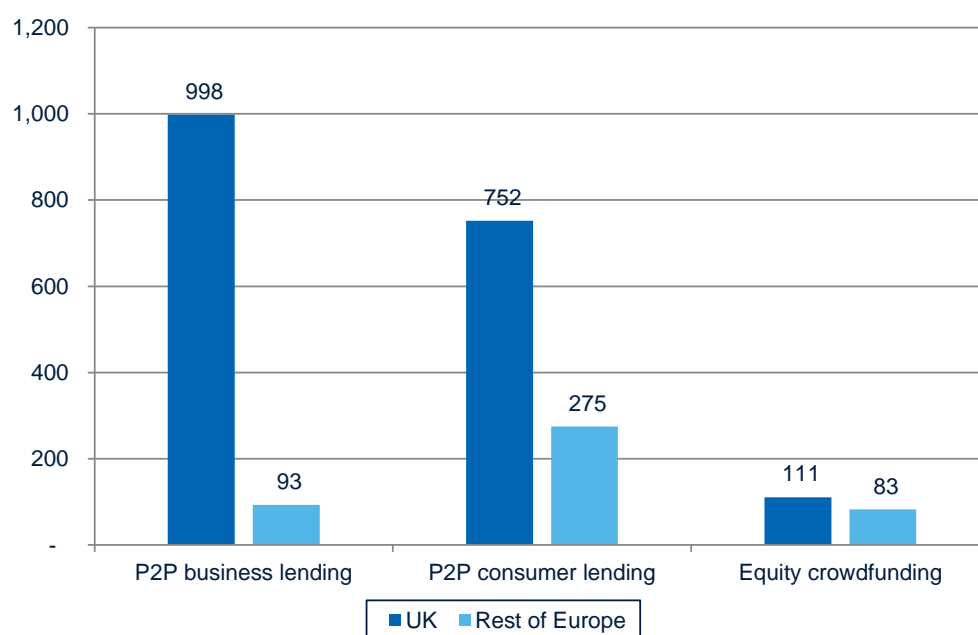
³³ See IOSCO (2014).

³⁴ Wardrop et al. (2015).

³⁵ Although P2P lending can include both secured and non-secured loans. See Nesta (2014).

³⁶ See IOSCO (2014).

³⁷ See IOSCO (2014).

Figure 2.1 Volume of crowdfunding, 2014 (€m)

Note: Oxera understands that volumes are ascribed to the UK if they flow through UK platforms, regardless of whether the investor and/or fundraiser are located in the UK. As discussed in footnote 23, estimates of cross-border inflows and outflows are provided for Europe excluding the UK in Wardrop et al. (2015). In the case of the UK, Nesta (2014) notes the lack of data on cross-border investments.

Source: Oxera, based on data from Wardrop et al. (2015).

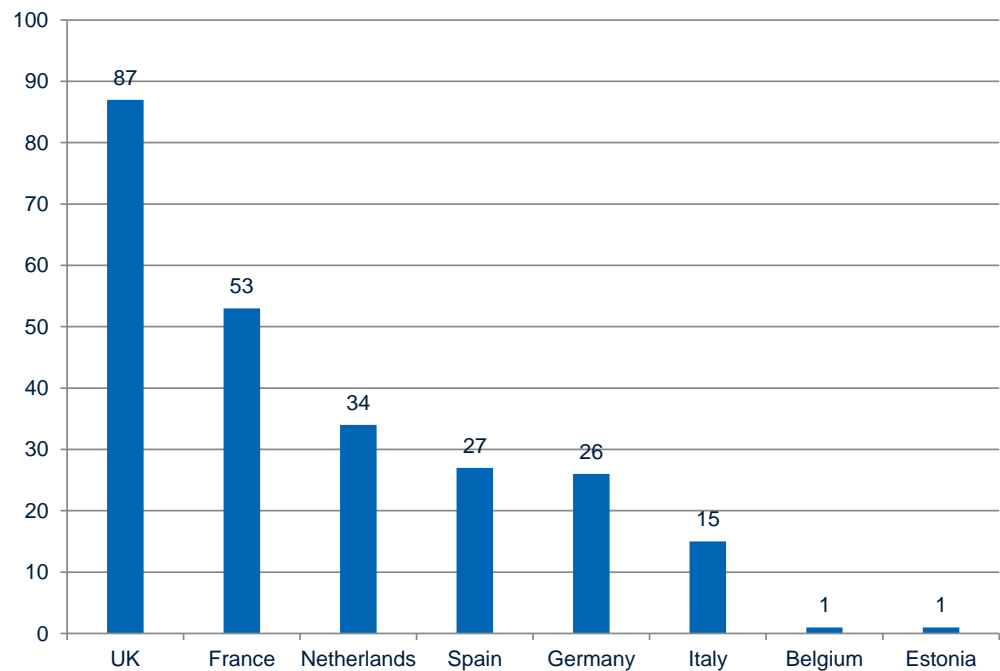
Wardrop et al. (2015) note that the UK is also marked by ‘the most advanced online platforms and sophisticated alternative finance instruments’ as well as a ‘dedicated regulatory regime and a supportive government’.

In terms of overall alternative finance, the UK leads by a similar margin, at €2,337m, followed by France (€154m), Germany (€140m), Sweden (€107m), the Netherlands (€78m) and Spain (€62m). On a per-capita basis, the UK leads with €36, followed by Estonia (€16.7), Sweden (€10.9), the Netherlands (€4.6), Finland (€3.1) and France (€2.4), while Germany and Spain are at €1.7 and €1.3 respectively. In addition, the UK’s average growth rate for 2012–14, of 146%, exceeds that of the rest of Europe, of 115%.³⁸

Figure 2.2 shows the number of P2P lending and equity crowdfunding platforms by country for 2013.

³⁸ See Wardrop et al. (2015).

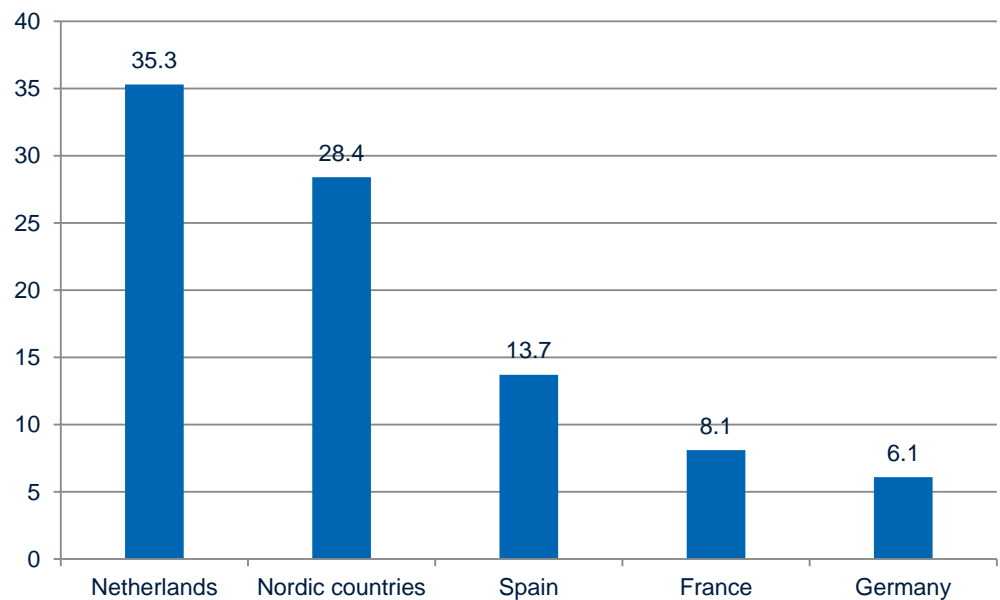
Figure 2.2 Number of crowdfunding platforms, 2013



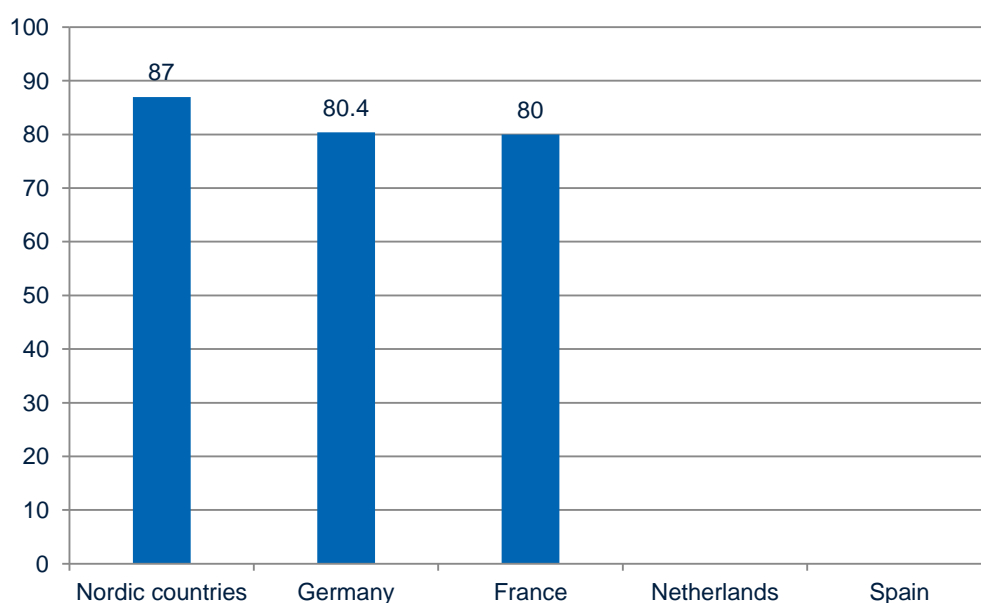
Source: Oxera analysis based on data from World Bank (2013).

For the purposes of illustration, the cross-country comparisons of lending volumes for 2014 in the figures below exclude the UK.

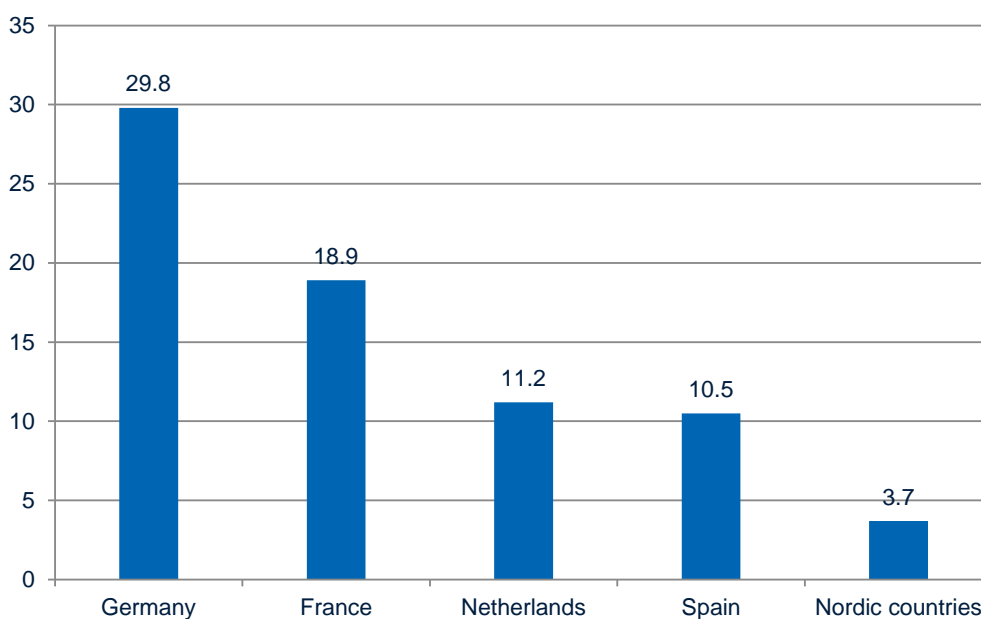
Figure 2.3 P2P business lending volume, 2014 (€m)



Source: Oxera, based on data from Wardrop et al. (2015).

Figure 2.4 P2P consumer lending volume, 2014 (€m)

Source: Oxera, based on data from Wardrop et al. (2015). Data on volume was not available for the Netherlands or Spain.

Figure 2.5 Equity crowdfunding volume, 2014 (€m)

Source: Oxera, based on data from Wardrop et al. (2015).

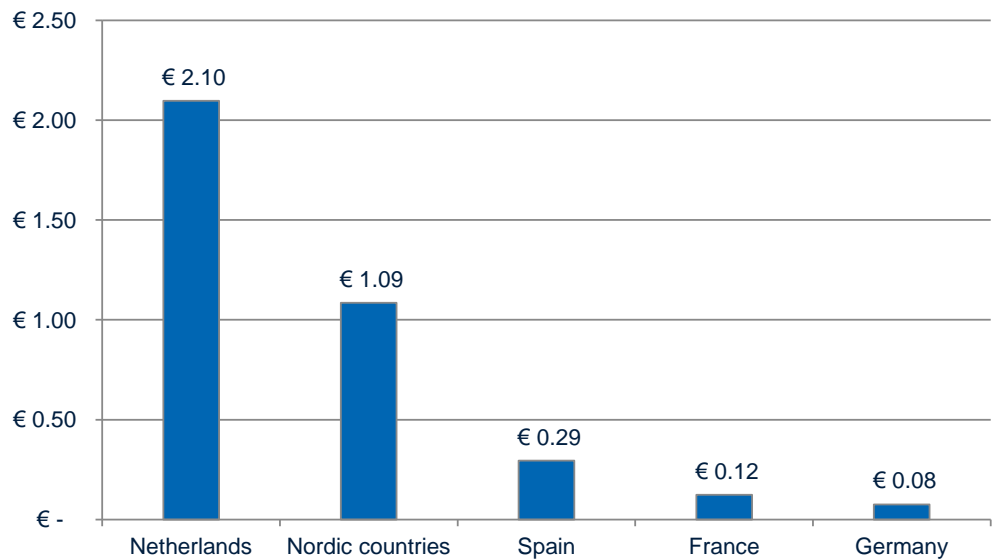
The figures above show that, in terms of total volume, even if the UK is not included, the largest countries do not necessarily have the largest crowdfunding volumes. For P2P business lending, in particular, Germany and France have a fraction of the volume of the Netherlands and the Nordic countries. For P2P consumer lending, Germany and France are roughly on a par with each other, but slightly behind the Nordic countries.³⁹ Germany and France have a lead over

³⁹ Wardrop et al. (2015) did not report P2P consumer lending volumes for the Netherlands and Spain.

the other, smaller, countries considered here only in terms of equity crowdfunding.

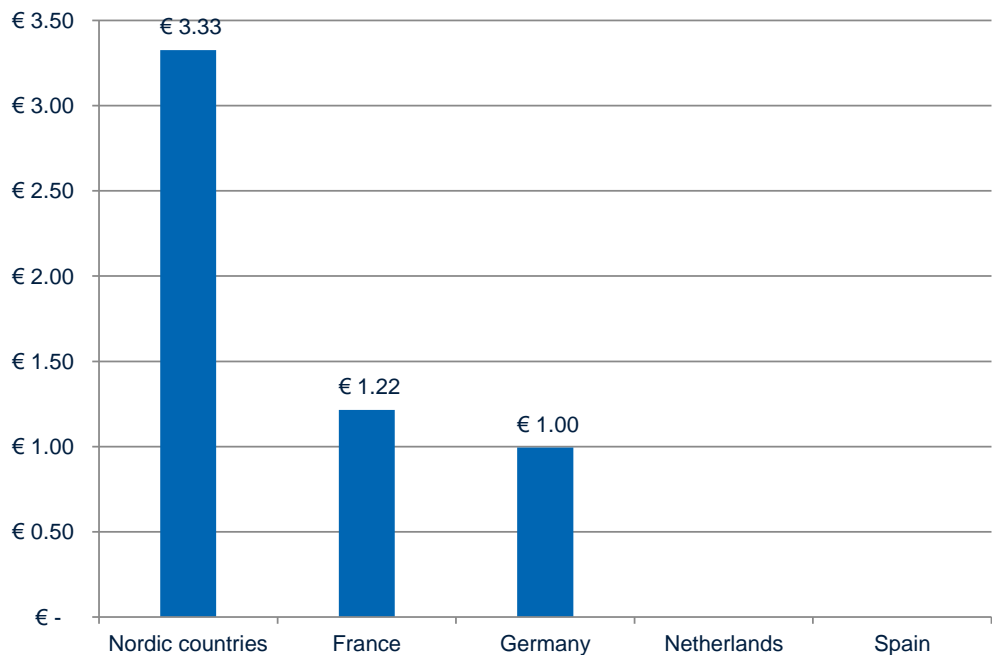
The following figures illustrate the corresponding per-capita volumes.

Figure 2.6 P2P business lending volume per capita, 2014 (€)

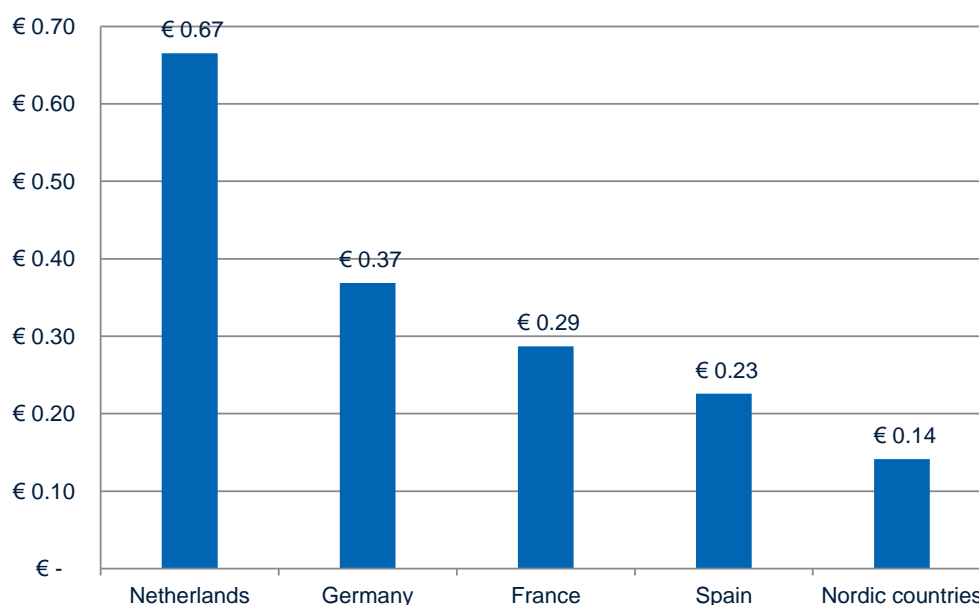


Source: Oxera, based on data from Eurostat and Wardrop et al. (2015).

Figure 2.7 P2P consumer lending volume per capita, 2014 (€)



Source: Oxera, based on data from Eurostat and Wardrop et al. (2015).

Figure 2.8 Equity crowdfunding volume per capita, 2014 (€)

Source: Oxera, based on data from Eurostat and Wardrop et al. (2015).

On a per-capita basis, France, Germany and Spain are dominated by the Netherlands and Nordic countries for P2P business lending, by the Nordic countries for P2P consumer lending, and by the Netherlands for equity crowdfunding.

2.3 Awareness of crowdfunding

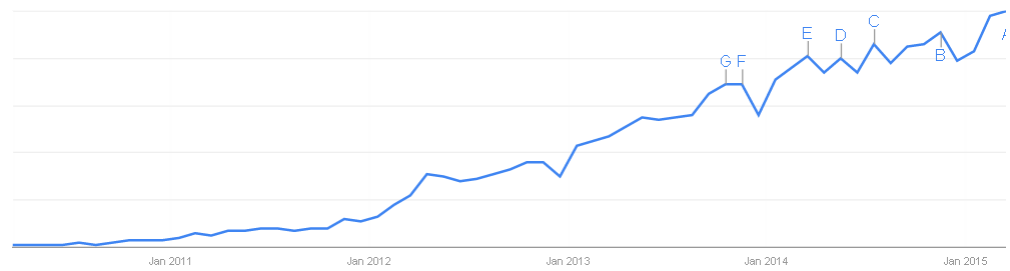
The growth in crowdfunding, alongside regulatory efforts and increased press attention, has raised awareness of this method of channelling funds from investors to fundraisers/borrowers.⁴⁰ Wardrop et al. (2015) state that '[c]rowdfunding and peer-to-peer lending are becoming financial as well as cultural buzzwords of today, capturing the public's imagination and the media's interest as well as regulator and government attention.'⁴¹

The 'Google Trends' service, which counts the number of times a word or phrase is used in search terms on the search engine, provides one simple measure of the amount of interest in crowdfunding. Illustrated below for each country, this shows a clear upward trend in interest, with spikes in interest linked to particular news events.

⁴⁰ Agrawal et al. (2013) argue that the US Jumpstart Our Business Startups (JOBS) Act 2012, which was passed in order to support the raising of funds by small businesses, 'raised general awareness of and interest in the potential of crowdfunding'.

⁴¹ The term 'P2P lending' is not commonly used in non-English-speaking countries. In the UK, a similar trend can be seen for this search term as for 'crowdfunding'.

Figure 2.9 Germany: relative search volume for the term 'crowdfunding'



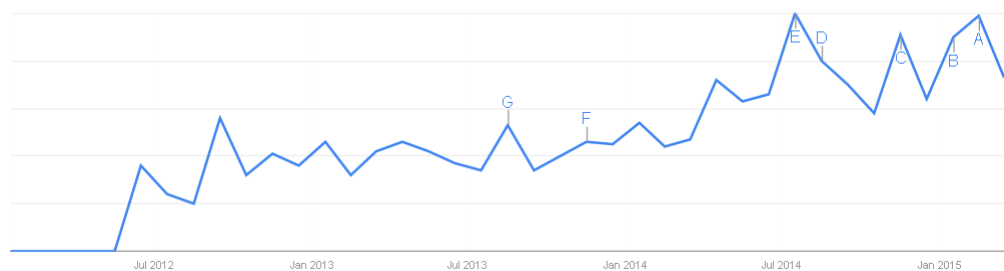
Note: Values are indexed, with the highest value normalised to 100.

Source: Google Trends.

The news events (indicated by the corresponding letters above) associated with peaks in search volume are:

- A. TODAYonline – New crowdfunding platform to aid start-ups in region
- B. Chron.com – Caterham to race in Abu Dhabi after crowdfunding
- C. Sydney Morning Herald – Potato salad raises \$US37,000 crowdfunding
- D. Businessweek – East London Restaurant Shuns Crowdfunding, Seeks \$4.1m
- E. euronews – UK to tighten crowdfunding controls to protect investors
- F. Businessweek – Mass. to offer investors advice on 'crowdfunding'
- G. Business Times – US SEC releases 'crowdfunding' rule

Figure 2.10 Poland: relative search volume for the term 'crowdfunding'



Note: Values are indexed, with the highest value normalised to 100.

Source: Google Trends.

The news events (indicated by the corresponding letters above) associated with peaks in search volume are:

- A. The Standard Digital News: Kenya Climate Innovation Center launches first crowdfunding program in East Africa
- B. CTV News: BC teen closer to experimental cancer treatment after crowdfunding campaign
- C. Chron.com: Caterham to race in Abu Dhabi after crowdfunding

- D. CNET: Tiny Canadian town crowdfunding full-size USS Enterprise
- E. Sydney Morning Herald: Potato salad raises \$US37,000 crowdfunding
- F. Businessweek: Mass. to offer investors advice on 'crowdfunding'
- G. Computerworld: Canonical misses smartphone crowdfunding goal by \$19m

Figure 2.11 Spain: relative search volume for the term 'crowdfunding'



Note: Values are indexed, with the highest value normalised to 100.

Source: Google Trends.

The news events (indicated by the corresponding letters above) associated with peaks in search volume are:

- A. The Standard Digital News: Kenya Climate Innovation Center launches first crowdfunding program in East Africa
- B. Telegraph.co.uk: Rollasole smashes crowdfunding target as investors lap up roll-up shoes
- C. Sydney Morning Herald: Potato salad raises \$US37,000 crowdfunding
- D. Businessweek: East London Restaurant Shuns Crowdfunding, Seeks \$4.1m
- E. Euronews: UK to tighten crowdfunding controls to protect investors
- F. Wall Street Journal: Medical Researcher Turns to Crowdfunding
- G. Business Times: US SEC releases 'crowdfunding' rule

Figure 2.12 UK: relative search volume for the term 'crowdfunding'



Note: Values are indexed, with the highest value normalised to 100.

Source: Google Trends.

The news events (indicated by the corresponding letters above) associated with peaks in search volume are:

- A. The Standard Digital News: Kenya Climate Innovation Center launches first crowdfunding program in East Africa
- B. Chron.com: Caterham to race in Abu Dhabi after crowdfunding
- C. Bloomberg: Real Estate Crowdfunding Firm Seeks Lending Revolution
- D. Sydney Morning Herald: Potato salad raises \$US37,000 crowdfunding
- E. Businessweek: East London Restaurant Shuns Crowdfunding, Seeks \$4.1m
- F. Euronews: UK to tighten crowdfunding controls to protect investors
- G. Businessweek: Mass. to offer investors advice on 'crowdfunding'
- H. Computerworld: Canonical misses smartphone crowdfunding goal by \$19m
- I. Moneycontrol.com: Crowdfunding websites not for novice investors says UK regulator
- J. Globe and Mail: Why 'crowdfunding' gamble could end in tears

In addition to increased press attention, Nesta (2014) found that, in the UK, 28% of P2P business lenders and 27% of P2P consumer lenders learned about P2P business/consumer lending through online advertising, and 25%/33% through online intermediaries such as MoneySupermarket.

The literature also provides some estimates of the level of awareness of crowdfunding, which complement the research being conducted in this study.

The UK survey by Nesta (2014) used an online survey of 2,007 consumers, representative of the general UK population.⁴² In the UK, awareness rates of P2P business lending, P2P consumer lending and 'investment-based crowdfunding' (consisting of equity crowdfunding and debt-based securities) were 39%, 45% and 38% respectively, while usage rates were 5%, 7% and 5% respectively (in percentages of the overall sample of respondents).⁴³

In Spain, the awareness rate of crowdfunding (including non-investment-based crowdfunding) was found to be 45%, consisting of 'Enthusiasts' (8%), 'Moderates' (15%), 'Neutrals' (5.4%) and 'Distant' (16.5%).⁴⁴ High levels of 'Internet affinity', 'Exposure to culture' and 'Propensity to save/invest'⁴⁵ were found to correspond to high levels of awareness of 64.3%, 58.5% and 61%, respectively. Among respondents who were aware of crowdfunding, 31.7% (or 14.3% of all respondents) were aware of P2P lending, and 25.7% (or 11.6% of all respondents) stated that the term sounded familiar. Similarly, 34.3% (or 15.4% of all respondents) were aware of equity crowdfunding, and 28.5% (or 12.8% of all respondents) stated that the term sounded familiar.

Directed at 4,011 daily Internet users residing in Spain of between 18 and 60 years of age, Two Much Research (2015) used an online survey consisting of a long questionnaire (22 minutes) and a short questionnaire (11 minutes) for respondents who stated that they were, respectively, aware and not aware of crowdfunding.

⁴² Nesta (2014).

⁴³ Note that 'usage' may include both usage as an investor and as a fundraiser/borrower.

⁴⁴ Two Much Research (2015).

⁴⁵ This included people who indicated that they had invested in at least three other forms of savings or investments.

2.4 Benefits and risks of crowdfunding

The existing literature also explores the benefits and risks associated with crowdfunding. This section covers the following aspects.

- Benefits of crowdfunding, including those relating to the ‘crowd’ aspect of crowdfunding—referred to as the ‘wisdom of the crowd’.
- Project risk—in particular, the risk of default (borrowing) or failure (equity).
- Asymmetric information—in particular as it relates to investors lacking information about the risks and/or expected returns of their investments.
- Adverse selection resulting from ex ante (i.e. pre-investment) asymmetric information and giving rise to a risk of systematically low-quality investments.
- Moral hazard resulting from ex post (i.e. post-investment) asymmetric information and giving rise to a risk of funding being used for purposes other than those intended by investors.
- Liquidity risk—in particular, the difficulty of exiting investments faced by investors due to illiquid secondary markets.
- Risk associated with platform failure.
- Other risks.
- Investor experience and risk awareness.
- Platform measures to address various risks.

2.4.1 The wisdom of the crowd, and other benefits of crowdfunding

The benefits of crowdfunding, some of which were mentioned above, include the increased scope for spreading risk (especially for small investors with small portfolios), potentially higher returns, and increased access to investment opportunities.

In addition, as discussed above, by ‘cutting out the middleman’, crowdfunding can reduce systemic risk and lower administrative costs. The latter is also achieved by replacing more thorough due diligence with quick project screening (but which also gives rise to potential risks, as discussed further below).

There are a number of other benefits relating to the ‘crowd’ element of crowdfunding. In particular, a potential benefit of crowdfunding is its scope for pooling information and experience from a wide range of investors.

To the extent that investors from the crowd are also potential consumers, successful crowdfunding can be a form of market testing, allowing entrepreneurs to better understand consumer preferences and product demand.⁴⁶

Investors from the crowd can also contribute their own ideas, allowing for ‘user-based innovation’ as well as ‘mass customisation’.⁴⁷ However, the added value from investors from the crowd may be limited compared with business angels

⁴⁶ See Agrawal et al. (2013), Belleflamme and Lambert (2014), Hagedorn and Pinkwart (2013) and Hornuf and Schvienbacher (2014a).

⁴⁷ See Belleflamme and Lambert (2014). See also Hagedorn and Pinkwart (2013).

and venture capitalists,⁴⁸ who tend to have greater expertise in, for example, investment and risk appraisal as well as financial and operative involvement.⁴⁹

Crowdfunding platforms can help to market new ideas by giving them exposure to a large number of investors, allowing for ‘awareness- and attention-building’.⁵⁰ Early investments, in turn, can serve as quality signals to later investors.⁵¹

In line with the above, Nesta (2014) found that, in terms of non-financial support, fundraisers considered that they received networking and connections (63% of fundraisers), proof of concept/market validation (60%), marketing/advocacy (53%), help with their expertise and knowledge (50%), help with follow-on funding (39%), and assistance with business/product development (30%).

The due diligence of borrowers carried out by crowdfunding platforms may be complemented by ‘crowd due diligence’. Agrawal et al. (2013) give an example of two investors flagging a case of fraud and notifying other investors on the US platform, Kickstarter; while Brown (2014) notes that fraud is difficult to expose, that opinions of the crowd may be ignored, and that it is therefore likely that ‘the “collective wisdom” of the crowd will not adequately protect investors.’ To date there seems to be little research on the effectiveness of crowd wisdom compared with regulation (or more conventional due diligence).⁵²

2.4.2 Project risk

Crowdfunding often deals with early-stage projects,⁵³ which are subject to high levels of uncertainty as to future performance.⁵⁴ There is a risk of projects being low-quality⁵⁵ or fraudulent.⁵⁶ In addition to project failure, project delays have been frequent in the past, prompting platforms to increase their screening efforts.⁵⁷ Mollick (2014) finds—albeit in the context of reward-based crowdfunding—that ‘the vast majority of founders seem to fulfil their obligations to funders, but that over 75% deliver products later than expected’.

In the case of a project failure, platforms or external firms may attempt to recover some of the investments, but they have not always been successful in doing so and investors may not have access to borrowers’ assets.⁵⁸ This ‘credit risk’ is the risk associated with the recovery rate in the case of a default.⁵⁹

⁴⁸ See Hornuf and Schwienbacher (2014b).

⁴⁹ See Kortleben and Vollmar (2012).

⁵⁰ Burtch et al. (2012). See also Kortleben and Vollmar (2012).

⁵¹ Kim and Viswanathan (2014).

⁵² The US Securities Exchange Commission (SEC) noted the need to ‘better understand the risks to investors and the effectiveness of the ‘wisdom of the crowd’ in addressing those risks’ (see Securities Exchange Commission, 2012). For an overview of the literature on the wisdom of the crowds, see Ziewitz (2011).

⁵³ Nesta (2014) finds that 46% of funding in equity crowdfunding is seed or start-up capital, and 54% of funding is for expansions.

⁵⁴ ‘[T]he risk of insolvency during usual crowdinvesting [i.e. equity crowdfunding] timespans of three to ten years...of participation is not to be underestimated.’ See Deutsche Bank Research (2014a). See also Hagedorn and Pinkwart (2013).

⁵⁵ See Deutsche Bank Research (2014a): ‘Examples of reasons for a start-up to fail may include bad management, poor liquidity planning, a technically immature business plan and the failure of the business model’. See also Meschkowski and Wilhelmi (2013).

⁵⁶ See Gabison (2015) and IOSCO (2014).

⁵⁷ Agrawal et al. (2013) refers to the case of Kickstarter in the USA.

⁵⁸ Chaffee and Rapp (2012) note: ‘in the event of default by the borrowers, lenders are dependent on the P2P lending platforms and their designees for collecting on defaulted loan, which the platforms are notoriously bad at doing. For example, as of February 2009, Prosper Marketplace had recovered just over \$800,000 of the \$39.4m it had charged off in default.’ While this example is dated, it serves to illustrate the point. See also IOSCO (2014).

⁵⁹ See Bow Group (2014).

In addition to the above, in the case of equity crowdfunding there may be a disclosure risk associated with a public business plan. For example, this might include the copying of business ideas.⁶⁰ Moreover, the transparency of the business and funding can adversely affect subsequent negotiations, for example with potential suppliers.⁶¹

IOSCO (2014) notes, however, that default rates 'are quite low' for the projects funded through the 'largest, most successful [P2P lending] platforms'.

The Financial Conduct Authority (FCA) and the IOSCO consider the risk to be high for equity crowdfunding in particular. The FCA notes: 'Research indicates that around 50% to 70% of business start-ups fail completely'.⁶² IOSCO (2014) states: 'In equity crowdfunding the risk of default/investment failure is estimated to be around 50% [based on its own market intelligence]. In peer-to-peer lending there has been a concerted effort by the industry to reduce default rates, which reached a high of 30% in 2009.' Wardrop et al. (2015) note that P2P consumer lending offers 'a relatively low-risk profile'.

Wilson and Testoni (2014) note that: 'Eurostat data show that in EU the one-year survival rate for all enterprises created in 2009 was 81 percent, while the five-year survival rate of all enterprises started in 2005 was only 46 percent.'

These issues have been further explored in the discussions with crowdfunding platforms for this study, as described in section 4. Ultimately, the understanding of the expected project risk associated with crowdfunding is limited by the short history of this form of finance. Arguably, experience from at least a full economic cycle would be required before clear conclusions can be reached.

2.4.3 Asymmetric information

Since investors are likely to be less informed than entrepreneurs or borrowers about the quality of the project, asymmetric information is likely to play a significant role in crowdfunding.

- It is difficult to assess the risks and opportunities of a business model and the competence of a project team. For example, in the context of equity crowdfunding, Deutsche Bank Research (2014a) states:

For an interested investor it is a huge challenge to gain a proper assessment of the business model including all of its opportunities and risks. After all, given the only short existence of a start-up as a company there is only a small amount of valuation-relevant data available.⁶³

- Information may be difficult to obtain. Owing to anonymity, investors may be reliant on platforms for information,⁶⁴ while platforms may not check the accuracy and completeness of the information they receive.⁶⁵ Guenther et al. (2014) find that investors base their funding decisions on material provided by new ventures,⁶⁶ as opposed to other information gathered by the investors themselves.

⁶⁰ See Hornuf and Schwienbacher (2014a) and Kortleben and Vollmar (2012).

⁶¹ See Agrawal et al. (2013).

⁶² Financial Conduct Authority (2013). See also Deutsche Bank Research (2014a) for figures for Germany.

⁶³ Deutsche Bank Research (2014a). See also Hornuf and Schwienbacher (2014a).

⁶⁴ IOSCO (2014).

⁶⁵ In relation to concerns surrounding crowdfunding, Belleflamme and Lambert (2014) note the 'risk of fraud, misleading advertisements and advices by entrepreneurs'. See also Chaffee and Rapp (2012) and Meschkowski and Wilhelmi (2013).

⁶⁶ This material can include a business plan, business descriptions, a business video and other information.

- To keep costs down, platforms may carry out only basic due diligence.⁶⁷ Individual investors' due diligence may be low on account of free-rider effects.⁶⁸ Agrawal et al. (2013) note that:

To the extent that the cost of performing due diligence is high and the individual benefit low, the crowdfunding community may systematically underinvest in due diligence; instead, funders may free-ride on the investment decisions of others, which is feasible to do since funding information is public and funders usually cannot be excluded.

Factors that serve to mitigate the asymmetry of information in the crowdfunding context include the following.

- Investors make use of quality signals⁶⁹—for example, the level of education and social network of the borrower, retaining equity (in the case of equity crowdfunding), and information on risk and governance (e.g. board structure).⁷⁰
- Platform screening⁷¹ and past performance data can inform investors about rates of return.⁷² Most P2P lending platforms publish historical performance data, including failure rates and rates of return. IOSCO (2014) notes that the advertised rates of return may be difficult to achieve.

Much less data is available in the case of equity crowdfunding. As noted above, this is because the duration of projects tends to be several years and platforms have not been operating long enough to be able to collect the necessary performance data.

FCA (2013) notes that conflicts of interest may arise where platform remuneration is transaction-based and platforms are trying to grow market share quickly such that they may be 'motivated to downplay risks and over-emphasise possible returns'. Similarly, *The Economist* (2015) notes that P2P lending platforms may be tempted to sell more high-risk loans, while default rates may continue to be low as a result of rapid loan book growth.

2.4.4 Adverse selection

There is a possibility that the managers of high-quality projects prefer the stricter due diligence carried out by traditional investors in order to differentiate themselves from lower-quality projects, and thus achieve more favourable investment terms. This may lead to a risk of 'adverse selection' of low-quality projects going to crowdfunding platforms.⁷³

As discussed below, platforms can use project screening to mitigate adverse selection.

⁶⁷ See Hagedorn and Pinkwart (2013) and Kortleben and Vollmar (2012).

⁶⁸ Investors may choose to copy each other rather than conduct their own analysis. This is supported by cases where the funding target was reached in less time than might be considered necessary to carry out due diligence. See Deutsche Bank Research (2014a). See Agrawal et al. (2013) and Hagedorn and Pinkwart (2013).

⁶⁹ Guenther et al. (2014) find that 'crowdinvestors [i.e. investors in equity crowdfunding] utilize important aspects of thorough evaluations (i.e. expertise, experience, and effort) and these aspects are associated with the investment amount.'

⁷⁰ See research cited by Belleflamme and Lambert (2014) and by Kim and Viswanathan (2014). See also Agrawal et al. (2013) and Ahlers et al. (2012).

⁷¹ See Hagedorn and Pinkwart (2013) and IOSCO (2014).

⁷² It should further be noted that past performance is not necessarily a good indicator of future performance. For example, past performance may be misleading if there have been changes in platforms' screening processes or in the population of applicants.

⁷³ See Agrawal et al. (2013), Ahlers et al. (2012) and Meschkowski and Wilhelmi (2013).

Nesta (2014) found that, for UK P2P business lending, 44% of borrowers considered it likely or very likely that they would have received financing elsewhere, compared with 33% that considered this unlikely or very unlikely. Moreover:

Of the borrowers who had sought a loan from a bank before approaching P2P consumer lending (59 per cent), the majority (over 90 per cent of them) were offered a bank loan. These findings are consistent with the strong credit profiles (i.e. prime or super-prime) of the borrowers revealed by the primary data.

For equity crowdfunding, Nesta (2014) found that 20% of fundraisers had previously received funding from angel investors.

This suggests that adverse selection is not a critical factor for at least a significant proportion of borrowers, in particular for P2P consumer lending.

2.4.5 Moral hazard

A further risk faced by investors is that, once they have committed to an investment, the other party does not use the funds for the intended purposes.⁷⁴

Crowdfunding differs from many other online commercial activities by its lack of repeated interaction with the recipient of the money.⁷⁵ Thus, there is little room for reputational effects to mitigate moral hazard on the side of borrowers.

In principle, moral hazard could be mitigated by breaking large projects down into sub-projects, with funding of the later sub-projects conditional on the successful completion of earlier sub-projects or milestones.⁷⁶ In addition, good communication between investors and borrowers may play an important role in building trust,⁷⁷ which in turn plays an important role, especially in equity crowdfunding.⁷⁸

At this relatively early stage in the development of crowdfunding, the extent of these risks is not yet clear.

2.4.6 Illiquid secondary markets

Liquidity risk relates to the difficulty investors face when trying to exit an investment prior to its maturity.⁷⁹ Secondary markets in crowd-funded borrowings are rare and tend to be lightly traded⁸⁰—particularly in equity crowdfunding.⁸¹

The FCA (2013) notes: ‘Consumers investing in such equity need to understand that they will probably have to wait until an event occurs, such as the sale of the company, a management buy-out or a flotation, before getting a return’.

⁷⁴ See Agrawal et al. (2013): ‘The creator may behave in a short-term opportunistic manner and not exert the level of effort that was implied at the outset. This is a form of moral hazard. The most extreme example of this is outright fraud.’ See also Belleflamme and Lambert (2014) and Cumming and Johan (2013).

⁷⁵ See Agrawal et al. (2013).

⁷⁶ See Agrawal et al. (2013).

⁷⁷ Guenther et al. (2014) find that: ‘Direct and active communication (e.g. to exchange information) of crowdinvestors [i.e. investors in equity crowdfunding] with entrepreneurs is positively associated with the investment amount... Thus, platform operators are well advised to facilitate direct communication and trust between entrepreneurs and investors.’

⁷⁸ See Hagedorn and Pinkwart (2013).

⁷⁹ See Bow Group (2014). Similarly, for equity crowdfunding in Germany, Deutsche Bank Research (2014a) states that ‘premature notice of termination or outright disposal is not possible, as a rule’. See also Kortleben and Vollmar (2012).

⁸⁰ See Brown (2014), FCA (2013) and IOSCO (2014).

⁸¹ See Gabison (2015) and IOSCO (2014).

Similarly, Hornuf and Schwienbacher (2014a) note: 'Entrepreneurial firms that are financed via crowdinvesting [i.e. equity crowdfunding] are often too small for an IPO on the stock market. Exit opportunities are thus restricted in crowdinvesting'. Moreover, the authors point out the exit opportunity coming from angel investors and venture capitalists, and give the example of German platform, Bergfürst, having set up a 'secondary market allowing for IPOs in the range from €2,000,000 to €10,000,000.'

Liquidity risk might be of little concern provided that investors have experience with low-liquidity investments.⁸² Investor experience is discussed further below.

2.4.7 Risk of platform failure

Platforms are two-sided markets—that is, to be successful, they need to simultaneously bring on board large numbers of investors and investment opportunities. A platform is likely to be more attractive to investors if there are more projects to invest in, and more attractive to borrowers if there are more investors and hence a bigger chance of being successful at obtaining funding. This can create market dynamics where big platforms become bigger and small platforms may eventually exit the market,⁸³ giving rise to a risk of platform failure.⁸⁴ In line with this, a number of platforms have already exited the market.⁸⁵

This risk is exacerbated by high fixed costs giving rise to economies of scale and low profitability.⁸⁶ However, it may be counteracted in two circumstances: if there is investor preference for smaller platforms (for example, if community benefits⁸⁷ are an important reason for investment, small platforms may be preferred as an investor is more likely to be pivotal to a project); and if platforms are horizontally differentiated (i.e. if platforms use their specialisation in a particular project type to signal expertise).⁸⁸

There have been cases of platforms exiting the market without leaving behind records, implying a complete loss to investors. This can be avoided if platforms have separate accounts for their clients.⁸⁹

The exit of a platform that is active in multiple jurisdictions can complicate matters due to potential uncertainty regarding which contract law is applicable.⁹⁰ Wardrop et al. (2015) noted: 'There are several leading equity-based crowdfunding platforms now facilitating cross-border transactions and operating in multiple jurisdictions.' This suggests that the issue is becoming increasingly relevant.

The FCA (2013) further notes that:

Platform failure may harm investors. Existing loans and investments will still need to be administered, with repayments or dividends allocated appropriately among investors and late payments by borrowers followed up. If the firm running the

⁸² IOSCO (2014).

⁸³ See Belleflamme and Lambert (2014).

⁸⁴ See Bow Group (2014).

⁸⁵ For example, mysherpas, pling and Inkubato in Germany. See Crowdfinanzierung in Deutschland (2014).

⁸⁶ See IOSCO (2014).

⁸⁷ See Hagedorn and Pinkwart (2013), 'Regarding crowdfunding, several studies found that intrinsic and social motivation, such as the feeling of being actively involved or the patronage of a project, matter to supporters.' By contrast, Nesta (2014) found that '[t]hose in P2P lending and equity-based crowdfunding were primarily driven by the prospect of financial returns with less concern for backing local businesses or supporting social causes.'

⁸⁸ See Belleflamme and Lambert (2014).

⁸⁹ IOSCO (2014).

⁹⁰ IOSCO (2014).

platform goes out of business, responsibility for this could fall to individual investors but, particularly where their stake in a particular investment is small, it may not be economical for them to do so.

This is an area of key concern for regulators, and ultimately for the successful development of crowdfunding as a form of finance. One of the motivations for this study was to understand awareness of risk among investors, to help inform understanding of how these risks could affect investor trust in crowdfunding.

2.4.8 Other risks

In addition to the above, the literature highlights a number of other potential risks surrounding crowdfunding, as follows.

- The risk of insufficient funds being raised, which may decrease the likelihood of a project's success. This may be addressed by platforms setting fundraising targets and returning the funds to investors if the target is not met.⁹¹
- Fraud can be common in Internet environments due to anonymity.⁹² In a crowdfunding context, fraud may be further encouraged by the fact that investors may not have sufficient incentives to seek damages.⁹³ The FCA (2013) considers fraud a 'key risk facing investors looking to lend or invest on crowdfunding platforms.' Nevertheless, fraud appears to be rare.⁹⁴
- The risk of share dilution as competing investors are brought on board.⁹⁵ This form of moral hazard can be mitigated through the use of control rights and protective covenants,⁹⁶ provided that this is done by platforms or that investors are sufficiently experienced to make this a condition of investment. In addition, investors can get at least some of their money back if they are paid dividends before there is a share dilution.
- The risk of a cyber attack.⁹⁷

The discussions with crowdfunding platforms in this study include a wide-ranging discussion of possible risk types.

2.4.9 Inexperienced investors and risk awareness

The above risks indicate the importance of investors being aware of risks and having sufficient experience to manage them appropriately. There is thus a 'risk of investor inexperience'.⁹⁸ The FCA considers that '[p]rofessional investors may know more about investment in some enterprises and be better able to select the best investments, leaving options with higher risk or poor value to retail investors.'⁹⁹ This could give rise to a concern of professional investors 'crowding out the crowd', although this does not appear to have happened yet.¹⁰⁰ Furthermore, professional investors are a possible source of financing even in the absence of crowdfunding. The risk that professional investors select all the

⁹¹ See Agrawal et al. (2013), Belleflamme and Lambert (2014) and Cumming et al. (2014).

⁹² IOSCO (2014).

⁹³ See Kantor (2013).

⁹⁴ See Belleflamme and Lambert (2014) and the literature cited therein—identified fraud accounts for 0.5% of the money pledged for technology and design projects on Kickstarter. See also Kim and Viswanathan (2014).

⁹⁵ See Cumming and Johan (2013), FCA (2013) and Kantor (2013).

⁹⁶ Kortleben and Vollmar (2012) consider this in the context of German platform, Innvestment.

⁹⁷ See IOSCO (2014).

⁹⁸ See IOSCO (2014).

⁹⁹ See FCA (2013).

¹⁰⁰ See Wardrop et al. (2015).

best investments is thus a case of adverse selection, which was considered above.

There is a general concern in the literature that much of the public is largely financially illiterate.¹⁰¹ For example:

- Wilson and Testoni (2014) note ‘a misconception about success rates and returns on investment in start-ups...and [that] the average individual is not aware of the risks;’
- Ahlers et al. (2012) note that ‘in an equity crowdfunding context...small investors are less likely to have experience evaluating investment opportunities [compared with VC financing].’

In line with this, Deutsche Bank Research (2014a) states:

Investors in Germany’s relatively new crowdfunding market are in most cases not professionals, which is why they could tend to assess available information the wrong way... [A] current funding record in which EUR 250,000 was raised in only 7 hours and 18 minutes shows that investment decisions in crowdfunding [i.e. equity crowdfunding] are taken in an extremely short space of time. In fact, the first EUR 50,000 was collected in only 38 minutes. [¹⁰²] This raises the question of the extent to which it is at all possible to perform an appropriate valuation and calculate all the related opportunities and risks in this short timespan.

On the other hand, Guenther et al. (2014) finds that:

Individuals from the crowd show certain levels of expertise and experience and that they also perform due diligence before they invest...The majority of individuals in crowds invest their money in new ventures when they possess prior investment experience (both online and offline) and also some specific expertise. Thus, crowdfunders [i.e. investors in equity crowdfunding] avoid investments where they lack expertise or experience.

Similarly, the FCA (2013) states that: ‘The information we have on investors in crowdfunded investments indicates that they tend to be high-net worth individuals with investment experience.’

IOSCO (2014), commenting on Nesta (2013), which used a sample of 600 UK lenders, notes that:

most of the lenders are between 40 and 60 years old. Almost 90% are experienced investors in securities, while almost 40% have more than 10 years of experience working with SMEs, with 83% being male. The median investment size was £50 and the median number of investments is 35. The median total investment is £2,000. Although this study is not comparable with other platforms and countries and complete and comparable data is not publicly available, it shows relatively experienced retail investors investing small amounts of money in a great number of projects.

Nesta (2014) found that 38% of investors in equity crowdfunding were ‘professional investors with previous experience/ high net-worth individuals’. The other 62% considered themselves to be ‘retail investors with no previous investment experience’. The average portfolio for these retail investors is less than £4,000, compared with more than £8,000 for the professional investors.

¹⁰¹ See Kantor (2013).

¹⁰² See <http://www.vc-magazin.de/news/maerkte-zahlen/item/2564-crowdfunding-in-rekordzeit-bei-secucloud>.

Moreover, Nesta (2014) found that 88% of P2P business lenders and 77% of equity crowdfunders considered the diversification of investment portfolios to be important or very important,¹⁰³ with 91% of lenders considering the risk rating/credit score to be important or very important. Similarly, 92% of P2P consumer lenders thought that knowing that their money was ‘protected by a provision’ was important or very important. Similarly, among the general population:

- 31% of respondents consider alternative finance platforms more risky and 23% consider them less secure than traditional finance providers;
- of respondents who are aware of alternative finance, 56% thought it was risky;
- for respondents who were unaware of alternative finance, ‘having their money covered by a guarantee would encourage them to lend or invest.’¹⁰⁴

In Spain, among respondents who knew about crowdfunding, the ‘lack of guarantees’ was the barrier to investing in crowdfunding most frequently cited (54%), followed by ‘risk of fraud’ (49%) and ‘low project quality’ (40%).¹⁰⁵ Moreover, respondents with a high ‘propensity for saving and investing’ (i.e. who had indicated experience with other forms of investing) were more likely than other respondents to indicate that investment-based crowdfunding was the type of crowdfunding that ‘best matches [them] and [their] circumstances’.

This suggests that there is a degree of risk awareness among lenders as well as among the general population.

There is a concern that more inexperienced investors will be attracted to crowdfunding as it gains credibility—e.g. one of the effects of regulation may be that it validates crowdfunding as a form of investment.¹⁰⁶

Cases of quick funding suggest that investors do not always conduct a significant level of due diligence. On the other hand, carrying out assessments of projects may be facilitated by online evaluation tools.¹⁰⁷

Moreover, there is a concern that investors may be overoptimistic,¹⁰⁸ or ‘make decisions based on personal biases and persuasive narrative, rather than on financial experience.’¹⁰⁹

It has been observed that early investments in a project, in particular by expert investors,¹¹⁰ serve as quality signals and can trigger subsequent investments by other investors. This, in turn, can give rise to a positive information externality and freeriding effects, as well as marketing effects.¹¹¹ This suggests that expert investors may play a particularly important role and that their expertise may benefit less-experienced investors.

¹⁰³ Similarly, 73% of potential lenders who had registered but not lent on P2P business platforms and 77% of registered users who had not invested on equity crowdfunding platforms considered uncertainty about the creditworthiness of businesses seeking loans to be a key issue.

¹⁰⁴ Nesta (2014).

¹⁰⁵ Two Much Research (2015).

¹⁰⁶ See IOSCO (2014).

¹⁰⁷ See Deutsche Bank Research (2014a). The examples cited are the sites ‘Bewertungspilot’ and ‘EquityNet’.

¹⁰⁸ See Agrawal et al. (2013) and Belleflamme and Lambert (2014).

¹⁰⁹ IOSCO (2014).

¹¹⁰ Kim and Viswanathan (2014).

¹¹¹ See Agrawal et al. (2013) and the literature cited therein.

Kim and Viswanathan (2014) consider that:

the crowdfunding market works in a largely rational manner. This is particularly impressive since investors in the crowdfunding market are arguably less sophisticated. Crowdfunding investors appear to pay much attention to credible sources of quality and discern more credible signals by looking at expertise and experience of early investors. Thus, as long as the crowdfunding market provides a sufficient amount of information about investors and products, potential risks in crowdfunding that some regulators are concerned about might be significantly mitigated.

On the other hand, this suggests that investments are characterised by herding¹¹²—which may or may not be efficient—and hence give rise to concerns that investors are easily manipulated.¹¹³ For example, early funding may come from friends and family, which potential investors would not know.¹¹⁴ An empirical analysis by Benlian et al. (2015) suggests that fake quality signals (in the form of fake Facebook ‘likes’) do not have a significant effect on funding behaviour. As noted above, herding is more likely when other signals are of lower quality.

Nesta (2014) found that ‘investors often read comments by other investors when making investment decisions.’ However, it also found that, in the UK, ‘almost none of the P2P business lenders had personal connections to the businesses they lent to, with 97 per cent saying their first loan was to someone they didn’t know.’ Similarly, for equity crowdfunding:

investors are selecting specific investment opportunities on the crowdfunding platform, with the quality of the team (rated ‘important’ or ‘very important’ by 97 per cent of respondents) and the pitch (96 per cent) named as the most important factors. External endorsements and the views of other investors on forums were deemed less important.¹¹⁵

2.4.10 Platform incentives and measures

Platforms may have the means and incentives to address many of the above risks. To maximise profits, a platform will seek to maximise the number of successfully funded projects,¹¹⁶ accounting for reputational effects.¹¹⁷ As noted above, a platform has an incentive to maximise the number of investors and investment opportunities it lists. Wardrop et al. (2015) consider that:

The alternative finance industry itself recognises that the market will not develop if the platforms are not perceived as trusted intermediaries by investors and beneficiaries alike.

Belleflamme and Lambert (2014) note that: ‘In the case of crowdfunding platforms, design and governance decisions are generally geared to address issues related to information asymmetries’.

Platforms may address information asymmetries in the following ways.

¹¹² See Belleflamme and Lambert (2014).

¹¹³ See Agrawal et al. (2013).

¹¹⁴ See Meschkowski and Wilhelmi (2013).

¹¹⁵ Nesta (2014). Moreover, ‘[t]hree-quarters of investors had invested in businesses run by entrepreneurs whom they had no previous knowledge about or connection to.’

¹¹⁶ See Agrawal et al. (2013).

¹¹⁷ See Belleflamme and Lambert (2014).

- Bringing sophisticated investors on board.¹¹⁸ Wardrop et al. (2015) noted that equity crowdfunding increasingly allows funds to be raised from angel groups and venture capital firms. This may create positive information externalities,¹¹⁹ allowing smaller investors to freeride on due diligence efforts of other investors. Agrawal et al. (2015) noted the prevalence of equity crowdfunding 'syndicates' involving 'lead investors bringing deals to a crowd of backers' and that 'the syndicate structure allows platforms to provide financial incentives to individuals for solving the information problem through the implementation of a "carry"—that is, a fee paid to the lead by other syndicate members, equal to a fraction of the profits they earn.
- Screening projects.¹²⁰ This will serve to attract mainly high-quality projects and reduce fraud, as well as providing a certain amount of due diligence for investors. This will further serve to improve platform performance (by lowering rates of default and raising rates of return¹²¹) and reassure investors.

Nesta (2014) found that:

the funding process on most of the P2P consumer lending platforms is highly automated with registered users normally only required to specify how much to lend or borrow and for what duration. Then based on algorithms and automated matching mechanisms, lenders' funds are divided and then channelled in smaller portions to fund a diversified loan portfolio at any given time.

The offering of automated portfolio-building tools involves selecting projects with different risk profiles and is therefore related to a platform's ability to rate the riskiness of individual projects.

Screening is likely to affect platform reputation, not only for investors, but also for borrowers: Nesta (2014) found that 32% of SMEs that were aware of alternative finance considered that they would be less likely to use alternative finance if platforms had a reputation for accepting applicants regardless of quality.

- Disclosing information about the borrower or issuer in a standardised, transparent way.¹²²
- Publishing past performance data. This will attract investors as it allows them to form better expectations of the risks they face. IOSCO (2014) notes:

Peer-to-peer lending and equity crowdfunding both market themselves as being different to banks, with an emphasis on the transparency of the industry. Most platforms freely publish data on overall total loan origination, default rates and selected statistics on their sites.
- Wardrop et al. (2015) considered that 'transparency and ease of use, are determining factors that make peer-to-peer business lending a viable business funding alternative.'

Nevertheless, IOSCO (2014) considers that '[d]espite this broad access to data, a concern about awareness of risk still exists' and 'both equity

¹¹⁸ Two examples are the Belgian platforms, MyMicroInvest (crowd plus venture capitalist), and Angel.me (partnership with a bank). See Belleflamme and Lambert (2014).

¹¹⁹ See Kim and Viswanathan (2013).

¹²⁰ Agrawal et al. (2013) gave the example of US platform, Kickstarter, increasing its fraud detection efforts. See also IOSCO (2014) and Kortleben and Vollmar (2012).

¹²¹ See IOSCO (2014).

¹²² See IOSCO (2014).

crowdfunding and peer-to-peer lending are opaque when it comes to disclosing some risks.’

The fact that P2P lending platforms publish their performance data suggests that they have incentives to conduct thorough project screening in order to increase their performance rates, which are then visible to investors. In line with this, in the context of consumer lending, Nesta (2014) found that:

The majority of the borrowers had a A or A+ credit rating, which put them into the ‘prime’ or ‘super-prime’ borrower category, with the average rejection rate as high as 90 per cent (i.e. 9 out of 10 loan applications are rejected). This is one of the key factors to explain why the P2P consumer lending platforms have a very low average and weighted default rate of less than 1 per cent.

- Raising transparency and awareness about how platforms work. Nesta (2014) found that 62% of respondents ‘who were aware of alternative finance but had not used it’ considered that they would be more likely to invest through a platform ‘if it could give them a better sense of transparency and understanding of where their money goes...and if they could receive better guidance on how to use the different platforms.’

Platforms may further seek to reduce the risk of project failure by setting up a pooled insurance or ‘contingency’ fund.¹²³ It should be noted that doing so may weaken the incentives of investors (but not the platforms) to conduct good due diligence.¹²⁴ Another approach that some platforms have adopted is the securing of loans with collateral.¹²⁵

With crowdfunding still at an early stage of development, one can expect (as supported by the findings of the platform interviews) that platforms will improve risk management procedures over time. On the other hand, the tendency to focus on the lowest-risk projects (as noted above) could also change over time, as growing platforms delve further into the market (in terms of accepting higher-risk projects). These developments are key to the future success of crowdfunding, and a topic of considerable interest in the literature.

2.5 Summary

The literature review illustrates some of the main topics of interest in the current debate on crowdfunding. These topics helped to inform the approach of this study to both the market research (section 3) and the discussions with crowdfunding platforms (section 4).

There is a growing body of literature on the rapid rise of crowdfunding in recent years, which is primarily linked to the growth of the Internet and the global financial crisis that began in 2008. The literature shows that crowdfunding is complementary to, as well as a substitute for, traditional forms of finance, as it serves new as well as existing market segments (in terms of both investors and borrowers). As crowdfunding continues to grow, it is becoming more interconnected with the rest of the financial sector, giving rise to potential concerns about systemic risk and contagion.

The literature also explores a range of benefits and risks associated with crowdfunding, with a focus on those that differ from traditional options for

¹²³ See FCA (2013) and IOSCO (2014).

¹²⁴ IOSCO (2014).

¹²⁵ Nesta (2014) stated that ‘P2P business lending facilitates secured or non-secured business loans’, while P2P consumer lending consists of mostly unsecured loans.

investment vehicles. The literature looks at benefits, such as the wisdom of the crowd in projects and investments, as well as risks, with a focus on project risk.

A key concern is investor inexperience and possibly low levels of risk awareness. This concern is increased by cases of quick funding and herding. At the same time, both of these can be consistent with rational responses to information signals. Empirical evidence suggests that a significant proportion of investors in crowdfunding—especially equity crowdfunding have a relatively high income as well as investment experience. Moreover, the most frequent concerns mentioned by investors and potential investors relate to risk, implying a degree of risk awareness.

Platforms have incentives to address these issues by adopting measures such as bringing on board sophisticated investors, screening projects, and being transparent about projects, past performance and the platforms' business models. Other measures adopted by some P2P lending platforms include setting up a contingency fund and securing loans with collateral.

The literature on crowdfunding, just like crowdfunding itself, is rapidly developing and expanding. This study therefore provides an overview of the current literature on crowdfunding, and the picture it conveys can be expected to continue developing over time.

3 Market research

3.1 Methodology

Oxera commissioned market research company, Millward Brown,¹²⁶ to measure awareness, usage and risk perception of crowdfunding among the general population of Spain, Germany and Poland. Since recent market research on awareness is available for the UK,¹²⁷ the UK was not included in this exercise. However, it is included in the other parts of the study, and the market research results presented in this section can be compared to the findings of the recent study in the UK by Nesta (2014).

The market research was commissioned in two stages. The first stage aimed at understanding awareness of crowdfunding among the general population. It consisted of two questions in an omnibus survey conducted via computer-assisted telephone interviews (CATI).¹²⁸ The first question asked about awareness of crowdfunding, and the second asked whether the respondent had experience of investing in crowdfunding. This survey also included questions to establish common characteristics of people who are aware of crowdfunding. The research covered Germany, Poland and Spain, surveyed 1,000 people in each country, and used the same methodology throughout. The respondents ranged from 18 to 75 years of age,¹²⁹ and were a representative sample of gender, social class and region.

The first phase of the market research was aimed at understanding the awareness of crowdfunding among the general population. While this phase also included one question to assess usage of crowdfunding, the second stage, which had a larger sample size of respondents who were aware of crowdfunding, is better suited to analyse usage and perception of crowdfunding. In this stage, multiple questions were presented in an online survey or computer-assisted web interview (CAWI) for the same three countries. Aimed at respondents between 18 and 65 years of age, the study was designed in the form of an ad hoc survey to be disseminated through Millward Brown's database.

The CAWI survey covered a sample of 1,000 respondents who were representative of the population of regular Internet users, and a targeted sample of people whose profile met the criteria established in the first phase of the analysis (in order to target those respondents who were most likely to know about crowdfunding). For this second phase, as many surveys as needed were completed in order to identify 400 respondents who were familiar with crowdfunding, and thus capable of answering the rest of the survey.¹³⁰

The tables below detail the questions asked during each phase of the market research.

¹²⁶ <http://www.millwardbrown.com/>.

¹²⁷ Nesta (2014).

¹²⁸ The CATI methodology involves asking questions over the telephone and recording the answers in a computer system.

¹²⁹ In the case of Poland, the lower limit was 18 years of age, but there was no upper limit.

¹³⁰ 400 respondents corresponds to a margin of error of 4.9% with a 95% confidence level, the commonly accepted benchmark in market research.

Table 3.1 CATI questionnaire

Introductory sentence	Peer-to-peer lending and crowdfunding are Internet-based methods for individuals and companies to raise funds for specific projects
Question 1	Are you aware of peer-to-peer lending or crowdfunding as a means of getting a financial return?
Question 2	Have you actually invested in peer-to-peer lending or crowdfunding?

Source: Oxera.

Table 3.2 CAWI questionnaire

Introductory sentence	Same as the CATI questionnaire																								
Question 1	Are you aware of peer-to-peer lending or crowdfunding as a means of getting a financial return? a. Yes b. No																								
Question 2	Where have you heard about peer-to-peer lending or equity crowdfunding? a. Friend/colleague b. Relative c. Financial adviser d. Blog/digital newspaper article e. Newspaper article/book f. TV g. Other																								
Question 3	Have you actually invested on equity crowdfunding platforms? a. Yes b. No																								
Question 4 [IF YES to question 3]	What proportion of your savings have you invested in equity crowdfunding? a. Less than 10% b. Less than 25% c. Less than 50% d. More than 50%																								
Question 5 [IF YES to question 3]	[For each option, record answer on a 1 to 5 scale – 1 = no importance, 2 = low importance, 3 = some importance, 4 = high importance, 5 = very high importance] How would you rate the following reasons by importance in your choice to invest in these platforms rather than investing elsewhere? <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">a. Higher expected financial returns</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> <tr> <td>b. Interest/excitement/curiosity about specific companies or start-ups</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> <tr> <td>c. Disappointment/mistrust of traditional finance</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> <tr> <td>d. Taking advantage of a new form of investment (increased diversification)</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> </table>	a. Higher expected financial returns	1	2	3	4	5	b. Interest/excitement/curiosity about specific companies or start-ups	1	2	3	4	5	c. Disappointment/mistrust of traditional finance	1	2	3	4	5	d. Taking advantage of a new form of investment (increased diversification)	1	2	3	4	5
a. Higher expected financial returns	1	2	3	4	5																				
b. Interest/excitement/curiosity about specific companies or start-ups	1	2	3	4	5																				
c. Disappointment/mistrust of traditional finance	1	2	3	4	5																				
d. Taking advantage of a new form of investment (increased diversification)	1	2	3	4	5																				
Question 6	Have you actually lent on peer-to-peer lending platforms? a. Yes b. No																								

Question 7
[IF YES to question 6]

What proportion of your savings have you invested in peer-to-peer lending?

- Less than 10%
- Less than 25%
- Less than 50%
- More than 50%

Question 8
[IF YES to question 6]

[For each option, record answer on a 1 to 5 scale – 1 = no importance, 2 = low importance, 3 = some importance, 4 = high importance, 5 = very high importance]

How would you rate the following reasons by importance in your choice to lend on these platforms rather than lending elsewhere?

a. Higher expected financial returns	1	2	3	4	5
b. Interest/excitement about specific companies/start-ups or about helping individuals fund specific projects	1	2	3	4	5
c. Disappointment/mistrust of traditional finance	1	2	3	4	5
d. Taking advantage of a new form of investment (increased diversification)	1	2	3	4	5

Question 9
[IF NO to questions 3 and 6]

[For each option, record answer on a 1 to 5 scale – 1 = no importance, 2 = low importance, 3 = some importance, 4 = high importance, 5 = very high importance]

How would you rate the following reasons by order of importance in your choice not to invest on crowdfunding platforms?

a. I have not had the opportunity to invest in crowdfunding (e.g. lack of funds or lack of time)	1	2	3	4	5
b. I do not have enough understanding about crowdfunding	1	2	3	4	5
c. I am concerned about poor financial returns	1	2	3	4	5
d. I am concerned about the reliability of investing in crowdfunding	1	2	3	4	5
e. I am concerned about the lack of regulation of crowdfunding platforms	1	2	3	4	5

Question 10

[For each option, record answer on a 1 to 5 scale – 1 = no risk, 2 = low risks, 3 = some risks, 4 = important risks, 5 = high risks]

How would you rate the risks (if any) associated with equity crowdfunding?

a. The fundraiser may prove to be fraudulent	1	2	3	4	5
b. The platform may prove to be fraudulent	1	2	3	4	5
c. Poor information about the ongoing performance of the investment	1	2	3	4	5
d. Poor returns or losses on the investment	1	2	3	4	5

Question 11

[For each option, record answer on a 1 to 5 scale – 1 = no risk, 2 = low risks, 3 = some risks, 4 = important risks, 5 = high risks]

How would you rate the risks (if any) associated with peer-to-peer lending?

- | | | | | | |
|--|---|---|---|---|---|
| a. The borrower may prove to be fraudulent | 1 | 2 | 3 | 4 | 5 |
| b. The platform may prove to be fraudulent | 1 | 2 | 3 | 4 | 5 |
| c. Poor ongoing information about the borrower | 1 | 2 | 3 | 4 | 5 |
| d. Poor returns or losses on the money lent | 1 | 2 | 3 | 4 | 5 |

Source: Oxera.

The questionnaires used for the research in the language corresponding to each country are included in an appendix.

The following two sub-sections present first the results on awareness, and second those on usage and risk perceptions regarding equity crowdfunding and P2P lending.

3.2 Results on awareness

3.2.1 General awareness

A central aim of the market research was to assess the level of awareness of crowdfunding among the general populations of Germany, Poland and Spain. Figure 3.1 shows the results of the telephone survey regarding the levels of awareness of P2P lending and crowdfunding as a means of getting a financial return.¹³¹

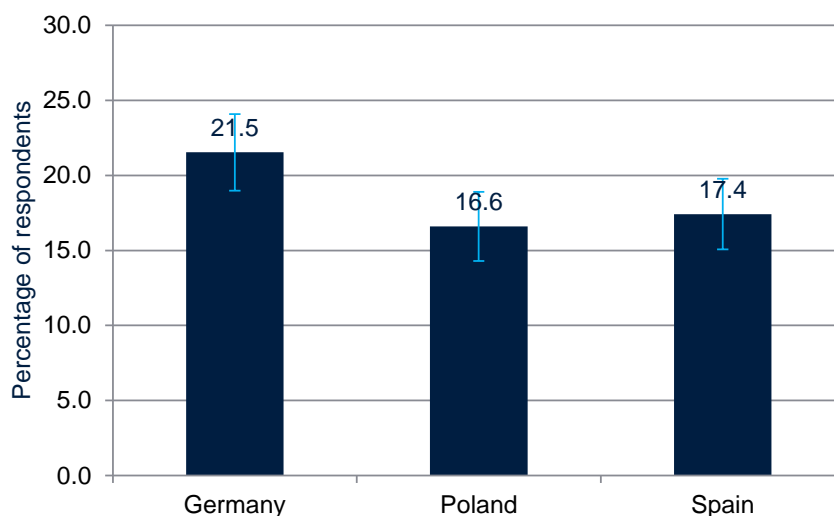
Of the countries examined, the level of awareness is the highest in Germany, at 21.5%, followed by Spain at 17.4% and Poland at 16.6%. The difference between the German and Polish awareness levels is statistically significant, while the difference between the German and Spanish awareness levels is weakly significant.¹³² The difference between the Polish and Spanish awareness levels is not statistically significant.¹³³

¹³¹ Most figures in sections 3.2 and 3.3 include the confidence intervals around each result at the 95% confidence level. The wider the interval is, the more uncertainty there is around point estimates. In certain instances, breaking the data into small subsamples may widen the interval.

¹³² The statistical method used in this instance, and for the subsequent analysis of section 3, is an analysis of variance, or ANOVA. ANOVA provides a way to test the hypothesis that there are statistically significant differences in the means of a target variable across subsamples of the data. In this specific analysis, we looked at how the mean responses to some of the questions changed across a relevant set of socio-demographic variables individually.

¹³³ Throughout sections 3.2 and 3.3, 'significant' denotes a significance at the 95% confidence level and 'weakly significant' a significance at the 90% level.

Figure 3.1 General awareness by country

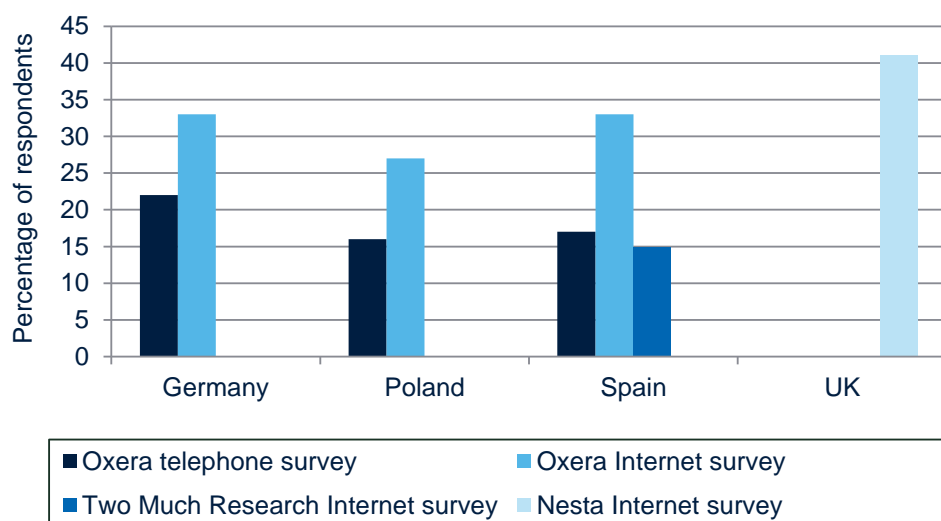


Note: The confidence intervals are associated with a 95% confidence level.

Source: Oxera, based on the results of a telephone market study carried out by Millward Brown.

The results of the subsequent online survey (CAWI), for the initial representative sample of 1,000 respondents, are presented in Figure 3.2 along with recent online survey results from the UK¹³⁴ and Spain.¹³⁵

Figure 3.2 Awareness rate by country and by methodology



Source: Oxera, based on the results of a telephone and an online market study carried out by Millward Brown; Nesta (2014) and Two Much Research (2015).

Depending on the country, the level of awareness is between 10 and 16 percentage points higher for the CAWI survey than for the CATI.

Various factors might account for this difference. As noted above, the CATI respondents are between 18 and 75 years of age,¹³⁶ while the CAWI respondents are between 18 and 65. Both studies record a drop in awareness

¹³⁴ Nesta (2014), using a sample of 2,007 consumers representative of the general UK population.

¹³⁵ Two Much Research (2015), based on a sample of 4,011 daily Internet users representative of the general population in terms of age and gender.

¹³⁶ Except for the case of Poland, where the lower limit is 18 years of age but there is no upper limit.

levels as the age increases to the highest ranges. Therefore, including respondents up to the age of 75 or above may partially contribute to finding lower awareness levels for the CATI survey. In addition, respondents willing to answer an online survey could be considered to have a greater affinity with the Internet, with a higher propensity to read articles online (for example), which is also likely to contribute to a higher level of awareness.

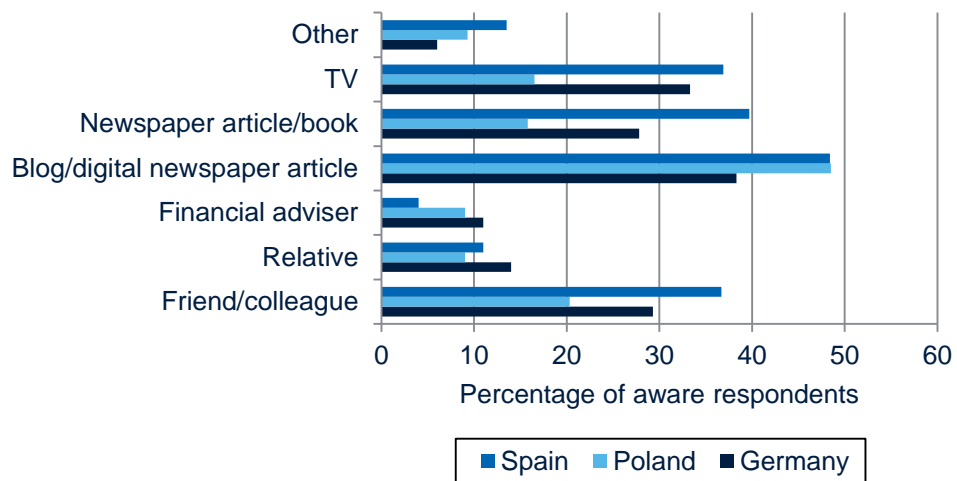
The Two Much Research study asked separately about awareness of peer-to-peer lending and of equity crowdfunding. The awareness level of 15% shown in Figure 3.2 is an average of the separate rates obtained for each type of crowdfunding (14.3% for peer-to-peer-lending and 15.4% for equity crowdfunding). The approach used in the CAWI survey is likely to lead to a higher level of awareness than the approach used in the Two Much Research study, as the CAWI study asks if the respondent is aware of *either* peer-to-peer lending *or* equity crowdfunding.

In addition, the Two Much Research survey included an option to indicate that the term sounded familiar, although the respondent might not have a concrete idea about what crowdfunding was. Of all respondents, 11.6% stated that the term 'peer-to-peer lending' sounded familiar, and 12.8% stated that 'equity crowdfunding' did. This option could divert certain answers away from the 'yes' response, thus leading to a lower outcome. Adding the 'yes' and 'sounds familiar' answers, the overall awareness level is 27%, a closer estimate to the result from the CAWI survey. Fundamentally, however, the Two Much Research findings and the CAWI findings differ because the questions and their structure were different.

For the UK, Figure 3.2 presents the findings of the survey conducted by Nesta. The obtained awareness level of 41% is a combination of the responses 'aware' and 'aware but not used', and is an average of the levels obtained separately for P2P business lending, P2P consumer lending, and equity crowdfunding.

Figure 3.3 shows the source of awareness by country found in the online study. A large portion of respondents have heard of crowdfunding through articles published online—in particular, in Poland and Spain, where nearly half of the respondents aware of crowdfunding chose this option. Newspaper articles and books, television, and friends or colleagues are also important sources of awareness.

Figure 3.3 Source of awareness by country



Note: Respondents could choose more than one option in this question.

Source: Oxera, based on the results of an online market study carried out by Millward Brown.

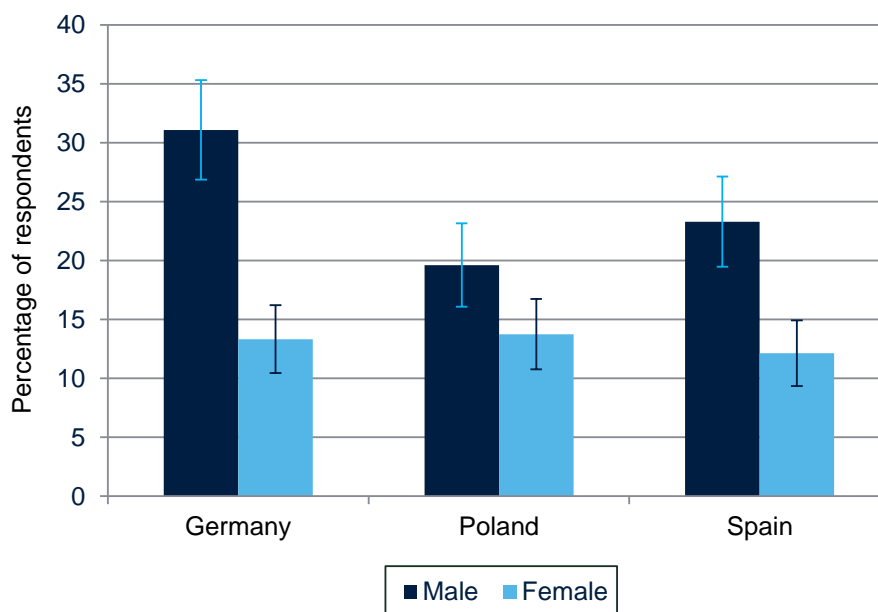
The survey also covered respondents' socioeconomic and other characteristics in order to understand the profile of those who were generally aware of crowdfunding as a form of investment. These results, drawn from the telephone-based study (CATI), are presented in the following sections.

3.2.2 Gender

The findings for all three countries covered in this study suggest a higher rate of awareness among male respondents than among female respondents, as shown in Figure 3.4. This difference in awareness according to gender is statistically significant for the three countries.¹³⁷

¹³⁷ Note that a difference may still be statistically significant when two confidence intervals overlap, as is the case here for Poland.

Figure 3.4 Awareness by country and gender



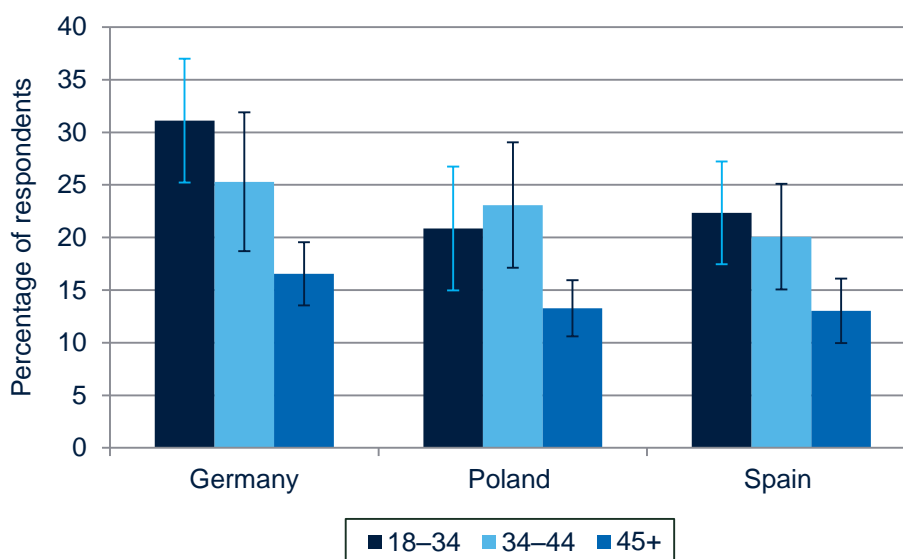
Note: The confidence intervals are associated with a 95% confidence level.

Source: Oxera, based on the results of a telephone market study carried out by Millward Brown.

3.2.3 Age

The awareness levels by age are shown in Figure 3.5. In Germany, and Spain the respondents from 18 to 34 years old are most aware of crowdfunding, while in Poland, the age group with the highest awareness is the 34–44-year olds. Respondents aged 18–34 are significantly more aware than the 45+ for all three countries. For all three countries as well, there is no statistical difference between 18–34 and 35–44. In Germany and Poland, the respondents between 35 and 44 years old are significantly more aware than those aged above 45. This holds as well for Spain albeit at the 90% confidence level.

Figure 3.5 Awareness by country according to age range (percentage of respondents)



Note: The confidence intervals are associated with a 95% confidence level.

Source: Oxera, based on the results of a telephone market study carried out by Millward Brown.

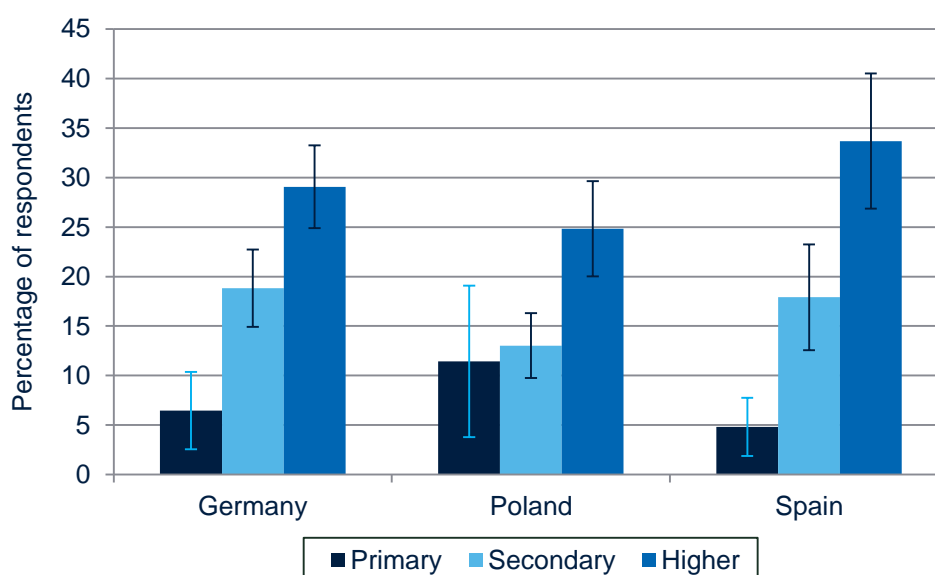
3.2.4 Region

Splitting the samples into regions greatly reduces the sample sizes. Regional awareness rates are therefore subject to relatively large margins of error, which could provide misleading results and should therefore be treated with caution. For completeness, the regional awareness rates are provided in Appendix A2.

3.2.5 Education

Figure 3.6 shows the awareness rate depending on level of education. In all three countries the awareness rate increases with education level. For Germany and Spain, the differences between each educational level are statistically significant. In Poland, respondents who have completed higher education studies are also significantly more aware than the other two groups. However, there is no statistically significant difference between the primary and secondary groups.

Figure 3.6 Awareness by country and highest level of education achieved



Note: The confidence intervals are associated with a 95% confidence level. For Germany, the primary category includes schooling until 14 years of age; the secondary category includes intermediate secondary school, polytechnical secondary school, and polytechnical college admission; and the higher category includes school leaving certificates, college admission, and full university studies. The categories for Poland were the ones used by the market researchers, excluding the vocational education category which did not have an adequate equivalent for the two other countries. For Spain, the primary education group includes schooling until 14 years of age, the secondary category includes schooling up to 18 years of age and the higher category includes medium and superior university studies.

Source: Oxera.

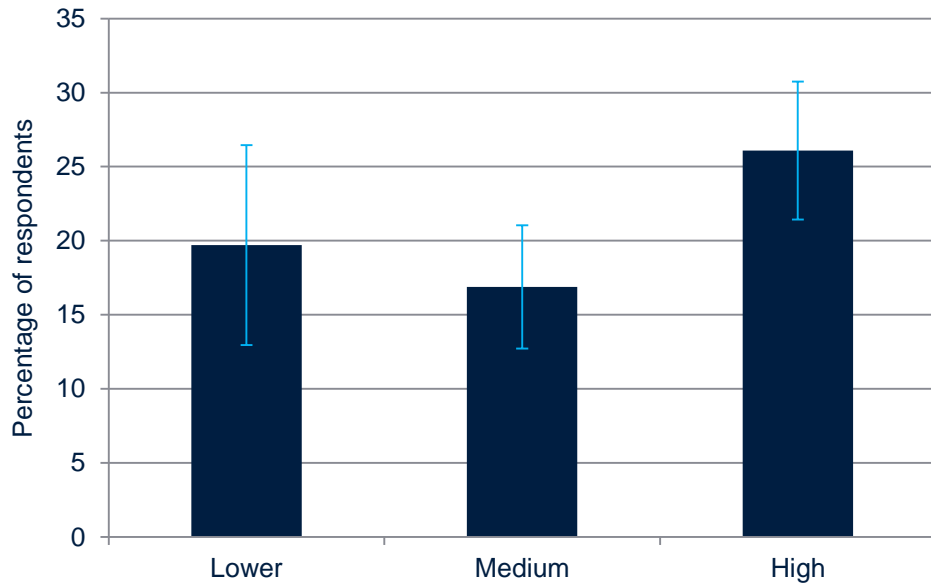
3.2.6 Income/social class

Figure 3.7 and Figure 3.8 below focus on awareness by income level in Germany and Poland. Spain is discussed further below. The data is presented separately for each country, as the income levels are not denoted in the same currency. In both countries, respondents with a higher income tend to be more likely to be familiar with crowdfunding or with P2P lending.

In Germany, respondents with a high income are statistically more aware than those with a medium income, but there are no statistically significant differences

for the other groups. In Poland, respondents with a high income are statistically more aware than those with a low income.

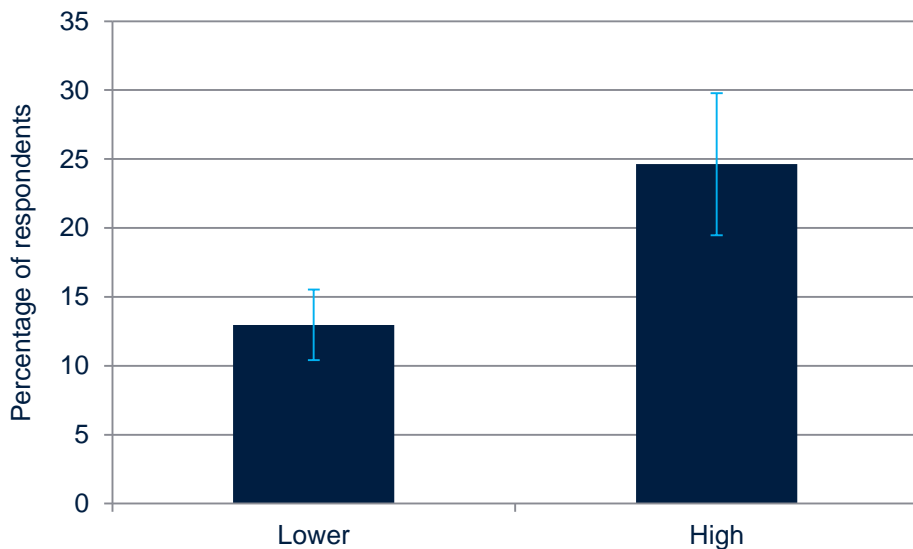
Figure 3.7 Awareness in Germany by monthly household net income level



Note: The confidence intervals are associated with a 95% confidence level. The income categories are those generally used by the market researchers in Germany. The lower category includes monthly incomes up to €1,500, the medium category consists of monthly income ranging from €1,500 to €3,000, and the high category includes monthly incomes above €3,000.

Source: Oxera, based on the results of a telephone market study carried out by Millward Brown.

Figure 3.8 Awareness in Poland by respondent monthly net income level



Note: The confidence intervals are associated with a 95% confidence level. The lower category includes monthly incomes up to zł 2,500 and the high category includes incomes above zł 2,500.

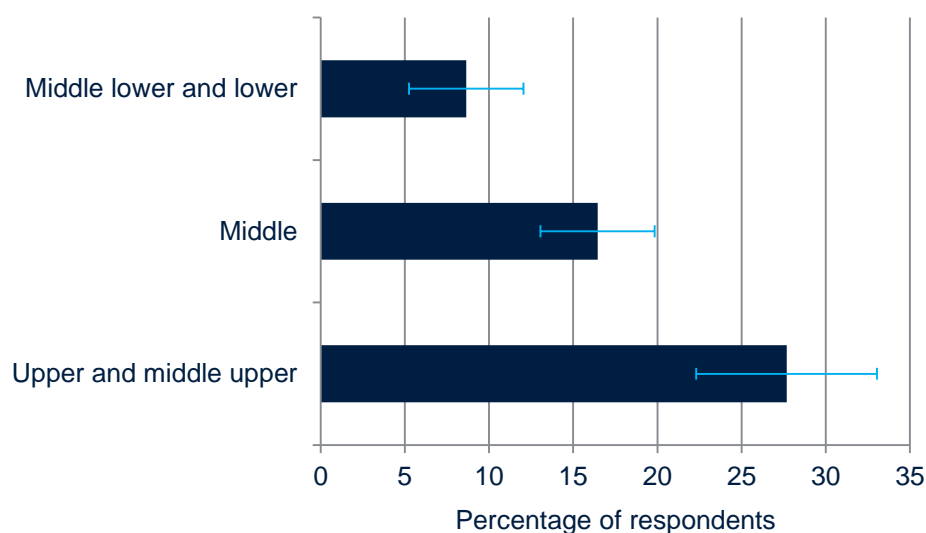
Source: Oxera, based on the results of a telephone market study carried out by Millward Brown.

In Spain, respondents were reluctant to communicate their income, with approximately half of respondents declining to answer. Figure 3.9 below therefore focuses on social class, which for this survey has been estimated by

combining indicators of the highest education level achieved and current professional status.

There is a positive relationship between awareness and social class, with the respondents belonging to the higher classes recording a higher awareness level. The respondents from the 'upper and middle upper' group are statistically more aware than those of the 'middle' group, and the awareness level of the latter group is also statistically higher than that of the 'middle lower and lower' group.

Figure 3.9 Awareness in Spain according to social class



Note: The confidence intervals are associated with a 95% confidence level.

Source: Oxera, based on the results of a telephone market study carried out by Millward Brown.

3.3 Results on usage and perception of crowdfunding

The second segment of the market research included questions on the level of investment, the reasons for investing or not investing through crowdfunding, and respondents' perception of risk.

As explained in section 3.1, this research was conducted online with two samples of respondents. The first sample was representative of the general population of Internet users in each country. The second sample was targeted to reach 400 respondents who were aware of crowdfunding and were able to complete the rest of the survey. As a consequence, the CAWI results on the level of awareness presented in Figure 3.2 are drawn from the general sample of Internet users, so as not to be biased by the selective second sample. For the following questions (questions 2 to 11 of the online questionnaire), the responses of the targeted sample of respondents who were aware of crowdfunding are included in the analysis, as the focus is now only on those who are aware of crowdfunding.¹³⁸ These responses are detailed in the following subsections.

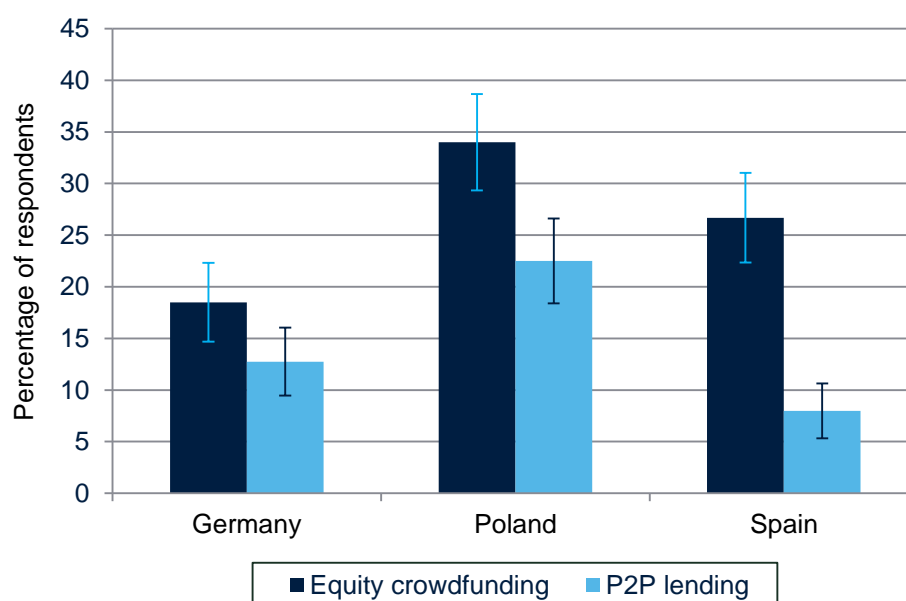
3.3.1 Usage of equity crowdfunding and peer-to-peer lending as a form of investing

Figure 3.10, presenting the results of questions 3 and 6, shows the proportion of respondents who answered that they have invested in equity crowdfunding or

¹³⁸ In this case, the issue of the selective sample is deemed to be less important than the need for a larger sample in order to provide useful results.

P2P lending. The findings are reported as percentages of the respondents who are aware of crowdfunding.

Figure 3.10 Respondents who have invested by type of crowdfunding



Note: This question (Q3 or Q6) was asked to the sample of aware respondents (400 per country). The proportions shown are percentages of these samples. The confidence intervals are associated with a 95% confidence level.

Source: Oxera, based on the results of an online market study carried out by Millward Brown.

For the three countries surveyed, the proportion of total respondents who have invested is significantly higher for equity crowdfunding than for P2P lending. Converting the figures above to account for the entire sample of respondents, the stated investment level is 4.1% in Germany, 5.4% in Poland, and 4.5% in Spain for equity crowdfunding. It is 2.8% in Germany, 3.6% in Poland, and 1.4% in Spain for P2P lending.

The findings for questions 3 and 6 are positively correlated (48%), meaning that a respondent answering that he or she has invested in equity crowdfunding is also likely to respond having invested in P2P lending. Across the three countries, 134 respondents answered they had invested in both types of crowdfunding.

These levels of investment activity via crowdfunding appear to be higher than might be suggested by the data from the platforms.¹³⁹ The Two Much Research study conducted in Spain also finds higher investment levels than those suggested by the platforms. Two Much Research offers the following explanations for this observation:

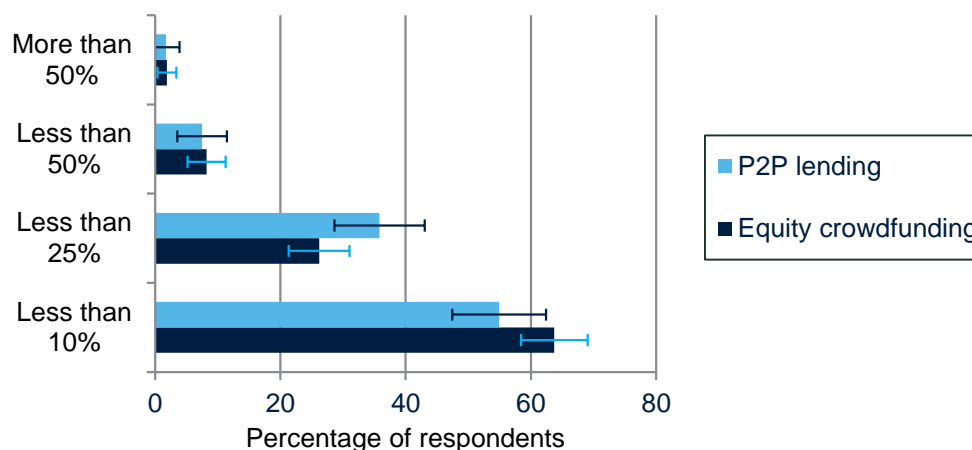
- platforms may not be the only way people get involved in crowdfunding—investments may be made through friends and family, for example. The number of investors in this case could be a large group where individuals made small contributions. This may have been classified as ‘crowdfunding’ by respondents;
- a significant proportion of crowdfunding in these countries may be conducted through foreign platforms;

¹³⁹ See Table 4.1 and Table 4.2.

Consistent with these findings, it may be that respondents interpreted the concept of crowdfunding more broadly in this question than relating just to investments on the types of crowdfunding platforms included in this study. This could also explain the relatively high stated usage of equity crowdfunding compared to P2P lending.¹⁴⁰

Figure 3.11, which presents the findings from questions 4 and 7, shows the proportion of savings invested by type of crowdfunding for Germany, Poland and Spain combined. More than three-fifths of the respondents who have invested in equity crowdfunding, and more than half of those who have invested in P2P lending, report investing less than 10% of their savings. Only a small proportion of respondents have invested more than 25% of their savings through crowdfunding.¹⁴¹

Figure 3.11 Proportion of savings invested by type of crowdfunding for Germany, Poland and Spain combined



Note: Respondents answered this question (Q4 or Q7) on the basis of having previously responded that they had invested in equity crowdfunding or in P2P lending. Thus, the sample of respondents was 317 for equity crowdfunding, and 173 for P2P lending, across the three countries. The proportions shown are percentages of these samples. The confidence intervals are based on a 95% confidence level.

Source: Oxera, based on the results of an online market study carried out by Millward Brown.

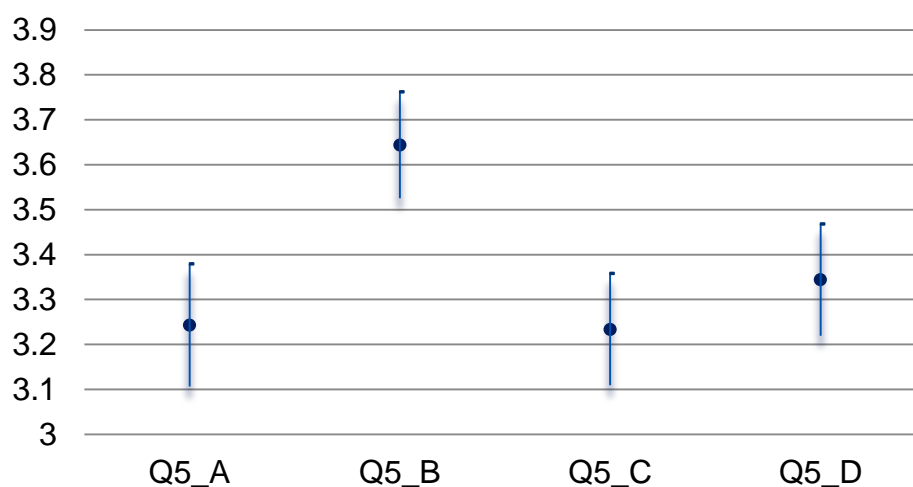
The survey enquired about the importance of four categories of potential reasons for investing in equity crowdfunding (question 5) and in P2P lending (question 8). The figure below displays the average rating by respondents of each of these reasons to invest in equity crowdfunding.¹⁴²

¹⁴⁰ The volume of P2P lending exceeds that of equity crowdfunding and, similarly, the P2P lending platforms that were interviewed tended to have larger volumes than the equity crowdfunding platforms that were interviewed.

¹⁴¹ Similar patterns are observed, albeit with a higher margin of error, if the countries are considered individually.

¹⁴² The statistical method used in this instance, as well as for the subsequent analysis of this section, is an analysis of Likert scale averages. We have assigned a Likert score of 1-5 to the level of importance attached by respondents to the various reasons for investing in crowd-funding and peer-to-peer lending. We then computed means across the different reasons and used simple t-tests to test for any significance of the differences in the level of importance across responses.

Figure 3.12 Average rating (with confidence interval) of each reason to invest in equity crowdfunding across the three countries



Note: Respondents answered this question (Q5) on the basis of previously having responded that they had invested in equity crowdfunding. This sample corresponds to 317 respondents across the three countries. Respondents were asked to rate each option on a scale from 1 to 5, with 1 denoting 'no importance' and 5 signifying 'very high importance'. Option A corresponds to 'higher expected financial returns', option B to 'interest/excitement/curiosity about specific companies or start-ups', option C to 'disappointment/mistrust of traditional finance' and option D to 'taking advantage of a new form of investment (increased diversification)'. The confidence intervals are based on a 95% confidence level.

Source: Oxera, based on the results of an online market study carried out by Millward Brown.

On average, all reasons to invest in equity crowdfunding are considered to have from 'some importance' to 'high importance' as shown by the ratings between 3 and 4. The data displays fairly low variation across responses, showing that respondents tend to give similar weights to all options. Nevertheless, there are statistically significant differences in the findings.

Being interested or excited about a specific company or project (response B) appears as the most important motivator, with an average rating of 3.6. The three other reasons are rated between 3.2 and 3.3. The difference in valuation is statistically significant at the 95% confidence level, signifying that we can confidently state that reason B seems more important than the three other reasons.¹⁴³

For question 5, as well as subsequent questions 8, 9, 10 and 11, which asked respondents to rate specific options as part of a same question, it is interesting to look within each question to understand respondent behaviour. For example, do investors who are seeking to take advantage of a new form of investment also tend to be disappointed with traditional finance? This can be tested by analysing how correlated different answers are with each other. Assessing correlation coefficients is thus a good way to understand how different respondents value certain elements together. It may also provide further evidence of the veracity of the results if the answers seem consistent with what would intuitively be expected. The table below displays the correlation between the mean scores of each option in question 5.

¹⁴³ The mean differences for options A and C, and for A and D, are not statistically different. The difference between D and B is statistically significant, as well as that between D and C (although at the 90% confidence level), signifying that D is marginally more important than A and C.

Table 3.3 Correlation coefficients within question 5

	Q5_A	Q5_B	Q5_C	Q5_D
Q5_A	1			
Q5_B	0.17	1		
Q5_C	0.33	0.32	1	
Q5_D	0.55	0.36	0.51	1

Note: All correlation coefficients are statistically significant and positive.

Source: Oxera, based on the results of an online market study carried out by Millward Brown.

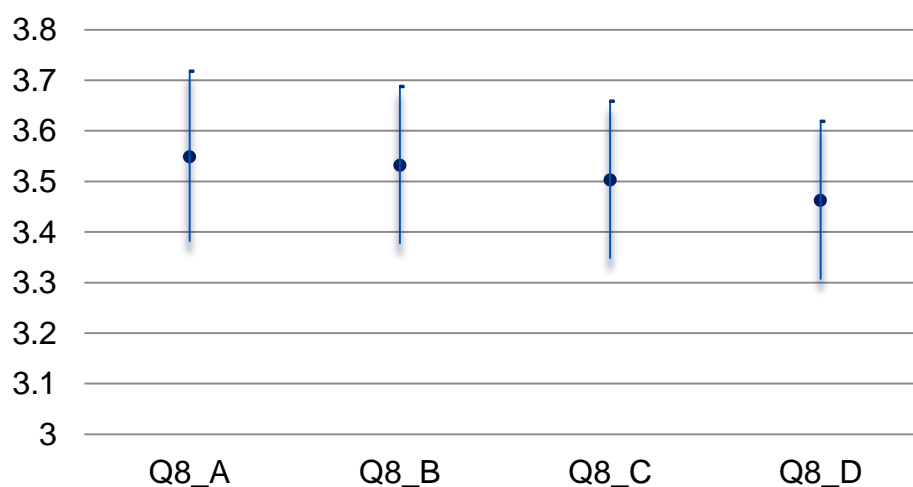
Responses for option D, namely ‘taking advantage of a new form of investment/increased diversification’, are highly correlated (around 50%, significantly higher than the other coefficients) with the mean scores for reasons A and C, respectively ‘higher expected financial returns’ and ‘disappointment/mistrust of traditional finance’. In other words, a respondent placing a high importance on D as a reason to invest also tends to place a high importance on reasons A and C. This is consistent with what might be intuitively expected, as an investor may be looking into new forms of investment so as to seek higher financial returns or because of a particular disappointment with traditional finance.

Similarly, it can be assumed that investors who are generally interested and excited about specific companies or projects (option B) would not primarily invest in crowdfunding for financial reasons. This is verified by the low correlation between responses for options A and B, compared to other coefficients (17%).

The remaining answers display a correlation ranging from 32% to 36%, a rather average correlation compared to the distribution of coefficients.

The findings for the same question are now analysed below, but for the case of peer-to-peer lending. The figure below displays the average scoring by respondents of each of these reasons to invest in peer-to-peer lending.

Figure 3.13 Average rating (with confidence interval) of each reason to invest in P2P lending across the three countries



Note: Respondents answered this question (Q8) on the basis of previously having responded that they had invested in P2P lending. This sample corresponds to 173 respondents across the three countries. Respondents were asked to rate each option on a scale from 1 to 5, with 1 denoting ‘no importance’ and 5 signifying ‘very high importance’. Option A corresponds to ‘higher expected financial returns’, option B to ‘interest/excitement about specific companies/start-ups or about

helping individuals fund specific projects', option C to 'disappointment/mistrust of traditional finance' and option D to 'taking advantage of a new form of investment (increased diversification)'. The confidence intervals are based on a 95% confidence level.

Source: Oxera, based on the results of an online market study carried out by Millward Brown.

The point estimates denoting the mean ratings are fairly close, ranging from 3.46 to 3.55, and none of the estimates are significantly different from each other. Thus, while all the reasons seem to carry some importance to high importance, we cannot reject the possibility that all motives are equally important in a respondent's decision to lend money.¹⁴⁴

The table below displays the correlation between the mean scores of each option in question 8.

Table 3.4 Correlation coefficients within question 8

	Q8_A	Q8_B	Q8_C	Q8_D
Q8_A	1			
Q8_B	0.39	1		
Q8_C	0.51	0.52	1	
Q8_D	0.58	0.51	0.53	1

Note: All correlation coefficients are statistically significant and positive.

Source: Oxera, based on the results of an online market study carried out by Millward Brown.

The responses to question 8 are characterised by a rather homogeneous correlation ranging from 51% to 58% between all answers. One exception is the lower correlation between options A and B (39%). This is consistent with what might be expected, similarly to what was found in the case of equity crowdfunding (question 5). Indeed, lenders who are generally interested and excited about specific projects would not primarily invest in crowdfunding for financial reasons.

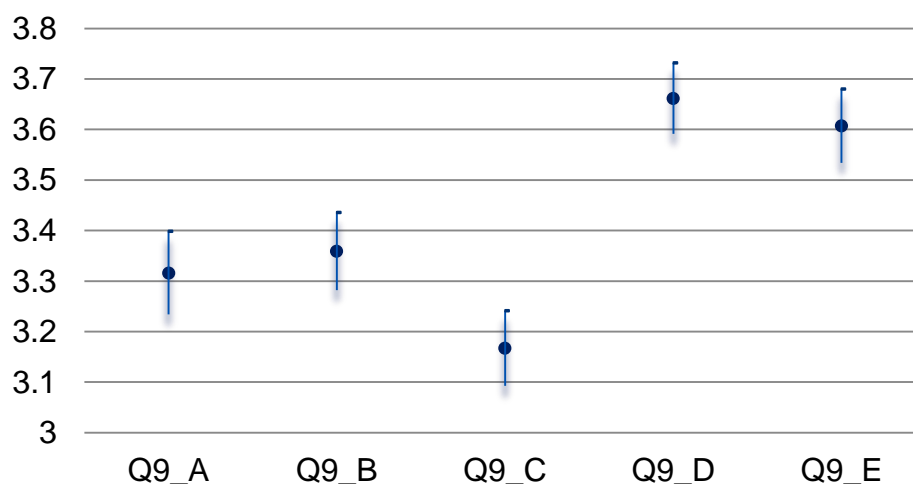
The following section analyses the survey results, shedding some light on the respondents' reasons not to invest in crowdfunding, as well as on their perception of the potential risks.

3.3.2 Reasons not to invest in crowdfunding or P2P lending and perception of risks

Question 9 enquired into the reasons why respondents answered 'no' when asked whether they had invested in equity crowdfunding or peer-to-peer lending. The figure below displays the average rating by respondents of five types of potential reasons not to invest.

¹⁴⁴ The associated confidence intervals are fairly wide for this question, limiting the scope for interpreting these findings.

Figure 3.14 Average rating (with confidence interval) of each reason not to invest in either form of crowdfunding across the three countries



Note: Respondents answered this question (Q9) on the basis of previously having responded that they had not invested in equity crowdfunding or in P2P lending. This sample corresponds to 845 respondents across the three countries. Respondents were asked to rate each option on a scale from 1 to 5, with 1 denoting 'no importance' and 5 signifying 'very high importance'. Option A corresponds to 'I have not had the opportunity to invest in crowd-funding (e.g. lack of funds or lack of time)', option B to 'I do not have enough understanding about crowd-funding', option C to 'I am concerned about poor financial returns', option D to 'I am concerned about the reliability of investing in crowd-funding', and option E to 'I am concerned about the lack of regulation of crowd-funding platforms'. The confidence intervals are based on a 95% confidence level.

Source: Oxera, based on the results of an online market study carried out by Millward Brown.

On average, all motives not to invest are given a degree of importance as shown by the ratings between 3 and 4. The data displays a fairly low variation across responses, but there are statistical differences in the findings.

The individuals who are aware of crowdfunding but who have never invested in either type of alternative finance seem concerned about the reliability of this form of investment and the lack of regulation of crowdfunding platforms. This is shown by the 3.7 rating for option D and the 3.6 rating for option E, both statistically significantly higher than the other three options rated between 3.2 and 3.4. Option D also appears to be rated more highly than option E, although at a weaker confidence level (90%).¹⁴⁵ Option C appears as the least important reason not to invest, suggesting that people who are aware of crowdfunding do not associate this form of investment with poor financial returns.

The table below displays the correlation between the mean scores of each option in question 9.

¹⁴⁵ All other differences between the means are significant, except for the mean ratings of options A and B.

Table 3.5 Correlation coefficients within question 9

	Q9_A	Q9_B	Q9_C	Q9_D	Q9_E
Q9_A	1				
Q9_B	0.18	1			
Q9_C	0.15	0.38	1		
Q9_D	0.08	0.44	0.48	1	
Q9_E	0.12	0.46	0.43	0.63	1

Note: All correlation coefficients are statistically significant and positive.

Source: Oxera, based on the results of an online market study carried out by Millward Brown.

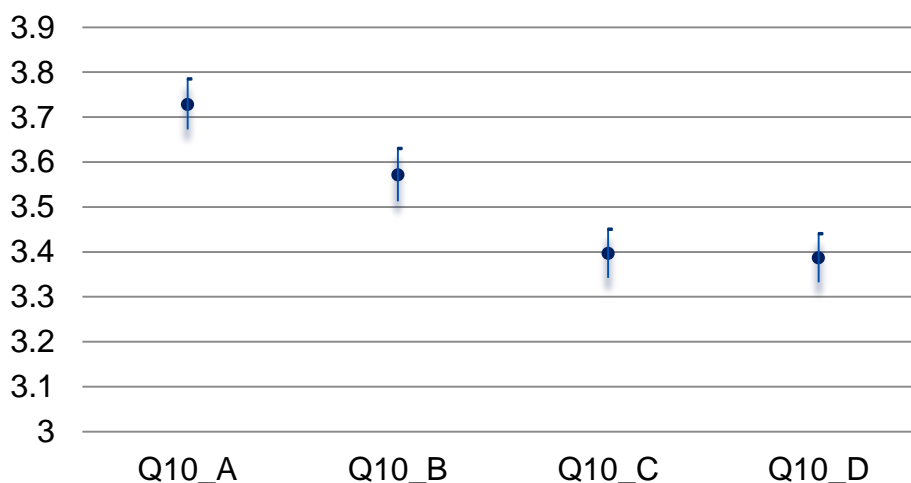
The reasons appearing as most important in the respondents' evaluation, D and E, are highly correlated with each other (63%) compared to other scores. Intuitively, it can be predicted that someone who is concerned about poor reliability associated with this type of investment would also be concerned about a lack of regulation.

Conversely, a respondent saying that he or she had not had the opportunity to invest in crowdfunding because of a lack of time or funds, for example (option A), would probably not be particularly concerned about the reliability of this form of investment or about a lack of regulation. It might also be expected that not having a good understanding of what crowdfunding is, or being concerned about poor financial returns, would also not be chosen by such a respondent. This is exemplified by the correlation that scores for option A display with all other answer choices (between 8% and 18%, much lower than the other coefficients ranging from 38% to 63%).

The remaining answer choices have fairly average correlations, ranging from 38% to 48%.

The last two questions of the online survey, questions 10 and 11, aimed at understanding how potential risks are perceived among the respondents who are aware of crowdfunding. These findings are presented in Figure 3.15 and Figure 3.16.

Figure 3.15 Average rating (with confidence interval) of each risk type associated with equity crowdfunding across the three countries



Note: This question (Q10) was asked to the sample of aware respondents (400 per country). Respondents were asked to rate each option on a scale from 1 to 5, with 1 denoting 'no risk' and 5 signifying 'high risks'. Option A corresponds to 'the fundraiser may prove to be fraudulent', option B to 'the platform may prove to be fraudulent', option C to 'poor information about the ongoing performance of the investment', and option D to 'poor returns or losses on the investment'. The confidence intervals are based on a 95% confidence level.

Source: Oxera, based on the results of an online market study carried out by Millward Brown.

On average, all risks are considered to be moderate to high, as shown by the ratings between 3 and 4. The data displays a fairly low variation across responses, but there are statistical differences in the findings.

For equity crowdfunding, respondents seemed mostly concerned that the fundraiser may be fraudulent and, to a lesser extent, that the platform may be fraudulent, as shown by the respective scores of 3.7 and 3.6. This difference is statistically significant, meaning that respondents tend to think that there may be more severe fraud risks from the fundraiser than from the platform.

The ratings for options A and B are also significantly higher than the score for the two other risk sources in this question. These two other risks, namely those of having poor information on the investment, and having poor returns or losses, seem equally severe, given that the difference between the two means of 3.40 and 3.39 is not statistically significant.

The table below displays the correlation between the mean scores of each option in question 10.

Table 3.6 Correlation coefficients within question 10

	Q10_A	Q10_B	Q10_C	Q10_D
Q10_A	1			
Q10_B	0.74	1		
Q10_C	0.58	0.58	1	
Q10_D	0.51	0.51	0.57	1

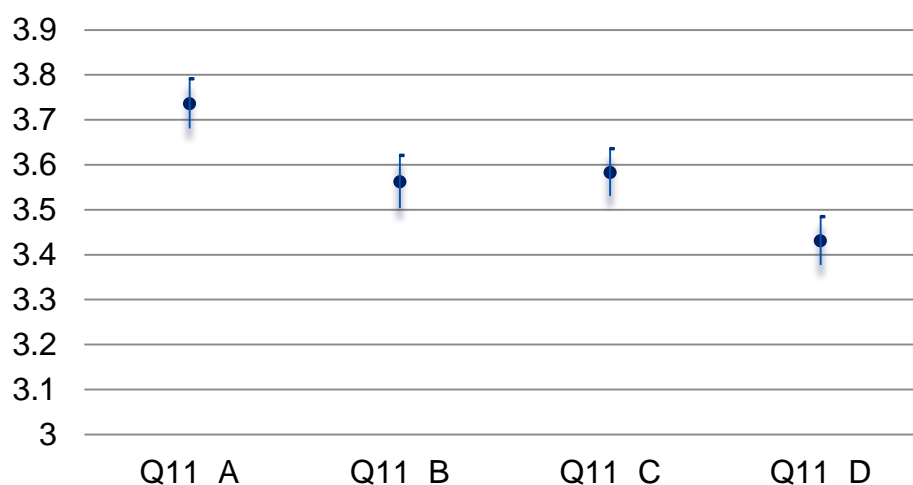
Note: All correlation coefficients are statistically significant and positive.

Source: Oxera, based on the results of an online market study carried out by Millward Brown.

As might be intuitively supposed, responses A and B are very highly correlated with each other (74%) compared to other correlation coefficients.

All other answers are fairly highly correlated (51–58%) in a homogeneous way, suggesting that each investor may be equally concerned about various sources of risks.

Figure 3.16 Average rating (with confidence interval) of each risk type associated with P2P lending across the three countries



Note: This question (Q11) was asked to the sample of aware respondents (400 per country). Respondents were asked to rate each option on a scale from 1 to 5, with 1 denoting 'no risk' and 5 signifying 'high risks'. Option A corresponds to 'the borrower may prove to be fraudulent', option B to 'the platform may prove to be fraudulent', option C to 'poor ongoing information about the borrower', and option D to 'poor returns or losses on the money lent'. The confidence intervals are based on a 95% confidence level.

Source: Oxera, based on the results of an online market study carried out by Millward Brown.

On average, all risks are considered to be moderate to high, as shown by the ratings between 3 and 4. The data displays a fairly low variation across responses, but there are statistical differences in the findings.

For peer-to-peer lending, and similarly to equity crowdfunding, respondents seemed mostly concerned that the borrower may be fraudulent. This potential risk was given an average score of 3.7, which is significantly higher than the three other risk sources.

The risks that the platform may be fraudulent or the risk from having poor ongoing information about the borrower have the second-most severe rating, around 3.6. The difference between the two means is not statistically significant, but both means are significantly higher than the mean for risk D corresponding to having poor returns or making losses on the money lent.

The table below displays the correlation between the mean scores of each option in question 11.

Table 3.7 Correlation coefficients within question 11

	Q11_A	Q11_B	Q11_C	Q11_D
Q11_A	1			
Q11_B	0.73	1		
Q11_C	0.66	0.63	1	
Q11_D	0.54	0.53	0.63	1

Note: All correlation coefficients are statistically significant and positive.

Source: Oxera, based on the results of an online market study carried out by Millward Brown.

In a very similar way to question 10, the ratings for risk types A and B display the highest correlation (73%). All other answer choices are fairly highly correlated in a homogeneous way, with coefficients between 53% and 66%.

3.4 Summary of results

The consumer research highlights the degree of awareness of crowdfunding in the three countries, and sheds some light on the types of people who are most likely to be aware. The survey also provides insights into investor behaviour, the motivations for investing, and not investing, in crowdfunding and P2P lending, as well as into how risks are perceived.

The results on awareness of equity crowdfunding or of P2P lending, derived from the CATI survey, may be summarised as follows:

- Awareness levels are highest in Germany (21.5%), followed by Spain (17.4%) and then Poland (16.6%). The difference between the latter two is not statistically significant.
- Awareness rates among males are higher than among females.
- With the exception of Poland where the age group with the highest awareness is the 34–44-year olds, there is a tendency for the youngest age groups (the 18–34-year olds) to have higher awareness rates. In all three countries the awareness rate of the 18–34-year olds exceeds that of the age group 45+ by a statistically significant level.
- Education and income (or, in the case of Spain, social class) are broadly positively correlated with awareness levels for all countries considered. In some instances there are no statistically significant differences.

Of those who reported that they are aware of crowdfunding, the additional questions explored their reasons for investing or not investing, as well as their investment activity where relevant. The findings, derived from the CAWI survey, can be summarised as follows:

- A greater number of respondents report that they have invested in equity crowdfunding (question 3) than in P2P lending (question 6). Reported investment levels range from 4.1% to 5.4% of total respondents (i.e. not just the aware) in equity crowdfunding and from 1.4% to 3.6% in P2P lending. These estimates suggest higher levels of investing than seems likely given the data from the platforms. Indeed, they may indicate a broader interpretation of the term ‘crowdfunding’ than used in this study. A similar study conducted in Spain by Two Much Research also concludes that the levels of investments found might be higher than what would be expected.
 - There is a positive correlation between responses indicating investing in equity crowdfunding and investing in P2P lending.
 - Around 60% of the respondents who report that they have invested stated that they had invested less than 10% of their savings in equity crowdfunding or in P2P lending (questions 4 and 7).
 - Being interested or excited about a specific company or project was the most important reason to invest for equity crowdfunding (question 5). Respondents who consider ‘taking advantage of a new form of investment/increased diversification’ to be important tend to consider ‘higher expected financial returns’ and ‘disappointment/mistrust of traditional finance’ important as well.
-

-
- For peer-to-peer lending, no motivations behind investing appear as more important others, and large confidence intervals limit the extent to which the data can be interpreted (question 8).

Finally, the survey enquired into the reasons not to invest in either form of crowdfunding, and also looked into how people who are aware of equity crowdfunding or peer-to-peer lending evaluate the potential risks associated with these forms of investment. The findings, derived from the CAWI survey, can be summarised as follows.

- Concerns about the reliability of this form of investment, as well as the lack of regulation of platforms, is rated as the most important reasons not to invest for both forms of crowdfunding (question 9). The mean scores are highly correlated with each other (63%), compared to correlations between other questions displaying coefficients from 8% to 48%. Being concerned about poor financial returns is the least important reason not to invest.
 - When asked about risks, on average, respondents consider all risk types to be of moderate to high importance.
 - Respondents seem mostly concerned that the fundraiser/borrower might be fraudulent (questions 10 and 11). For both equity crowdfunding and P2P lending, the second most highly rated source of concern is that the platform might be fraudulent.
 - Respondents score more highly the risk of having poor ongoing information about the borrower in P2P lending, than they rate the risk of having poor information on the state of the investment in equity crowdfunding.
-

4 Discussions with crowdfunding platforms

Further information for the study was collected from leading crowdfunding platforms in the four countries. This section gives a detailed overview of the discussions with crowdfunding platforms, including a summary of the responses and a discussion of the findings.

4.1 Crowdfunding platforms

The study included telephone-based discussions with a total of ten representatives of leading crowdfunding platforms, including at least two per country, comprising a mix of equity crowdfunding platforms and P2P lending platforms. The focus was on the major platforms, although platform sizes differ greatly between countries, due to the different sizes of the crowdfunding markets in the countries. The discussions included both qualitative and quantitative questions. The questions sent to the platforms beforehand, and which served as the basis for the discussions, are provided in the appendices.

4.2 Size and investment patterns

Table 4.1 and Table 4.2 list the platforms interviewed, and summarise the responses relating to platform size and investment patterns.

Table 4.1 P2P lending platforms

	UK	UK	Germany	Spain
	Funding Circle	Ratesetter	Auxmoney	Arboribus
Members	n.a.	n.a.	974k	2.3k , 700 a year ago
Volume	£279m in 2014, £129m in 2013; already almost £200m in 2015	£293m in 2014; record month was Jan 2015 with £44m	€237m so far; €65.3m in 2014, €36.4m in 2013	€2.35m so far; €1.2m last year
Number of projects/borrowers	11k loans to 9k borrowers	78k active borrowers	41k so far, 700 ongoing; 11.3k in 2014, 7.2k in 2013	64 so far, with 7 ongoing; 35 in 2014
Investors	40k active investors	19k active lenders	55k in 2014, of which 15k active, 38k in 2013	c. 750 active investors
Average investor portfolio size	c. £5,000-8,000 ,	£20k ; up from £15k a year ago	€4,500	c. €3,000 ; up from €1,000 a year ago
Average number of projects per investor	Recommend diversification across at least 100 loans with no more than 1% exposure to any one SME	4.1 loans per active lender (NB: protected by Provision Fund, so less need for risk spreading)	n.a.	Most invest in all ongoing projects
Investment timeframe	6 months to 5 years	1 month to 5 years	12 to 60 months	18 months
Acceptance rate	n.a.	15–20%	Less than 20%	10–15%

Note: Unless stated otherwise, the graphs below are based on the figures in bold in this table.

Source: Oxera telephone-based discussions with platforms.

Table 4.2 Equity crowdfunding platforms

	Germany Companisto	Germany Seedmatch	Spain Sociosinversores	Poland Crowdangels	Poland Ideowi	UK Seedrs
Members	28k	39k	12k in 2014 (up 30% from 2013)	4k	600 (up from 200 last year)	n.a.
Volume	€16.7m so far; €11m in 2014, €3.8m in 2013	€23.3m so far; €11.3m in 2014, €7.4m in 2013	€7.8m so far; €1m in 2014, €850-900k in 2013	€50k	n.a.	n.a.
Number of projects/fundraisers	38 so far, with 5 ongoing; 17 in 2014, 9 in 2013	79 so far; 21 in 2014; 25 in 2013.	71 so far; 23 in 2014, 30 in 2013	2 fundings completed so far	10	204 so far; 2015 to date: c. 50; 2014: 110 ; 2013: c. 40; 2012: c. 10
Investors	n.a.	9k investors	4.5k investors in 2014 (up 30% from 2013)	100 investors	n.a.	n.a.
Average investor portfolio size	n.a.	€2,500 ; this figure has remained roughly constant	€220 (i.e. €1m volume divided by 4,500 investors)	€200	€25	£10,000
Average number of projects per investor	n.a.	2.5 ; this figure has remained roughly constant	1–2 projects	1	2–3	10
Investment timeframe	Estimate 8 years ; 2–3 years unlikely, 4–7 years more likely	5–7 years	Estimate 3–5 years	n.a.	n.a.	Estimate at least 5–7 years .
Acceptance rate	C. 1.2% , 38 of over 3000	n.a.	Less than 30%	17.5% (7 out of 40)	n.a.	n.a.

Note: Unless stated otherwise, the graphs below are based on the figures in bold.

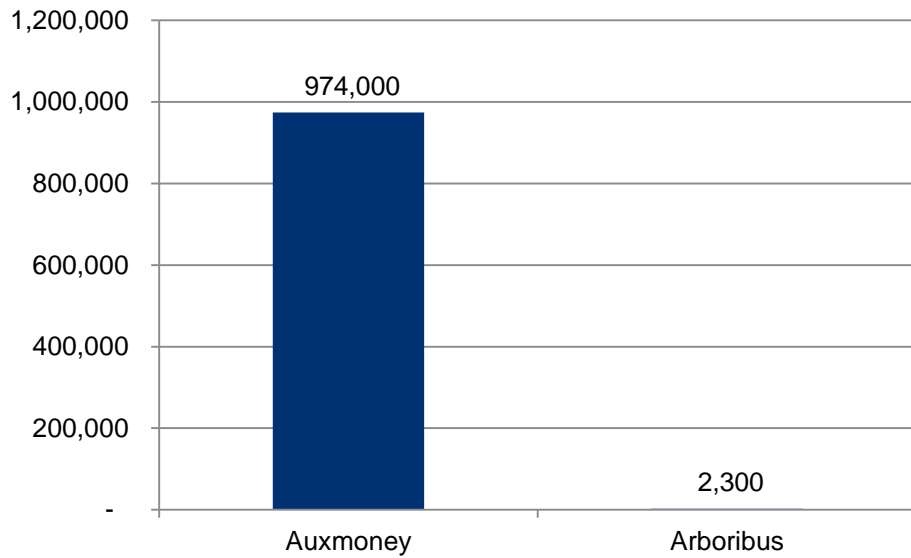
Source: Oxera telephone-based discussions with platforms.

As there are no consistent methodologies for calculating the numbers presented above, care is required in interpreting them. The UK equity crowdfunding platform Seedrs noted that it does not disclose some of the figures as it considered that, in the absence of uniform standards of reporting in the industry, certain other platforms present this data in an inconsistent and misleading fashion.

Comparisons of the platforms in terms of several of the factors listed in Table 4.1 and Table 4.2 are presented in the figures below.¹⁴⁶

¹⁴⁶ Where applicable, GBP was converted to euro using the exchange rate of 1.31 from Wardrop et al. (2015).

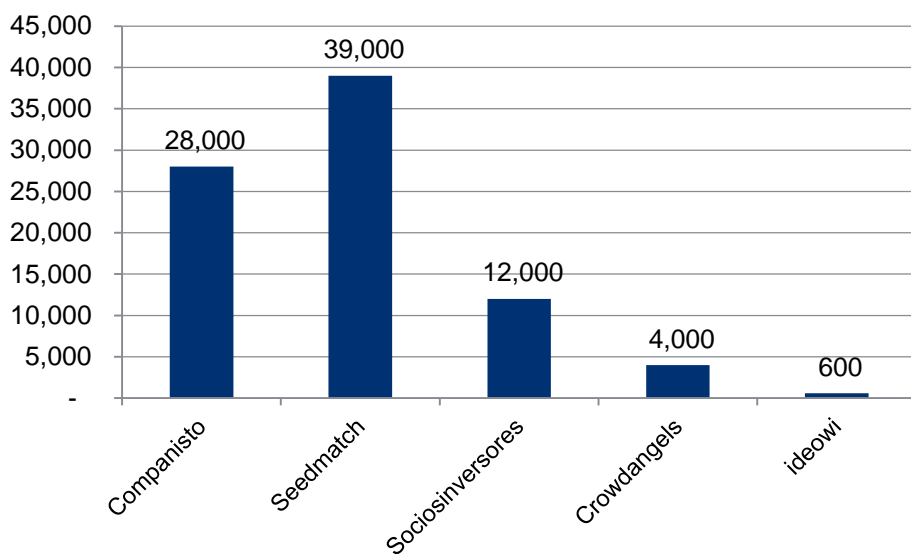
Figure 4.1 Number of registered members, P2P lending platforms



Note: Care should be taken in interpreting the above numbers, which were provided by various platforms and may not be fully comparable.

Source: Oxera analysis based on platform data.

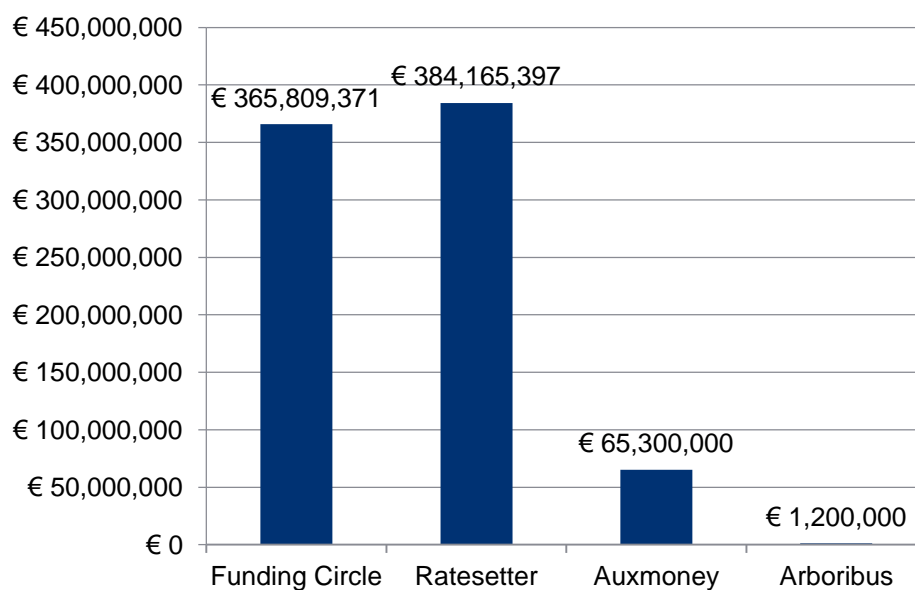
Figure 4.2 Number of registered members, equity crowdfunding platforms



Note: Care should be taken in interpreting the above numbers, which were provided by various platforms and may not be fully comparable.

Source: Oxera analysis based on platform data.

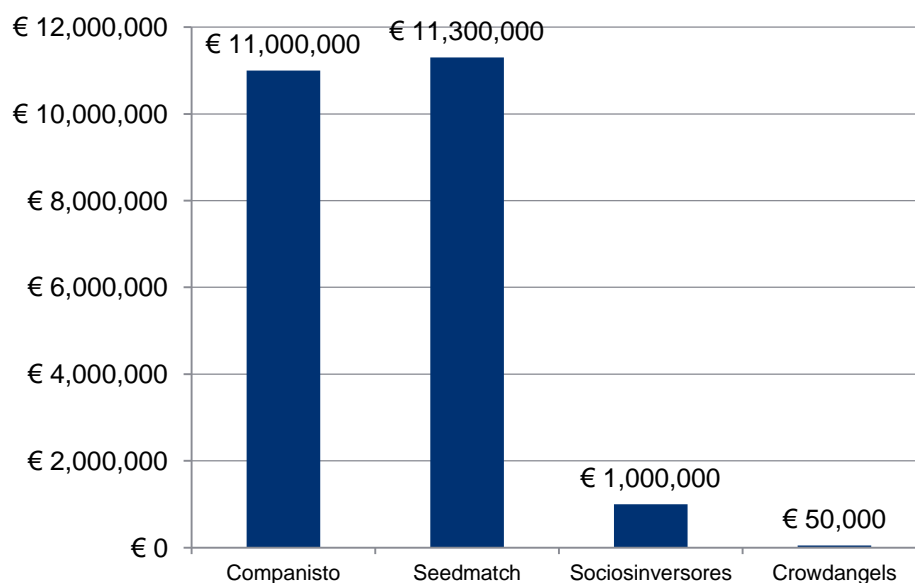
Figure 4.3 2014 volume, P2P lending platforms



Note: Care should be taken in interpreting the above numbers, which were provided by various platforms and may not be fully comparable.

Source: Oxera analysis based on platform data.

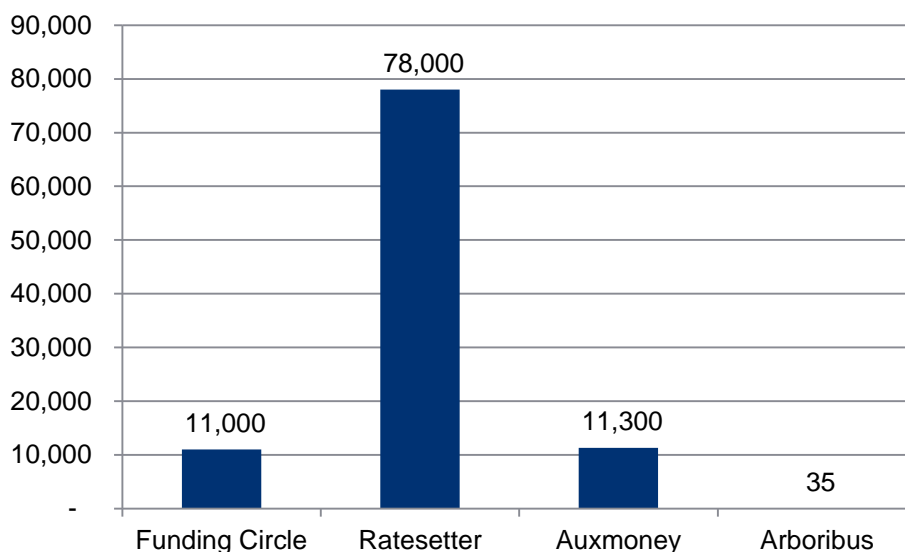
Figure 4.4 2014 volume, equity crowdfunding platforms



Note: Care should be taken in interpreting the above numbers, which were provided by various platforms and may not be fully comparable.

Source: Oxera analysis based on platform data.

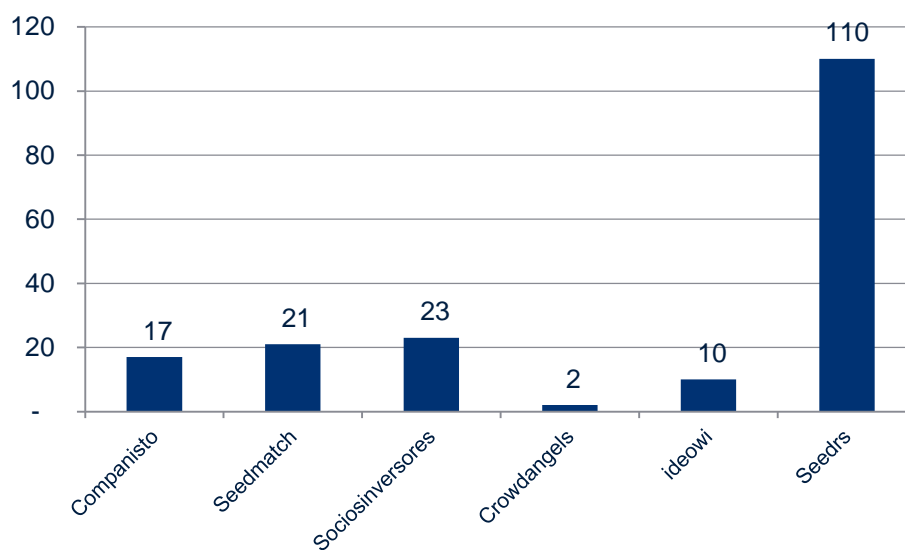
Figure 4.5 2014 number of projects/borrowers, P2P lending platforms



Note: Care should be taken in interpreting the above numbers, which were provided by various platforms and may not be fully comparable.

Source: Oxera analysis based on platform data.

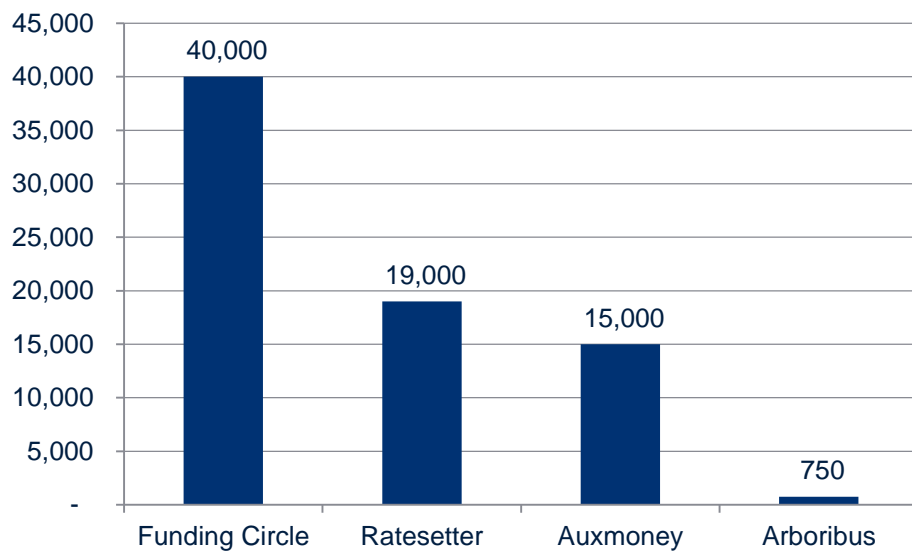
Figure 4.6 2014 number of projects/fundraisers, equity crowdfunding platforms



Note: Care should be taken in interpreting the above numbers, which were provided by various platforms and may not be fully comparable.

Source: Oxera analysis based on platform data.

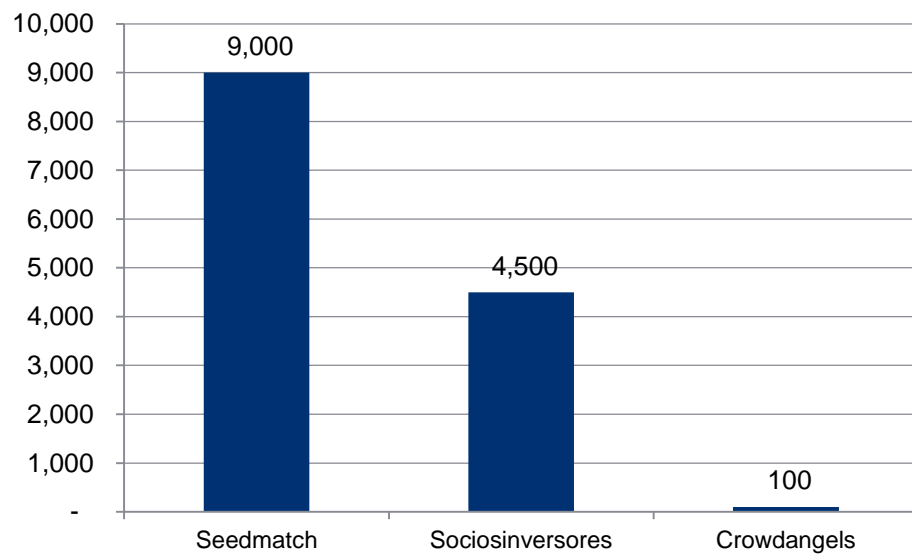
Figure 4.7 Number of active investors, P2P lending platforms



Note: Care should be taken in interpreting the above numbers, which were provided by various platforms and may not be fully comparable.

Source: Oxera analysis based on platform data.

Figure 4.8 Number of active investors, equity crowdfunding platforms



Note: Care should be taken in interpreting the above numbers, which were provided by various platforms and may not be fully comparable.

Source: Oxera analysis based on platform data.

In addition to the above notes, Figures 4.1 to 4.8 provide the following insights.

- There is variation between countries, with clear differences in the size (in particular in terms of investment volumes) of the leading platforms spoken to: (in decreasing order) the UK, Germany, Spain and Poland.

- There is a difference between P2P lending and equity crowdfunding, with the former having higher volumes and more projects than the latter.¹⁴⁷
- The number of subscribers, investors and borrowers/entrepreneurs, annual investment volumes, and the volume and number of projects per investor are generally rising, in many cases rapidly. However, the number of subscribers in 2014 was still relatively low (although varying considerably between platforms), perhaps reflecting only a few percentage points of the proportion of the population who are aware of crowdfunding (as indicated by the consumer research).
- Comparing P2P lending with equity crowdfunding, P2P investors tend to invest more, in a larger number of projects, albeit with a shorter investment timeframe than equity crowdfunding.

4.3 Awareness of crowdfunding

All platforms were asked whether they were able to provide additional information about levels of awareness (for example, drawing on market research findings). Only some provided information, and, with a few exceptions, this tended to be limited, as follows.

- German platform, Auxmoney, noted that it had conducted its own survey and found that 30% of the German population answered 'yes' when asked whether they know Auxmoney. This exceeded Auxmoney's expectations of 3–5%.
- Another German platform mentioned (but did not provide) a study suggesting that 5–10% of the population are aware that crowdfunding deals with start-ups.
- Another German platform did not know the level of awareness, but noted that this was too low for marketing to be directed at the whole population rather than being directed specifically groups.
- A Polish platform mentioned (but did not provide) a study suggesting that only 2% of the Polish population are aware of crowdfunding.
- A Spanish platform mentioned that recent crowdfunding regulation raised awareness of crowdfunding, including through increased press attention.
- A UK platform mentioned that it uses the Nesta (2014) report as a source of information on awareness of crowdfunding.

All platforms indicated that they engage in marketing aimed at investors, including press interviews and articles, online newsletters, PR events, TV advertising, Facebook updates, talks, and meetings with investors. A German platform mentioned having recently set up a professional marketing team. A Spanish platform indicated that, in addition to its regular projects, it has a few large projects where it brings on board large investors, mainly to market the platform to these types of investor. Similarly, a UK platform stated that it has large investors on board, including the government and two institutional

¹⁴⁷ In the case of UK P2P lending platform, Ratesetter, it is not necessary for investors to spread their investments over a large number of projects, given that Ratesetter has a Provision Fund used to reduce risk for investors.

investors. Another UK platform stated that it had not engaged in much paid marketing so far.

4.4 Riskiness of investments

All platforms carry out project screening and project/loan assessments and/or risk analyses, and the vast majority (70–99%¹⁴⁸) of applications are rejected as part of the initial screening. Assessments can include checking business plans and business models (revenues, profits, number of customers, assumptions, financial forecasts), the competence of teams (how well projects are worked out and presented), legal documents and exit plans (equity crowdfunding). Moreover, platforms can use in-house and external risk analysis, screen individuals (e.g. by checking correctness of data, conflicts, blacklists or debts), and check how much money is needed and how money is to be invested.

P2P lending platforms differ greatly from equity crowdfunding platforms. They usually have large numbers of active projects, and investors are encouraged to spread their risk. This is often facilitated by automated portfolio tools. Projects are usually assigned to risk categories, with past rates of return (net of failure rates, which are low) published by the platform. Most platforms have mentioned that this transparency implies that thorough risk assessments and screening are necessary to keep failure rates low, in order to avoid reputational losses.

P2P lending platforms adopt different approaches to risk management. One UK platform, Ratesetter, has set up a 'provision fund' to provide some degree of protection for lenders' capital and interest.¹⁴⁹ More generally, P2P lending platforms tend to help investors in cases of payment issues. This can range from calling and chasing borrowers to setting up a collection company, pursuing legal steps and putting in place collateral (e.g. cars) to secure loans.

Equity crowdfunding platforms typically have only a few projects at a time, limiting the scope for spreading investment risk within the platform. Failure rates are significant, and investors commit to investments for several years. A few platforms noted that they inform investors that the project risk is high. One noted that investors have to actively confirm that they are aware of the risks; another noted that sophisticated investors are more likely to agree on clear terms regarding money being paid back, and that more sophisticated investors tend to focus on exits rather than dividends. Exits are usually covered in project proposals.

Some equity crowdfunding platforms have indicated that they help to set up proposals, with the aim of making them beneficial to both investors and entrepreneurs. One platform mentioned that it checks all proposals for accuracy, making sure that all information is backed up by evidence and presented to investors in a way that is not misleading. It further checks the share structure and monitors the contracts. The platform noted that it faces legal risks if its assessment is not carried out properly. One platform enables a group of investors to discuss projects and participate in the screening process. Another noted that it recommends that investors obtain sufficient shares to force a partial or total buy-out. One platform noted the reputation effects of project failure.

¹⁴⁸ This range is given by the lowest and highest rejection rates cited by the platforms.

¹⁴⁹ In this case, the only risk of investors incurring losses is if the fund runs out, although, even in this case, this would be spread across investors and would probably lead only to a lower interest rate being paid to investors. The fund's coverage ratio is published on the platform's website: <https://www.ratesetter.com/lend/provisionfund>.

Both UK P2P lending platforms interviewed currently have a secondary market allowing investors to exit investments early.¹⁵⁰ Another (German) platform has indicated its intention of setting up a secondary market in future, but noted that doing so is complicated.

For most platforms, it appears that investors get their money back in the case of unsuccessful fundraisings (where 'success' is defined by means of a predetermined funding threshold). One equity crowdfunding platform noted, however, that it merely advises investors to pledge before committing, so that they can pull out if the fundraising target is not reached, as the inability to reach the target amount can lead to significant project risk.

Overall, as platforms become more developed there appears to be a trend to addressing many of the challenges of crowdfunding (as discussed in section 2).

- The more established a platform is, the more projects it will have, allowing for better risk spreading and encouraging more sophisticated initial screening. In the case of P2P lending, as platforms grow they begin to set up automated portfolio-building tools in order to improve risk spreading (this can be seen with the German and UK platforms interviewed).
- The more established a platform is, the more likely it is to have developed a reputation for trustworthiness if it has been successful at screening out low-quality projects, which in turn increases the average quality of projects attracted to the platform. This can help to address concern about the reliability of crowdfunding platforms.
- The more established a platform is, the more past performance data it will have at its disposal. This, alongside experience, allows platforms to improve their risk assessment abilities, and reduce information asymmetries. That said, none of the platforms has yet experienced a full economic cycle, and performance data is therefore still inherently limited.
- As (P2P lending) platforms grow in size, they may consider setting up a secondary market. The highly developed UK P2P lending platforms interviewed have already done so, and another (German) P2P lending platform is currently considering this. Secondary markets allow investors to exit investments, thus improving liquidity.
- One highly developed (UK) P2P lending platform has set up a fund to protect investors (to the extent of the size of the fund), reducing (but not eliminating) project risk.

4.5 Complaints

The discussions also considered complaints, which can provide an indication of the investor experience and highlight areas of potential concern. At this early stage, information on complaints is fairly limited, and many of the reported

¹⁵⁰ On its website, Ratesetter states: 'You can access your money that is on loan at short notice using the "Sellout" function. Sellout will allow you to sell your contracts provided there is a new lender available to match your existing loans...RateSetter will automatically identify the amount of loans to be sold to achieve the amount you would like to access. It will show the calculation of the interest to be paid and any fees due.' See the answer to the FAQ, 'Can I access my money on loan in an emergency?' on <https://www.ratesetter.com/lend/faq>. Similarly, Funding Circle, in its 'Welcome pack for investors' mentions the possibility of selling loan parts 'before the end of the loan term'. See <https://www.fundingcircle.com/information-packs/investor-information.pdf>.

complaints relate to website technology. In particular, platforms mentioned three types of complaint.

- Complaints of a technical nature—these were the type most frequently mentioned by the platforms, and include complaints about spelling errors in messages; having an Apple app but no Android app; misunderstandings about the payment process; or the old website being better than the new one when there are updates. One platform mentioned that it keeps complaint statistics and that 97% of complaints (which are mostly technical) are resolved within 24 hours.
- A few platforms mentioned complaints about communication. One noted a case of project failure affecting over 400 investors, where all complaints were about the start-up taking two weeks to answer questions (as opposed to complaints about the failure itself). To address this, the platform put in place a quick response requirement for start-ups. Another platform indicated that it tries to get in touch with the start-up if the start-up fails to respond to a potential investor. If there is no adequate response from the start-up, it is removed from the platform and apologies are sent to the potential investor.
- One German P2P lending platform mentioned complaints from investors that were not spreading risk and were losing money. This was listed as one reason why the platform reduced the minimum investment amount per project to facilitate risk spreading. Another platform mentioned a general customer concern about whether the platform mitigates risk effectively. One German equity crowdfunding platform noted that investors complained about the risk not having been kept sufficiently informed in one of eight instances of project failure since the platform became operational.¹⁵¹ One Polish platform mentioned that (in addition to concerns regarding the online payment system) there had been concerns about getting money back.
- One UK platform (Funding Circle) provided a website where investors and borrowers can leave ratings and comments, and noted that it was rated the third-best company in financial services.¹⁵²

At this early stage of the development of crowdfunding, information on the nature of complaints is limited. One Polish and one Spanish platform have indicated that they have not yet had any project failure and have not yet received any complaints from investors. One of these indicated that it had close relationships with its clients, and that it does receive suggestions regarding the platform's functionality. A major UK platform noted that it had not received any formal complaints until six months earlier.

4.6 Information from platform websites

A number of the platforms indicated that they publish data on their websites. In some cases, the data provides considerable detail on investor activities, returns, and/or project risk.

The following is a selection of items made available by a selection of platforms on their websites. This is for illustrational purposes and is not intended to be exhaustive research of platform websites. The data does, however, provide insights into the key information used by investors. Not all platforms provide the

¹⁵¹ This led to a decrease in the investment volume.

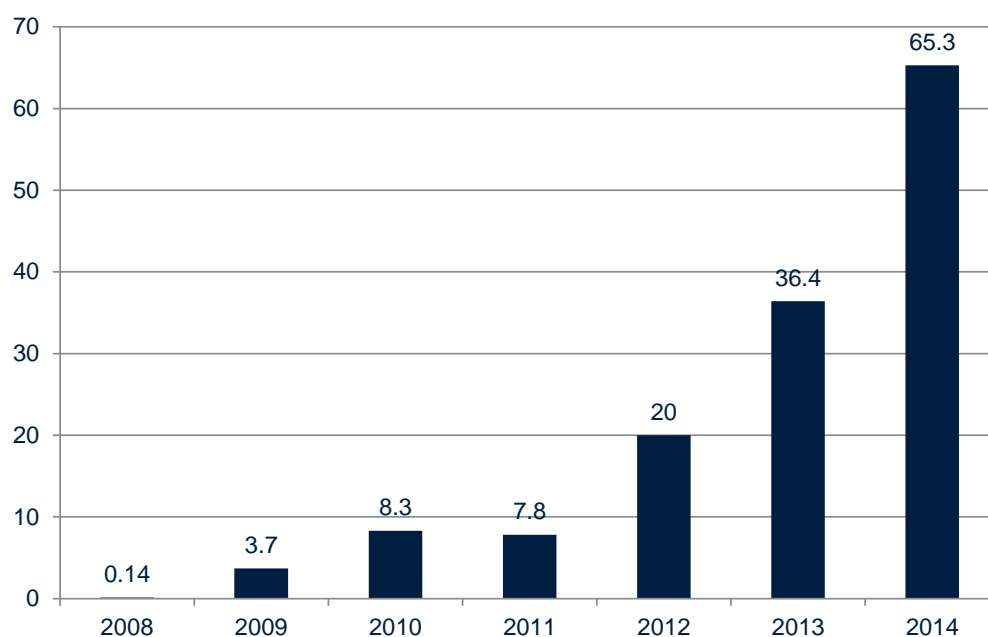
¹⁵² The website provided is <https://www.trustpilot.co.uk/review/fundingcircle.com?page=5>.

same type or level of detail of data, and a number of platforms supply additional data to registered members.

Auxmoney (Germany)

The following figure from the German P2P lending platform, Auxmoney, illustrates the platform's rapid growth in recent years.

Figure 4.9 Auxmoney's total lending volume (€m per year)



Source: <http://auxmoney-presse.de/grafiken-und-screenshots/>.

For marketing purposes, Auxmoney also publishes the performances of its top 50 investors, as shown in the table below.

Table 4.3 Auxmoney top 50 investors

Ranking	Username	Return (annual)	Total investment	Number of projects	Average investment per project
1	****es	25.57%	€44,000	216	€203.70
2	****de	25.10%	€1,725	69	€25.00
3	****si	23.64%	€1,800	62	€29.03
4	****6P	23.24%	€4,125	126	€32.74
5	****ir	23.19%	€9,600	250	€38.40
6	****pa	22.71%	€22,000	195	€112.82
7	****40	22.68%	€1,600	64	€25.00
8	****63	22.54%	€4,150	163	€25.46
9	****na	22.40%	€3,075	120	€25.63
10	****en	22.36%	€50,200	497	€101.01
11	****ai	22.24%	€8,600	71	€121.13
12	****y2	22.09%	€5,325	172	€30.96
13	****er	21.94%	€6,575	229	€28.71
14	****us	21.83%	€4,950	159	€31.13
15	****de	21.77%	€2,650	106	€25.00

Ranking	Username	Return (annual)	Total investment	Number of projects	Average investment per project
16	****er	21.08%	€4,800	192	€25.00
17	****el	21.02%	€11,675	368	€31.73
18	****er	21.00%	€2,450	88	€27.84
19	****y1	20.98%	€7,250	194	€37.37
20	****di	20.88%	€2,200	88	€25.00
21	****hm	20.82%	€3,775	111	€34.01
22	****tt	20.69%	€2,125	82	€25.91
23	****ey	20.65%	€16,425	576	€28.52
24	****68	20.64%	€1,825	73	€25.00
25	****39	20.45%	€1,500	60	€25.00
26	****ng	20.40%	€2,800	112	€25.00
27	****KL	20.13%	€12,875	345	€37.32
28	****ar	20.07%	€13,775	436	€31.59
29	****xa	20.01%	€13,475	238	€56.62
30	****11	19.96%	€5,275	143	€36.89
31	****na	19.95%	€2,675	107	€25.00
32	****in	19.93%	€12,000	480	€25.00
33	****ba	19.87%	€2,675	107	€25.00
34	****No	19.84%	€7,925	196	€40.43
35	****er	19.73%	€10,300	412	€25.00
36	****_K	19.66%	€17,675	413	€42.80
37	****ra	19.35%	€3,650	146	€25.00
38	****ri	19.20%	€8,650	249	€34.74
39	****ut	19.19%	€2,500	100	€25.00
40	****at	19.18%	€77,400	964	€80.29
41	****bo	19.00%	€4,000	123	€32.52
42	****hn	19.00%	€4,925	166	€29.67
43	****nd	18.95%	€16,500	292	€56.51
44	****ee	18.93%	€8,375	142	€58.98
45	****65	18.88%	€4,050	127	€31.89
46	****07	18.85%	€9,725	160	€60.78
47	****or	18.82%	€10,175	283	€35.95
48	****rs	18.82%	€2,425	97	€25.00
49	****74	18.78%	€13,650	450	€30.33
50	****22	18.74%	€2,725	109	€25.00
Average		20.74%	€9,892	215	€41.27

Source: <https://www.auxmoney.com/infos/statistiken> and Oxera analysis.

The average top 50 investor at Auxmoney earned 20.74% on a total portfolio of €9,892, consisting of 215 projects. This shows that successful investors are capable of earning high returns while spreading their risk over a large number of projects. Investor returns can exceed the maximum nominal interest rates (set at 15.25%) as a result of 'Vorlaufzinsen', which Oxera understands to be a form of early-repayment penalty.

The above numbers are for the top investors, which make up the tail end of the distribution of returns. Table 4.4 provides information about average returns.

Table 4.4 Auxmoney nominal interest rates and historical returns

Score class	Nominal interest rates (p.a.)	Historical returns before fees
AAA	2.90–3.90%	2.30%
AA	5.50–8.30%	4.70%
A	6.60–9.80%	5.10%
B	8.60–11.80%	5.60%
C	10.60–13.80%	6.40%
D-E	11.15–15.25%	7.30%
X ¹	Maximum of 15.25%	-

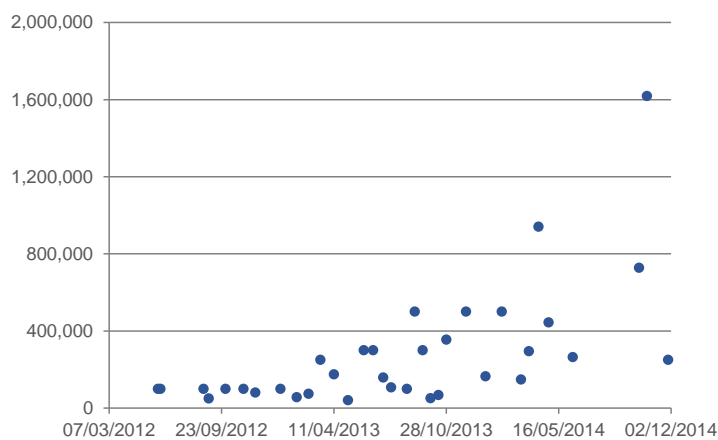
Note: ¹ The historical returns for score class X were not provided. Score class X is not included in the automatic 'Portfolio Builder' and investors are advised that projects in this category should be checked manually. While the data and calculations behind these figures were not provided, the difference between the nominal interest rates and the historical returns before fees reflects the rate of bad debt. For example, in score class AAA, returns in the absence of bad debt would be between 2.90% and 3.90%. Bad debt then reduces this to an actual return of 2.30%.

Source: <https://www.auxmoney.com/infos/rendite-und-gebuehren>.

Companisto

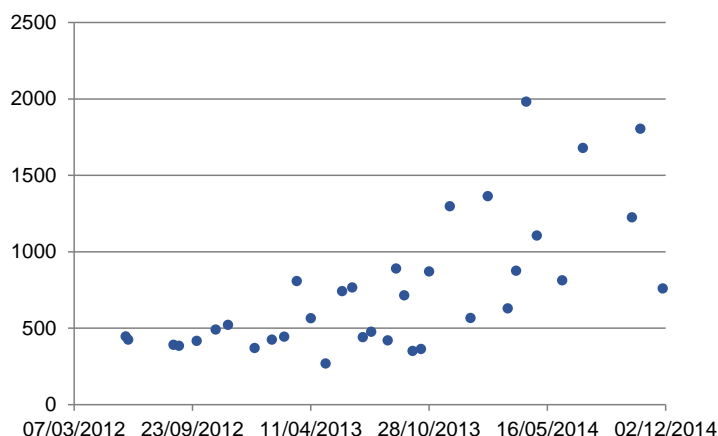
German equity crowdfunding platform, Companisto, lists all its past (and ongoing) projects on its website, including the start date of the crowdfunding, the amount of funding raised, and the number of investors. This is illustrated in the figures below.

Figure 4.10 Companisto project volume (€)



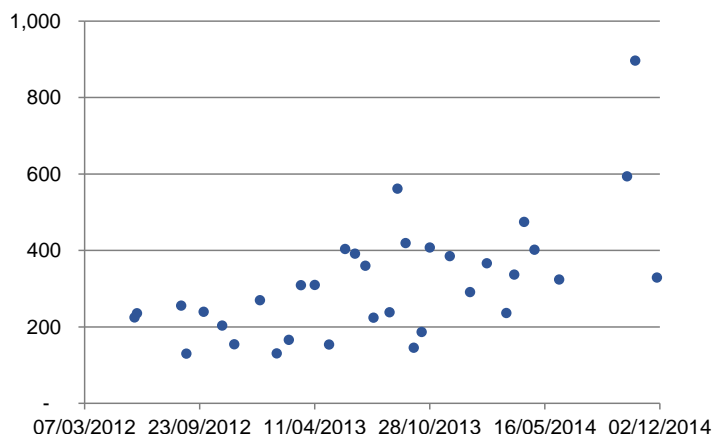
Source: Oxera analysis using data from <https://www.companisto.com/en/view-all-startups>.

Figure 4.11 Companisto number of investors for each project



Source: Oxera analysis using data from <https://www.companisto.com/en/view-all-startups>.

Figure 4.12 Companisto average investment per investor for each project



Source: Oxera analysis using data from <https://www.companisto.com/en/view-all-startups>.

The figures above show the growth in Companisto's projects by all three metrics considered: project volume, number of investors per project, and average investment per project and investor.

Seedmatch

German equity crowdfunding platform, Seedmatch, notes on its website that it provides its registered users with detailed informations such as business plans including financial information, a business portrait videos, individualised investment offers and the corresponding sample contract.

Investors can invest individually or as part of investment groups.

Returns are earned in the form of performance-based dividends, the possibility of exiting the investment after a specified number of years (usually five) and earning on a performance basis¹⁵³ and the possibility of an exit (e.g. in the form of an IPO).

¹⁵³ An example of this is provided on the website: an investor invests €2,500 to get a 0.1% share in a business and agrees to a revenue 'multiple' of 1 and an EBIT multiple of 6 as well as an investment period of

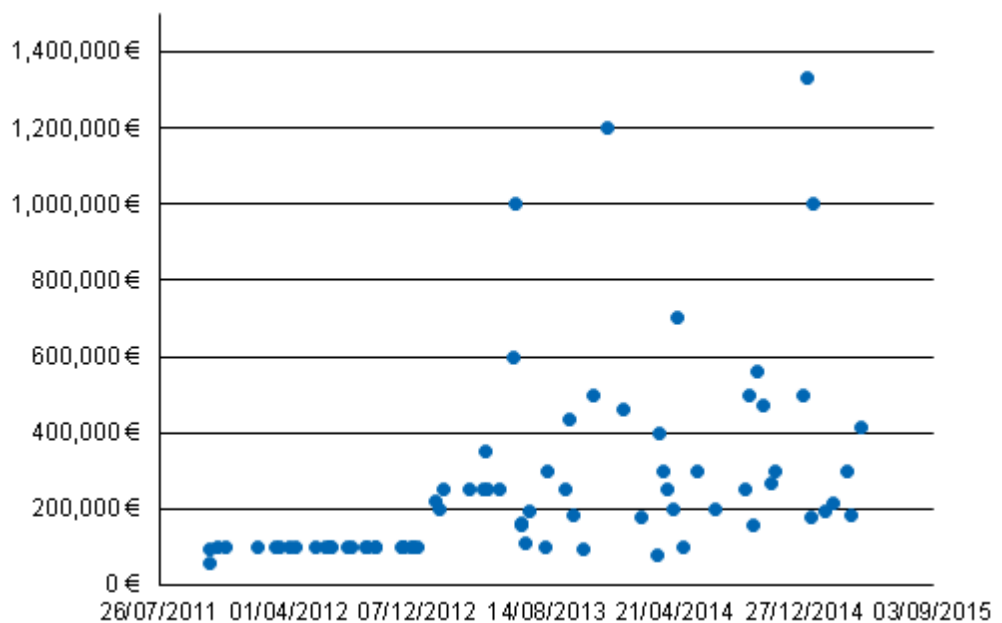
Seedmatch has 79 completed projects and four ongoing projects. Five projects have failed so far.

It sets out the following risks/risk-related aspects on its website:

- total loss of invested capital;
- risk management via diversification;
- the need for investors to carry out their own assessments;
- the need for investors to carefully check the investment contract, which is standardised, but with individualised adjustments;
- risk of share dilution;
- risk of illiquidity.

The following graphs summarise the data made available on Seedmatch's website regarding its past crowdfunding projects:

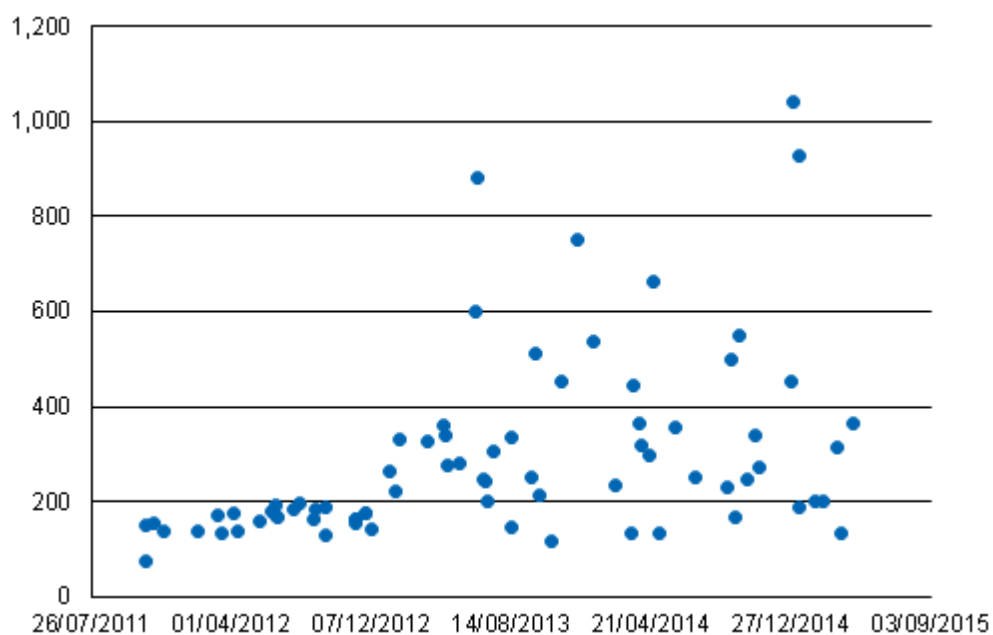
Figure 4.13 Project volume



Source: <https://www.seedmatch.de/startups>.

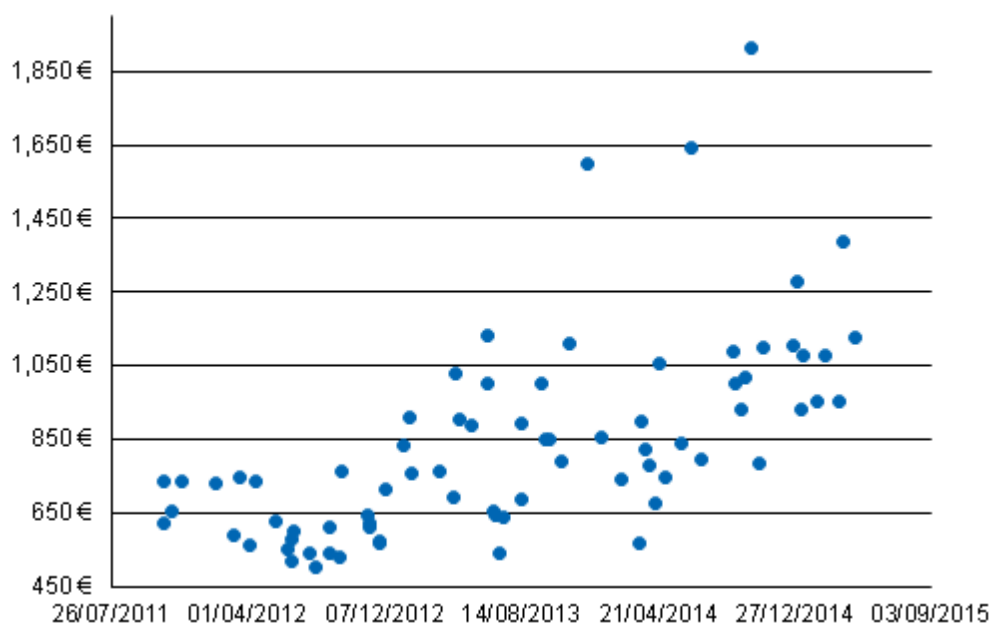
5 years. After 5 years the company earns revenues of €7.5m and has an EBIT of €1.1m. Multiplying these by their corresponding multiples gives €7.5m and €6m. The higher one is taken and the investor is paid its share of this number: €7.5m times 0.1%, which equals €7,500. This corresponds to a return of 200% over the 5-year investment period.

Figure 4.14 Number of investors per project



Source: <https://www.seedmatch.de/startups>.

Figure 4.15 Size of investment per investor per project



Source: Oxera analysis using data from <https://www.seedmatch.de/startups>.

Arboribus

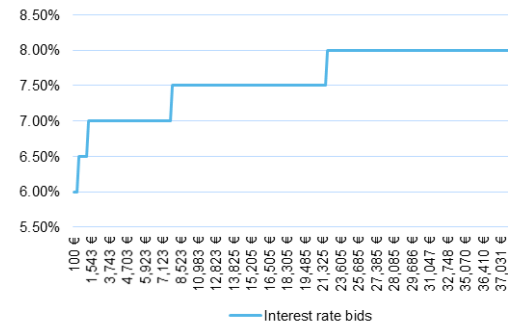
Spanish P2P lending platform, Arboribus, lists the complete bidding data for each of its ongoing projects. At the time of writing this report, this includes four projects,¹⁵⁴ for which the volumes of financing were €60,000, €20,000, €50,000

¹⁵⁴Financiación para circulante', 'Financiación para expansión de negocio', 'Financiación para compra de maquinaria (2º préstamo)', and 'Financiación para Importación'.

and €20,000 respectively. For each project, investors bid interest rates (in 0.5% increments) and investment volumes. Using this data, Oxera has constructed the supply curves below.

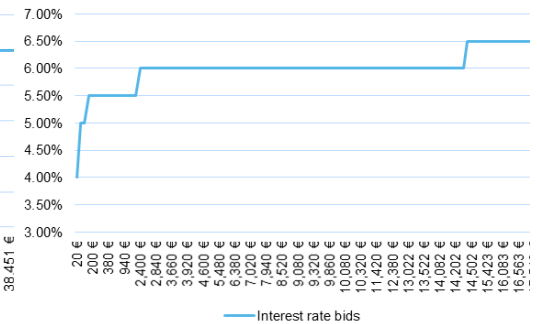
Figure 4.16 Arboribus lending supply curves

Financing for working capital



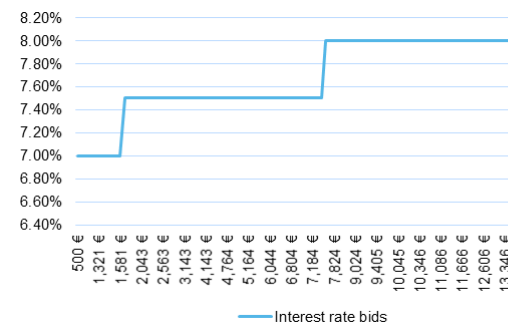
Calculated on the basis of 307 bids.

Financing for business expansion



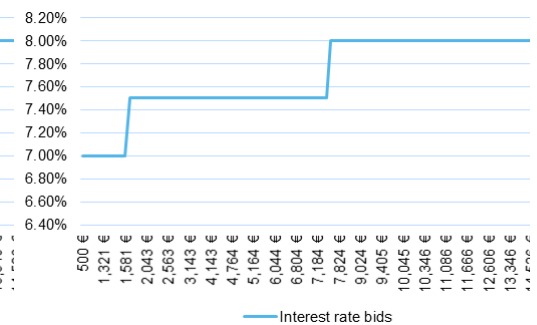
Calculated on the basis of 120 bids.

Financing for machinery purchase (2nd loan)



Calculated on the basis of 121 bids.

Financing for imports



Calculated on the basis of 109 bids.

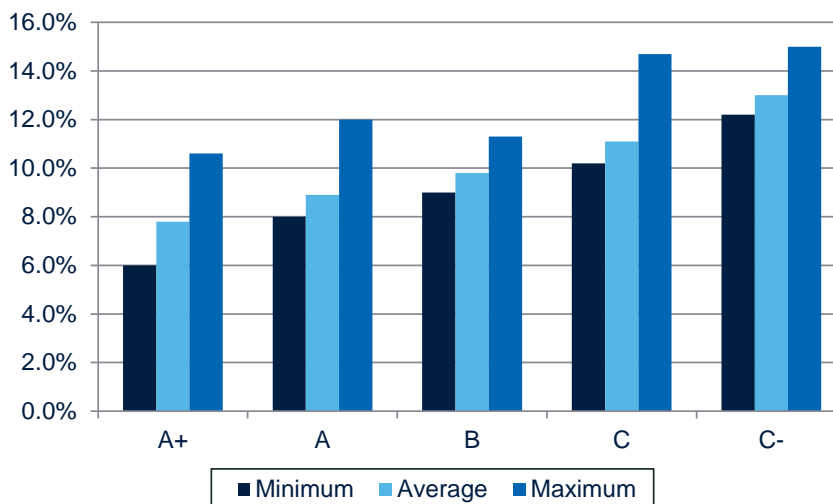
Source: Oxera analysis using data from <https://www.arboribus.com/web/subastas.html>.

Once the total volume bid exceeds the total volume sought, the borrower can choose the lowest bids up to the total volume sought.

Funding Circle

UK P2P lending platform, Funding Circle, provides a number of items on its website. The gross interest earned on the 100 most recent loans for each of the risk bands offered is shown in Figure 4.17.

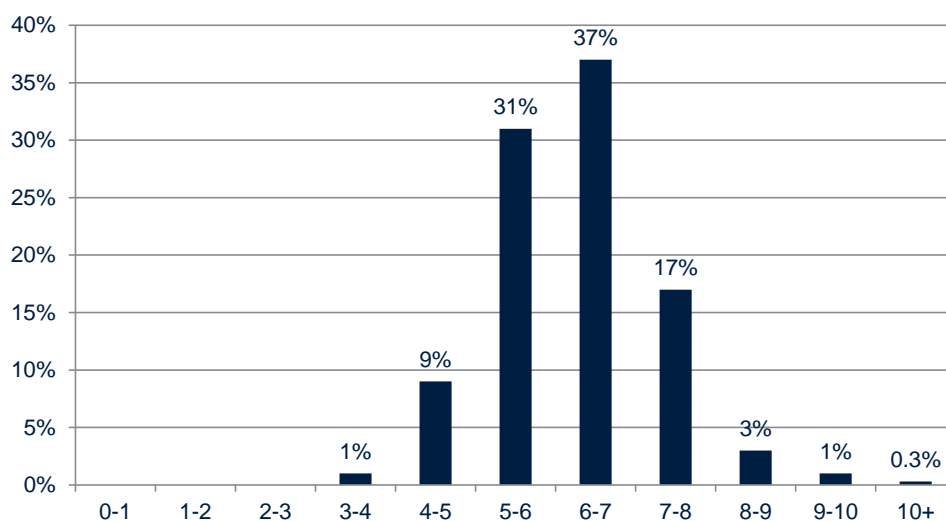
Figure 4.17 Interest earned by risk band before fees and bad debts for the last 100 loans



Source: <https://www.fundingcircle.com/statistics>.

Funding Circle also illustrates the effects of risk spreading in terms of past performance data, as shown in the figures below.¹⁵⁵

Figure 4.18 Distribution of net returns for investors who have lent to at least 100 businesses with a maximum exposure of 1%



Note: Chart presents the annual nominal percentage return (on the x-axis). The return is calculated after fees and bad debt but before taxes.

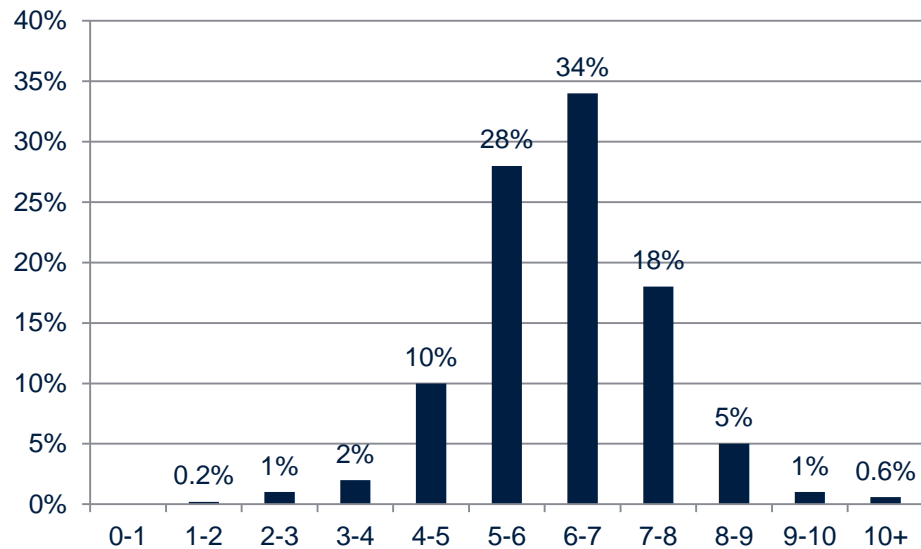
¹⁵⁵ Funding Circle calculates the average return r intrinsically using the following formula: $\sum_{n=0}^N \frac{C_n}{(1+r)^{365n}} +$

$\frac{I_N + P_N}{(1+r)^{365N}} = 0$, where C_n are cash flows, I_N is the interest and P_N is the principal.

On its website, Funding Circle notes that '[t]his return expression is just one way to show the returns investors have made through Funding Circle. We think it is the most useful and accurate way to measure investment performance because it takes into account both our fees and any bad debts but as with many calculations it has some limitations, including: It is before tax: as different investors have different tax rates and some earnings are taxed differently ...[.] It does not include any amounts not lent to businesses[.] It does not include the end-to-end cycle of loan repayments[.] Past returns are not necessarily a guide to future returns'. See <https://www.fundingcircle.com/investors/calculating-net-return>.

Source: <https://www.fundingcircle.com/statistics>.

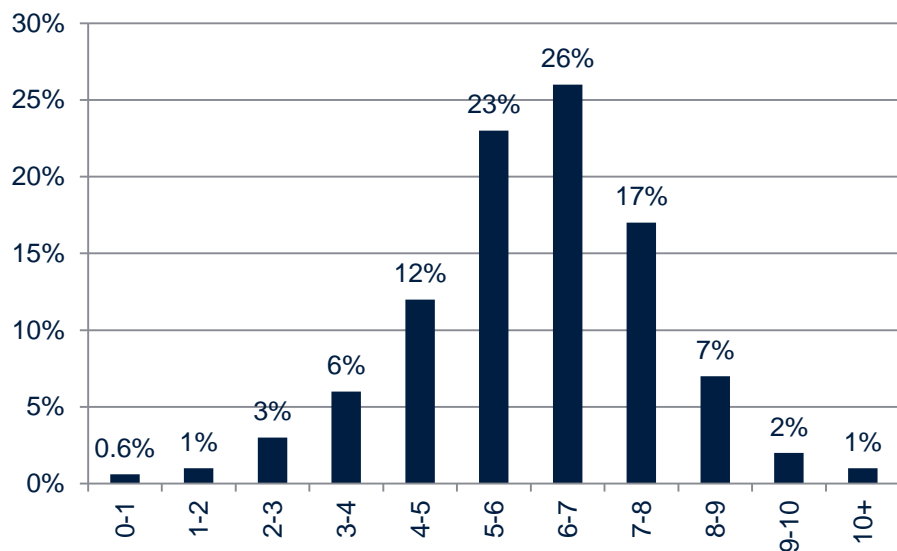
Figure 4.19 Distribution of net returns for investors who have lent to at least 50 businesses with a maximum exposure of 1%



Note: Chart presents the annual nominal percentage return (on the x-axis). The return is calculated after fees and bad debt but before taxes.

Source: <https://www.fundingcircle.com/statistics>.

Figure 4.20 Distribution of net returns for investors who have lent to at least 10 businesses with a maximum exposure of 1%



Note: Chart presents the annual nominal percentage return (on the x-axis). The return is calculated after fees and bad debt but before taxes.

Source: <https://www.fundingcircle.com/statistics>.

These figures illustrate that spreading investments over a larger number of projects reduces the risk. In particular, when spreading an investment over ten businesses, the risk of earning less than 3% lies at above 5%, whereas, when

spreading an investment over 100 businesses, the risk of earning less than 3% is below 1%.

In addition to the above, which is based on past performance data, Funding Circle provides comparisons of its past actual and estimated bad debt, including by risk band (see Table 4.5) and over time (Table 4.6). It also provides the formulae used to calculate actual and estimated annual return, based on actual and estimated bad debt rates.¹⁵⁶ Its website notes that '[r]egistered lenders can download the entire Funding Circle loan book'.

Table 4.5 Funding Circle bad debt

	A+	A	B	C	C-	Total
Current bad debt	0.2%	1.1%	2.0%	2.5%	2.5%	1.5%
Estimated lifetime bad debt	1.2%	3.1%	4.8%	6.9%	10.9%	4.3%

Note: The current bad debt is the percentage of all Funding Circle loans in default that have not been repaid.

Source: <https://www.fundingcircle.com/statistics>.

Table 4.6 Funding Circle bad debt performance over time

	2010	2011	2012	2013	2014	2015
Estimated lifetime bad debt rate	3.2%	3.3%	4.2%	4.5%	4.6%	4.2%

Note: The rates are as a percentage of the amount lent in a calendar year

Source: <https://www.fundingcircle.com/statistics>.

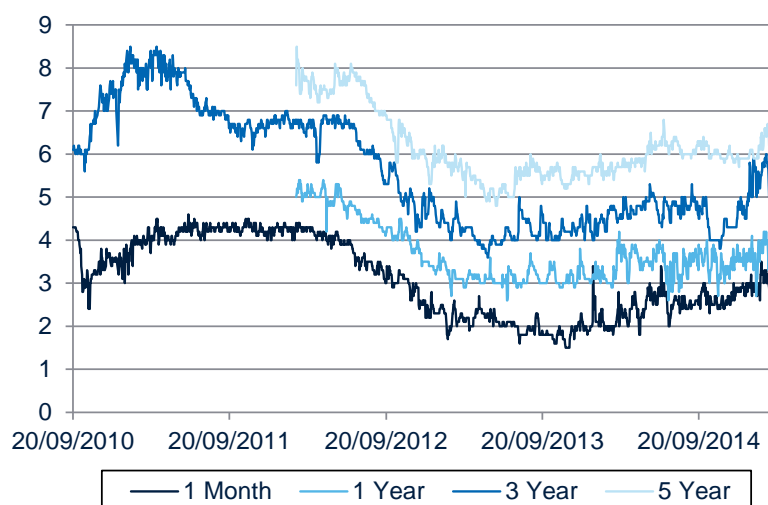
Ratesetter

UK P2P lending platform, Ratesetter, provides the historical rates of return for its products on its website. It has a provision fund that covers defaults, thus reducing the risk for investors unless the fund runs out. As a result, Ratesetter offers products on a maturity rather than a risk basis.

Figure 4.21 shows Ratesetter's historical lending rates. Note that it expanded its product range in 2012.

¹⁵⁶ See <https://www.fundingcircle.com/investors/past-performance-return>.

Figure 4.21 Ratesetter lending rates (i.e. the return to investors)



Note: Due to the provision fund, the above rates are only subject to the risk of the fund running out.

Source: <https://www.ratesetter.com/lend/statistics>.

On its website, Ratesetter notes that the provision fund contains £13,158,736, which corresponds to a coverage ratio compared with claims of 168% and an 'Independent FE risk score' of 1.0 (where 0 is the score for cash and 100 is the score for FTSE 100).¹⁵⁷

Ratesetter has also carried out 'scenario testing' for its provision fund, claiming that default rates at the level of those seen during the recent economic crisis are required to deplete the fund.

Ratesetter provides information on what would happen if the provision fund were depleted:

What happens if the Provision Fund is depleted?

Firstly, we'd declare a Resolution Event. All outstanding loan contracts would be automatically assigned to the Provision Fund, and all loan repayments collected by the Provision Fund on behalf of our lenders.

Pooled repayments would then be shared out (pro rata) to lenders to ensure diversification of default risk.

No single lender would be exposed to any individual default.

Some people think that if the Provision Fund failed, lenders would lose all their money. Not so. The Resolution Event would work to give lenders a return of (say) £0.95 on every £1.00 lent.¹⁵⁸

and in the case of platform failure:

What happens if RateSetter ceases trading?

Thankfully, it's highly unlikely. But if the worst happened, there's a Fully Funded Run-Off plan in place, as required by regulation.

Loan repayments and the Provision Fund would continue to operate as before. During the winding up process any fees owed to RateSetter would be used for the

¹⁵⁷ See <https://www.ratesetter.com/lend/provisionfund>.

¹⁵⁸ See <https://www.ratesetter.com/lend/provisionfund>.

run-off process. That would ensure contracts with borrowers are fulfilled and lenders get their money back.¹⁵⁹

and on cybersecurity:

'Is my data safe with RateSetter?'

Overview of RateSetter's data security approach

We use a 4-tier policy to deter unwanted visitors and protect your data:

1. In-built security with Microsoft's .NET framework

The RateSetter website is built using .NET, a Microsoft development framework that's responsible for 15.3% of the internet's websites, including the NHS and Bank of America.

ASP.NET works with .NET and Microsoft Internet Information Services (IIS) to help provide Web application security.

2. Actively maintained server firewalls

At RateSetter, we continually maintain our firewalls with batch updates and manual reconfiguration to better shield our networks from unwanted traffic.

3. Advanced database encryption

Our database has built-in data encryption for passwords and system procedures.

4. Optional 2-Step Verification

In 2013, we introduced a 2-Step Verification process to increase security when customers log-in to their accounts.

We recommend it, because it can keep the bad guys out, even if they get your password.¹⁶⁰

Seedrs

UK equity crowdfunding platform, Seedrs, provides information on a selection of ten past projects. This does not include its six ongoing projects.

Table 4.7 Selection of past projects

Project volume	Number of investors	Investment per investor	Equity offered	Days to fund	Country
£58,670	138	£425	5.82%		UK
£3,953,818	1,462	£2,704	14.11%	6	UK
£352,270	226	£1,559	26.05%	2	Belgium
£500,680	408	£1,227	15.00%	4	UK
£300,008	197	£1,523	23.10%	2	UK
£120,000	25	£4,800	28.57%	2	UK
£156,573	196	£799	15.41%	53	UK
£30,000	61	£492	14.00%	16	UK
£1,000,012	364	£2,747	22.56%	42	UK
£80,000	98	£816	40%	28	UK

Source: Oxera analysis on the basis of data from <http://learn.seedrs.com/case-studies/>.

For these projects the average project volume is £655,203, the average number of investors is 318, the average investment per investor per project is £2,064, the average equity is 20.46% and the average funding took 17 days.

Seedrs markets on its website the following features, among others.

¹⁵⁹ See <https://www.ratesetter.com/lend/provisionfund>.

¹⁶⁰ See <https://www.ratesetter.com/lend/provisionfund>.

- The depth of its investor network, which includes angel investors and venture capitalists:

Our target investors include active professionals, business owners and managers, academics and similar types of people who don't have both the capital and time required to be a traditional angel investor. We also have many angel investors and venture capitalists using the platform to source investment opportunities.

- Professional-grade investor protection.
- The cross-border aspect of its business: active investors and entrepreneurs from 48 countries and multi-currency service. Moreover Seedrs recently entered the US market through its acquisition of the platform, Junction Investments.
- Investor relations throughout the investment lifecycle.¹⁶¹

It also highlights the following risks.

- Loss of capital due to project failure.
- Illiquidity due to the low likelihood of there being a secondary market.
- Rarity of dividends and thus low returns for several years.
- Share dilution as a result of future capital requirements.
- The need for a diversified portfolio.

Investor experience

Seedrs further notes that it is 'targeted solely at investors who are sufficiently sophisticated to understand these risks and make their own investment decisions'. Moreover, to be authorised to invest through Seedrs, potential investors need to fill out a questionnaire or self-certify as 'high net worth individual/institution' or 'sophisticated investor'. Seedrs notes:

This process is intended to show us that you have the judgment and understanding to appreciate the risks involved in investing in private companies.

...

Seedrs was established to allow people who understand the risks of investing, but don't have both vast fortunes and tremendous amounts of time to build a diversified portfolio of investments in early-stage businesses.¹⁶²

¹⁶¹ In response to the frequently asked question 'Can investors stay involved with businesses after they've invested?', Seedrs states: 'Absolutely. In addition to watching the business's progress through the Portfolio section of the website, investors are welcome to reach out to the business to offer support, advice or mentorship at any time. One of the biggest benefits to a business using Seedrs to raise capital is that it can tap the expertise and wisdom of its large base of investors.'

¹⁶² In response to the frequently asked question, 'Why do people need Seedrs to be able to invest?', Seedrs notes: 'Unless they're extremely wealthy and have lots of time on their hands, it is very difficult for most people to invest in early-stage businesses the traditional way as a business angel. Due to transaction costs and other considerations, most angels find they need to invest at least £10,000 per business; and because this is a high-risk type of investing, many angels try to invest in at least 10 and often more. This means that to be an angel, people generally need to have £100,000 or more to allocate just to businesses (which means that they need to have far more than £100,000 in order to build a diversified portfolio that includes safer assets), and they also need to have the time to find, negotiate and execute a large number of offline investments. Investors with that much money and time available might not need Seedrs (although we can still provide them with access to investment opportunities they might not otherwise find, and more efficient investing). For everyone else, though, Seedrs provides the chance to invest small amounts of money through a streamlined, online process, which means that we're the one way to participate in the benefits of investing in early-stage businesses without having both a fortune and tons of time to spare.'

Due diligence and investor protection

Seedrs notes that it conducts 'campaign due diligence' by checking that project descriptions are clear and not misleading. Moreover, subsequent to the fundraising, Seedrs makes sure that 'the company is properly formed and that the investment is properly structured'. As part of 'Investor protections', Seedrs notes that it acts as a nominee to ensure that investors are treated equally. Generally contracts include tag-along rights (investors' rights to sell their equity if founders sell theirs) and anti-dilution rights. Shareholder votes tend to play a lesser role than the contract owing to the fact that shares are usually small.

Alternative campaign types

Through Seedrs it is possible to invest in 'Fund Campaigns', with a fund investing in a number of projects. Moreover, it offers 'Convertible Campaigns', where funders from early investment rounds receive discounts not available to funders from subsequent rounds.

Fee structure and platform incentives

We only charge a single, straightforward fee of 7.5% on any profit that you make on an investment held by us as nominee. This is all you will ever pay us, and you only pay the fee if you make a profit. This means that our incentive is to see you make money on your investments. We've completely aligned our success with yours.

Fraud

Frequently asked question: 'What's to stop entrepreneurs from running away with the money?'

Us. We have a number of measures in place – including conducting upfront checks, holding entrepreneurs and businesses accountable for the information they have provided us, and, if necessary taking legal action against the entrepreneurs and business for non-compliance with the subscription agreement – to ensure that the investment monies are used for genuine business purposes. Entrepreneurs may make bad business choices, and that's a risk investors bear, but if any entrepreneur tries to act dishonestly we will investigate and, if appropriate, pursue legal action against them. That said, we believe that 99.9% of entrepreneurs are well-intentioned people trying to create great businesses, and we expect only to have to use these measures on rare occasion.

The platforms illustrated above provide relatively detailed information about the projects and investments on their platforms. However, the extent to which investors use this data is not clear.

4.7 Summary of results

The discussions with crowdfunding platforms and the information provided on their websites has provided a number of insights for this study.

- In terms of platform size, the leading platforms in the UK are substantially larger than the leading platforms in other countries considered. The UK is followed by Germany, then Spain and then Poland. There is also a significant difference between P2P lending and equity crowdfunding in all the countries, with the former having much larger platforms in terms of volume than the latter.
- Platforms across all the countries tend to be growing rapidly in terms of all indicators of size considered, including volumes, and numbers of subscribers,

investors and borrowers/entrepreneurs. However, the number of subscribers in 2014 was still relatively low (although varying considerably between platforms), perhaps reflecting only a few percentage points of the proportion of the population who are aware of crowdfunding (as indicated by the consumer research).

- Managing project risk is a key focus for all the platforms included in the discussions. Overall, as platforms become more developed, there appears to be a trend towards increased management of project risk, including some significant innovations. These range from better risk spreading (e.g. more projects, and automated portfolio-building tools), to setting up insurance funds and secondary markets.
- All platforms stated that they conduct initial screening, with reported rejection rates ranging from 70% to 99% of received applications. In the case of P2P lending, the large number of projects (particularly in Germany and the UK) provides scope for risk spreading.
- Many platforms publish past performance data, as uncertainty over project risk has negative consequences for reputation. A significant amount of information relating to risk was documented, although there remains some doubt about how well investors understand and use this information.

A full understanding of the project risk associated with crowdfunding is limited by the short history of this form of finance. Experience of at least a full economic cycle is arguably required before clear conclusions can be drawn.¹⁶³

¹⁶³ One platform does explicitly model the impact of default rates such as those that occurred during the recent financial crisis, but most of the platforms do not have a full economic cycle of past experience.

A1 Bibliography

- Agrawal, A.K., Catalini, C. and Goldfarb, A. (2011), 'The geography of crowdfunding', National Bureau of Economic Research, No. w16820.
- Agrawal, A.K., Catalini, C. and Goldfarb, A. (2013), 'Some simple economics of crowdfunding (No. w19133)', National Bureau of Economic Research.
- Agrawal, A.K., Catalini, C. and Goldfarb, A. (2015), 'Are Syndicates the Killer App of Equity Crowdfunding?', MIT Sloan School Working Paper 5125-15.
- Ahlers, G.K., Cumming, D.J. and Günther, C. and Schweizer, D. (2012), 'Signaling in equity crowdfunding', SSRN 2161587.
- BBVA (2013), 'Economic Outlook – Second Quarter 2013 Economic Analysis', https://www.bbvaereasearch.com/KETD/fbin/mult/1306_EEUUOutlook_2Q13_tcm348-392269.pdf?ts=172013.
- Belleflamme, P. and Lambert, T. (2014), 'Crowdfunding: Some Empirical Findings and Microeconomic Underpinnings', SSRN 2437786.
- Benlian, A., Thies, F. and Wessel, M. (2015), 'A lie never lives to be old: The effects of fake social information on consumer decision-making in crowdfunding', http://www.researchgate.net/profile/Ferdinand_Thies/publication/275656583_A_Lie_Never_Lives_to_be_Old_The_Effects_of_Fake_Social_Information_on_Consumer_Decision-Making_in_Crowdfunding/links/5547210c0cf24107d39812e9.pdf.
- Bow Group, The (2014), 'The regulatory outlook for Crowdfunding', www.bowgroup.org/sites/bowgroup.uat.pleasetest.co.uk/files/Crowd%20funding%20briefing.pdf.
- Brown, J.R. (2014), 'Selling Equity Through Crowdfunding: A Comment', U Denver Legal Studies Research Paper, 14-11.
- Burtch, G., Ghose, A. and Wattal, S. (2013), 'An empirical examination of the antecedents and consequences of contribution patterns in crowd-funded markets', *Information Systems Research*, **24**:3, pp. 499–519.
- Chaffee, E.C. and Rapp, G.C. (2012), 'Regulating Online Peer-to-Peer Lending in the Aftermath of Dodd-Frank: In Search of an Evolving Regulatory Regime for an Evolving Industry', *Washington & Lee Law Review*, **69**, p. 485.
- Crowdfinanzierung in Deutschland (2014), 'Crowdfinanzierung im Umbruch', Ausgabe: Nr. 1/2015, fuer-gruender.de/fileadmin/mediapool/Unsere_Studien/Crowdfinanzierung_Deutschland_2014_Fuer-Gruender.de_Dentons.pdf.
- Cumming, D. and Johan, S. (2013), 'Demand-driven securities regulation: evidence from crowdfunding', *Venture Capital*, **15**:4, pp. 361–79.
- Cumming, D.J., Leboeuf, G. and Schvienbacher, A. (2014), 'Crowdfunding Models: Keep-it-All vs. All-or-Nothing. Paris December 2014 Finance Meeting EUROFIDAI-AFFI Paper.
- Deutsche Bank Research (2014a), 'Crowdfunding: Does crowd euphoria impair risk consciousness?', *Current Issues, Digital economy and structural change*, www.dbresearch.com/PROD/DBR_INTERNET_EN-PROD/PROD0000000000335563.pdf.
-

- Deutsche Bank Research (2014b), 'Fintech – The digital (r)evolution in the financial sector: Algorithm-based banking with the human touch', *Current Issues, Digital economy and structural change*, www.dbresearch.biz/PROD/DBR_INTERNET_EN-PROD/PROD0000000000345837/Fintech+%E2%80%93+The+digital+%28r%29evolution+in+the+financia.PDF.
- Financial Conduct Authority (2013), 'The FCA's regulatory approach to crowdfunding (and similar activities)', FCA Consultation Paper CP13/13.
- Gabison, G. (2015) 'Understanding Crowdfunding and its Regulations', European Commission.
- Günther, C., Hienerth, C. and Riar, F. (2014), 'The Due Diligence of Crowdinvestors', unpublished manuscript, <http://userinnovation.mit.edu/conf2014/282120869122991280/The%20Due%20Diligence%20of%20Crowd%20Investors.pdf>.
- Hagedorn, A. and Pinkwart, A. (2013), 'Crowdinvesting as a Financing Instrument for Startups in Germany', HHL Working Paper No. 120.
- Hornuf, L. and Schwienbacher, A. (2014a), 'Crowdinvesting – Angel Investing for the masses?', *Handbook of Research on Venture Capital*, 3.
- Hornuf, L. and Schwienbacher, A. (2014b), 'The Emergence of Crowdinvesting in Europe', SSRN 2481994.
- IOSCO (2014), 'Crowdfunding: An Infant Industry Growing Fast', <http://www.iosco.org/research/pdf/swp/Crowd-funding-An-Infant-Industry-Growing-Fast.pdf>.
- Kantor, R. (2013), 'Why Venture Capital Will Not Be Crowded Out By Crowdfunding', SSRN 2400082.
- Kim, K. and Viswanathan, S. (2014), 'The experts in the crowd: The role of reputable investors in a crowdfunding market', 41st Telecommunications Policy Research Conference.
- Kortleben, H. and Vollmar, B.H. (2012), 'Crowdinvesting: Eine Alternative in der Gründungsfinanzierung? (No. 2012/06)', PFH Forschungspapiere/Research Papers, PFH Private Hochschule Göttingen.
- Meschkowski, A. and Wilhelmi, F. (2013), 'Investorenschutz im Crowdinvesting', *Betriebs-Berater*, 24, www.corporate-partner.de/media/Artikel%20BB%20-%20Crowdinvesting.pdf.
- Mollick, E. (2014), 'The dynamics of crowdfunding: An exploratory study', *Journal of Business Venturing*, 29:1, pp. 1–16.
- Morse, A. (2015), 'Peer-to-Peer Crowdfunding: Information and the Potential for Disruption in Consumer Lending', SSRN 2551272.
- Nesta (2014), 'Understanding Alternative Finance: The UK Alternative Finance Industry Report 2014', www.nesta.org.uk/sites/default/files/understanding-alternative-finance-2014.pdf.
- Pekmezovic, A. and Walker, G. (2015), 'Crowdfunding: Solving the SME Funding Problem and Democratising Access to Capital', http://works.bepress.com/context/alma_pekmezovic/article/1000/type/native/view/content.

Securities and Exchange Commission (2012), 'Recommendation of the Investor as Purchaser Subcommittee Crowdfunding Regulations', www.sec.gov/spotlight/investor-advisory-committee-2012/crowdfunding-recommendation.pdf.

The Economist (2015), 'Peer-to-peer lending: From the people, for the people – But will financial democracy work in a downturn?', 9 May, www.economist.com/news/special-report/21650289-will-financial-democracy-work-downturn-people-people.

Two Much Research studio (2015), 'El crowdfunding y los españoles: Una historia de cambio social', www.slideshare.net/twomuchrs/el-crowdfunding-y-los-espaoles.

Wardrop, R., Zhang, B., Rau, R. and Gray, M. (2015), 'Moving Mainstream: The European Alternative Finance Benchmarking Report', www.growthcapitalventures.co.uk/pdf/the-european-alternative-finance-benchmarking-report.pdf.

Wilson, K.E. and Testoni, M. (2014), 'Improving the role of equity crowdfunding in Europe's capital markets', SSRN 2502280.

World Bank (2013), 'Crowdfunding's Potential for the Developing World', infoDev, Finance and Private Sector Development Department, http://www.infodev.org/infodev-files/wb_crowdfundingreport-v12.pdf.

Ziewitz, M. (2011), 'Can crowd wisdom solve regulatory problems? A review and some provocations', 1st Berlin Symposium on Internet & Society.

A2 Awareness of crowdfunding by regions

Table A2.1 sets out crowdfunding awareness rates by geographic regions within Germany, Poland and Spain. With margins of error ranging from 7% to upwards of 15%, these numbers should be interpreted with caution.

Table A2.1 Awareness by region (percentage of respondents)

Germany		Poland		Spain	
Nielsen area*	Awareness level	Makroregion	Awareness level	Nielsen area**	Awareness level
1	15	centralny	21	A1	16
2	28	wielkopolski	15	A2	15
3A	28	śląski	9	A3	14
3B	23	zachodni	16	A4	13
4	20	pomorski	14	A5	26
5	27	północnowschodni	15	A6	14
6+7	16	wschodni	13	AM Barcelona	24
–	–	małopolski	21	AM Madrid	19
		–	–	Canary Islands	28

Note: The margin of error ranges from 6.7% to 14.8% in Germany, 7.3% to 11.8% in Poland, and 7% to 15.5% in Spain.

* Key for Germany Nielsen areas

- 1 Schleswig-Holstein, Hamburg, Lower Saxony, Bremen
- 2 North Rhine-Westfalen
- 3A Hessen, Rhineland-Palatinate, Saarland
- 3B Baden-Wurttemberg
- 4 Bavaria
- 5 Berlin
- 6+7 Brandenburg, Mecklenburg-West Pomerania, Saxony, Saxony-Anhalt, Thuringia.

** Key for Spain Nielsen areas

- A1 Baleares, Girona, Huesca, Lleida, Tarragona, Zaragoza
- A2 Albacete, Alicante, Castellón, Murcia, Valencia
- A3 Almería, Badajoz, Cádiz, Córdoba, Granada, Huelva, Jaén, Málaga, Sevilla
- A4 Ávila, Cáceres, Ciudad Real, Cuenca, Guadalajara, Salamanca, Segovia, Soria, Teruel, Toledo, Valladolid, Zamora
- A5 Asturias, Coruña, León, Lugo, Ourense, Pontevedra
- A6 Burgos, Álava, Cantabria, Guipúzcoa, Navarra, Palencia, La Rioja, Vizcaya.

Source: Oxera, based on the results of a telephone market study carried out by Millward Brown.

A3 Questions sent to platforms for discussion

The telephone-based discussions were free-flowing. The following questions were sent to the platforms ahead of the interview, and served as a basis for the interview.

Questions regarding the size of your platform

1. How many members (e.g. subscribers to your platform) do you have? How has this changed compared to the previous year?
2. What is the annual investment volume and number of projects facilitated on your platform? How has this changed compared to the previous year?
3. How many investors do you have? How has this changed compared to the previous year?
4. How many borrowers do you have? How has this changed compared to the previous year?

Questions about investment patterns

1. What is the average amount invested per investor? How has this changed compared to the previous year?
2. What is the average number of active investments per investor? How has this changed compared to the previous year?
3. What is the typical timeframe for an investment?

Questions about crowdfunding awareness

1. Please provide any available data on the extent of awareness of your platform and/or crowdfunding among your target audience or the general population.
2. Please describe any strategy your platform has for raising awareness of the platform and/or crowdfunding.

Questions about riskiness of investments

1. Please describe the procedure your platform uses to assess the riskiness of a project.
2. What policies do you have in place to manage problems relating to project failure?
3. Please explain how project failure affects your platform (rather than just the funders).
4. Have you had recent experience of project failure? What was the project failure rate over the past year? How has this changed compared to the previous year?

Questions about complaints from investors

1. Please describe the most common types of complaints you have received from investors.
 2. Please describe the procedure you have in place for handling complaints from investors.
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EV-02-15-226-EN-N

DOI : 10.2874/61896

ISBN : 978-92-79-46659-5