ISCTE S Business School University Institute of Lisbon

Financial innovation and alternative finance: A comparative analysis of the objectives of regulation and its impact on lending based crowdfunding in France and in the UK

Dissertation for MSc on Business Economics and Competition

Vinay Pranjivan

Supervisor

Sandro Mendonça

Assistant professor, Economics Department, ISCTE Business School

Co-supervisor

Nikolaos Daskalakis

Senior lecturer, Economics and Finance, Brighton Business School

October 2017

ISCTE S Business School University Institute of Lisbon

Financial innovation and alternative finance: A comparative analysis of the objectives of regulation and its impact on lending based crowdfunding in France and in the UK

Dissertation for MSc on Business Economics and Competition

Vinay Pranjivan

Supervisor

Sandro Mendonça

Assistant professor, Economics Department, ISCTE Business School

Co-supervisor

Nikolaos Daskalakis

Senior lecturer, Economics and Finance, Brighton Business School

October 2017

Acknowledgements

This dissertation is the pinnacle of a process that began in September 2012 when I enrolled in this MSc course at ISCTE.

In 2013, I took on the challenge of moving to London for the position of policy expert on consumer protection and financial at the European Banking Authority (EBA), which led to postponing the drafting of this dissertation by three years. At the EBA, I was given the task of assessing lending based crowdfunding and its regulation in the European Union. Upon my return to Lisbon, in 2016, I decided to build upon that experience and develop this dissertation.

This idea was welcomed by my supervisors, Professor Sandro Mendonça and Professor Nikolaos Daskalakis, to whom I would like to thank for all their encouragement, support, and contributions.

To my wife, Filipa, thank you for the patience, drive, and critical thinking.

To my family, thank you for the love and support.

Abstract

With the advent of alternative sources of finance and the new phenomenon of FinTech, which includes crowdfunding in its various models, regulators now face the challenge of how to regulate this innovative form of finance, and try to anticipate the impact regulation will have.

Focusing on lending based crowdfunding in the European Union and on the basis of a mixed method approach, this dissertation concludes that the main objectives of regulation are promoting growth in this industry, maintaining financial stability and the soundness of markets, and ensuring safeguards for participants in this market, especially for SMEs and individuals. On the impact of regulation, the scenarios in France and in the United Kingdom were analysed to conclude that, in spite of significant differences in the way regulation has been designed in these two countries, introducing regulation has had positive effects, supporting growth in crowdfunding activities and market confidence.

Key words: alternative finance, FinTech, innovation, crowdfunding, regulation

JEL codes: G23, G28, O31

Resumo

Com o surgimento de fontes alternativas de financiamento e o novo fenómeno de FinTech, que inclui o financiamento colaborativo (crowdfunding) nos seus diferentes modelos, as entidades reguladoras veem-se confrontadas com o desafio de como regular esta forma inovadora de financiamento, e tentam antever o impacto dessa regulação.

Focando no crowdfunding de empréstimos na União Europeia, e com base numa metodologia de pesquisa de métodos mistos, conclui-se que os objetivos principais da regulação são o de promover o crescimento desta indústria, de manter a estabilidade financeira e a solidez dos mercados, e de garantir a proteção dos participantes neste mercado, em especial as PMEs e os indivíduos. Quanto ao impacto da regulação, foram analisados os cenários em França e no Reino Unido tendo-se concluído que, apesar das diferenças significativas na forma como a regulação foi desenhada nestes dois países, a introdução da regulação teve efeitos positivos, levando ao crescimento dos negócios de crowdfunding e da confiança no mercado.

Palavras-chave: financiamento alternativo, FinTech, inovação, crowdfunding, regulação

Códigos JEL: G23, G28, O31

Table of contents

	Ackno	wled	gements	III	
	Abstra	ostractIV			
	Resum	ResumoV			
	Table	of co	ntents	VI	
	List of	figu	res, tables, and boxes	VIII	
	List of	abbr	reviations	IX	
1.	Intro	oduct	tion		
2.	Lite	Literature review			
	2.1	Intro	oduction to the state of the art	13	
	2.2	Inno	ovation in economic theory and in financial services	13	
	2.2.	1	Innovation studies in economic theory	13	
	2.2.2	2	Innovation in financial services	15	
	2.3	The	phenomenon of FinTech	17	
	2.3.	1	Alternative finance and FinTech	17	
	2.3.2	2	The rise of crowdfunding		
	2.3.	3	Lending based crowdfunding	25	
	2.3.4	4	Variants to models of lending based crowdfunding	27	
	2.4	Reg	ulation theory		
	2.4.	1	Regulation of innovation in financial services		
	2.4.2	2	Regulation on lending based crowdfunding		
	2.4.	3	Regulating crowdfunding in the EU		
3.	Rese	earch	ı design		
	3.1	Intro	oduction		
	3.2	Obj	ectives and research questions		
	3.3	Mix	ed methods approach		
	3.4	Met	hods applied and their appropriateness		
4.	Rese	earch	findings and discussion		
	4.1	Intro	oduction	42	
	4.2	Obj	ectives of regulation of lending based crowdfunding in the EU		

Vinay Pranjivan

4.2.1	The rationale for regulation on lending based crowdfunding			
4.2.2	Landscape of regulation on lending based crowdfunding in the EU54			
4.2.3	Commonalities and contrasts between the regulation in France and in the UK 59			
4.2.4	Exploring the rationale for the key choices in both cases			
4.3 The	impact of regulation on the lending based crowdfunding industry66			
4.4 Rob	ustness check – what is (really) happening in the EU 75			
5. Conclusio	ons 80			
References				
Appendices				
Appendix 1	Appendix 1 - FSUG Survey "User's perceptions of Crowdfunding", 2015			
Appendix 2	Appendix 2 - Questionnaire and responses from the UK FCA and the ACPR			
Appendix 3	Appendix 3 - Questionnaire and responses from the ECN			
Appendix 4	- Questionnaire sent to platform associations 105			
Appendix 4	Appendix 4.1 - Responses from FPF (France)			
Appendix 5	- Questionnaire sent to platforms			
	Appendix 6 – SPSS output for the Chi-Square analysis of association between the respondents' country of residence and their perception of risks			
	 SPSS output for the Chi-Square analysis of association between the investing experience and their awareness of regulation			
	 SPSS output for the Chi-Square analysis of association between the country of residence and their awareness of regulation			

Vinay Pranjivan

List of figures, tables, and boxes

Figure 1 – FinTech landscape
$Figure \ 2-Comparing \ traditional \ funding \ with \ crowdfunding \ \dots \dots \ 21$
Figure 3 - Total EU debt crowdfunding, 2012-201627
Figure 4 – Typical flow for lending based crowdfunding
$Figure \ 5-Respondents' \ usage \ of \ crowdfunding \ models \ \dots \ 43$
$Figure \ 6-Respondents' \ usage \ of \ crowdfunding \ models \ according \ to \ experience \ in \ investing. \ 44$
Figure 7 – Degree of importance for the reasons for not yet investing through lending based
platforms
Figure 8 – Risk perception according to residence
$Figure \ 9-Level \ of \ awareness \ of \ regulation \ on \ lending \ based \ crowdfunding \ platforms \$
$Figure \ 10-Awareness \ of \ regulation \ in \ place \ according \ to \ investing \ experience \$
$Figure \ 11-Awareness \ of \ regulation \ in \ place \ according \ to \ residence \$
$Figure \ 12-Impact \ of \ regulation \ in \ trusting \ lending \ based \ crowdfunding \51$
$Figure \ 13-Distribution \ of \ variables \ under \ the \ Chi-square \ analysis \ \dots \ 68$
Figure 14 – Chi square test output on SPSS
Figure 15 - Total France debt crowdfunding, 2014-2016
Figure 16 - Total UK debt crowdfunding, 2012-201673
Figure 17 - EU debt crowdfunding market proportions73
Figure 18 - Country distribution of respondents to the EC consultation on FinTech76
Figure $19-\mbox{Distribution}$ of respondents to the EC consultation on FinTech by company type . 76
Figure 20 - Distribution of respondents to the EC consultation on FinTech by company type 77
Figure 21 - Responses to the question 1.6 of the EC consultation on FinTech on the impact of
regulation on crowdfunding78
$Figure \ 22-Distribution \ of \ responses \ according \ to \ regulation \ status \ of \ the \ country \ \ 78$
Figure 23 - Distribution of responses according to respondents type, business related

Table 1 - Different types of entrepreneurial finance investors	21
Table 2 - Research questions and methods applied	40
Table 3 - Comparison between regulation in France and in the UK	

Box 1 - Regulating crowdfunding in the USA and in China	. 36
Box 2 - Most notorious fraud cases	. 36

Vinay Pranjivan

List of abbreviations

- ACPR Autorité de Contrôle Prudentiel et de Résolution
- CIP Conseil en investment participative
- EBA European Banking Authority
- EC European Commission
- ESMA European Securities and Markets Authority
- EU European Union
- FCA Financial Conduct Authority
- FSUG Financial Services Users Group
- GDP Gross Domestic Product
- IFP Intermédiaire en financemenet participatif
- OECD Organisation for Economic Co-operation and Development
- ORIAS Registre unique des Intermédiaires en Assurance, Banque et Finance
- P2P peer-to-peer
- UK United Kingdom

1. Introduction

In recent years, the profound economic crisis that came to light in 2008 shook the foundations upon which the financial services' industry was established. To help understanding the advent and first effects of this crisis, Barrel and Davis (2008) provided an outline of the build-up to this crisis and describe the different types of economic crisis. More recently, a study by Claessens and Kodres (2014) lists the main clauses, sorting them between common and unique. The four common clauses referred by the authors are credit booms, rapid asset price appreciation (especially in the housing markets), creation of new investment instruments that are dependent on favourable economic conditions, and financial liberalisation and deregulation. On the unique causes, the authors identified a steep increase across several regions of households' leverage on housing loans which was followed by defaults, the impact of this leverage on market agents (households, credit institutions), growing complexity and opaque investment products, and finally the rise of international financial integration scenarios. These authors contribute to the understanding of the circumstances and failures that led to the crisis.

As a result, financial services have been under severe scrutiny and ever tightening regulation. Being at the heart of the crisis, financial firms and their services have seen a decline in the way costumers perceived their performance, strategies, values, and reputation. As a result, market confidence dropped drastically.

Traditionally, there are three ways for funding loans: they can be funded through deposits, this is generically the banking activity; they can be funded using the balance sheet of a loan originating firm; or they can be funded by lenders or investors. The most notable effect of the crisis was the restricted credit supply especially for small firms. As pointed out by Iyer *et al.* (2013), when the crisis started in Europe, in 2008, there were stress signs in the interbank market, which was the crucial source of liquidity for banks. At the same time technology and globalisation marched on, making services more liable to disruption and making them more tradable. In this context, alternative financial services providers came in play, empowered by the rise of internet usage and massive digitalisation. A significant number of new players, typically non-banking firms, major

technology companies, and start-ups, began granting products and services, such as payment solutions, which were predominantly associated to traditional financial firms. A big part of these alternative services were innovative and provided through the internet. These are generically referred to as FinTech providers, a term that combines "financial services" and "technology". The range of services includes payments and remittance via internet and mobile networks, asset management, and alternative funding forms.

Of these alternative financial services, crowdfunding has been considered as having the potential to fill the funding gap which resulted from the recession. An early and simple definition of crowdfunding was given by Schwienbacher and Larralde (2010) referring to it as when a group of individuals, instead of professional parties, finance a project or a venture, typically via the internet and eliminating intermediaries.

This dissertation analyses the phenomenon of FinTech, focusing on lending based crowdfunding. Although there is growing attention towards crowdfunding, there are some specific aspects that merit further study. Among such topics we can find regulation on financial innovation, in particular on crowdfunding. As a topic of personal interest for the author of this dissertation, it will focus on regulatory aspects and their impact on the evolution of lending based crowdfunding. This dissertation aims to respond to two main research questions: *1*) *Why and how is lending based crowdfunding regulated in the European Union (EU)?* and *2*) *Was there an impact of regulation in the evolution of the lending based crowdfunding industry?*

As there is limited data available that could be used in a thorough assessment of the issues raised, this dissertation will narrow its scope of analysis, focusing on two EU jurisdictions – the United Kingdom (UK) and France. The choice was based firstly on the fact that these two Member states were the first ones to bring specific regulation forward, both in 2014. Secondly, there are commonalities and significant differences in the way the policies are set in these countries, thus being relevant for this study. Finally, the data availability issue is somewhat overcome as there are data sources that cover these two jurisdictions in a detailed manner.

The assessment to respond to the research questions relies on a mixed-method. On the quantitative side, we will analyse the results of a survey carried out in 2015 by the

Financial Services User Group (FSUG), and will include data on the evolution of the lending based crowdfunding market. On top of these sources, this dissertation resorts to the responses to the questions on crowdfunding included in the European Commission's (EC) public consultation on FinTech, published in September 2017. On the qualitative side, the analysis will present the responses to interview questionnaires designed specifically for this dissertation, and an analysis of the regulatory framework in the European countries. The author is aware of the alignment between the questions and the methods applied in responding. These are sufficiently robust and diversified making it possible to obtain solid responses without relying too much on a unique method. In addition, the recent source of input, the EC's consultation on FinTech, included in this analysis allows corroborating the findings through the methodology initially set.

This dissertation aims to contribute to the study of FinTech services and their regulation by looking into the way two EU Member States addressed lending based crowdfunding, and how this affected its market. This contribution should bring a more in-depth view of what were the objectives behind the regulatory frameworks brought in by the UK and French authorities, in which way they went about addressing this phenomenon, and the impact it had. The conclusions may make a case for a call for an EU wide regulation that is homogeneous, fair, and promotes the growth of this industry.

The dissertation is structured as follows. Chapter 2 provides a state of the art of the literature on the topics of innovation in economic theory and in financial services; the advent of alternative finance and the phenomenon of FinTech; the rise of crowdfunding as an established alternative source for funding; lending based crowdfunding and its business model variants; and finally on regulation theory, for innovation in financial services, and more specifically on crowdfunding. Chapter 3 will present the research design for this dissertation, its objectives and questions identified, the selected methodology approach, and its appropriateness for each of the research questions. Chapter 4 will present the results and findings, and discuss these in light of the theory and objectives outlined earlier. Finally, Chapter 5 will draw up the research conclusions, lay down avenues for further discussion with newer approaches, and discuss possible recommendations for economic policy.

2. Literature review

2.1Introduction to the state of the art

This chapter provides a review of the existing literature on the topics of innovation in economic theory and in financial services; of regulation of financial services; and the advent of FinTech, and specifically of crowdfunding. This chapter lays down the theory that supports the investigation, discussion, and conclusions set out in the following chapters.

2.2 Innovation in economic theory and in financial services

2.2.1Innovation studies in economic theory

Innovation in economic theory has been a recurrent subject of academic study. One of the most commonly cited authors is Schumpeter whose work on the analysis of the business cycles and innovation is referred to in many research documents. In Schumpeter's theory economics is an ever changing science where disruption is the key factor that brings in the change (Schumpeter, 1934). This theory of economic growth introduced a framework to study how innovations influence macroeconomic growth and issues related to microeconomic choices.

Innovation has been thoroughly studied by scholars and, as a result, going through the existing literature became an overwhelming task. However, before a structured analysis of the research was carried out, Fagerberg (2004) supported that this task is now close to impossible. In his book, he presented a guide to assist researchers in studying innovation. Referring to Schumpeter's theories, Fagerberg mentions the five types by which innovations can be classified: new products, new methods of production, new sources of supply, the exploitation of new markets, and new ways to organise business. Fagerberg indicates that economic theory has mostly focused on the first two types. The author continues his analysis to indicate that organisational innovation, as sustained by Schumpeter, includes new ways by which a firm organises its production and cross-firm arrangements that may lead to reorganising entire industries.

A comprehensive effort to structure the study of innovation was delivered by Castellacci et al. (2005), aiming at presenting a state of the art on the innovation studies and discussing challenges and perspectives for the future research. These authors also

start off on Schumpeter's theory and structure the relevant literature. One particular issue referred to the impact of demand on innovation. The authors observed that existing literature mostly mentioned supply-side innovation as a result of following Schumpeterian theories. However, for these authors innovation will also have an impact from the demand side in that this can be

"an important incentive or constraint in shaping the innovative activity carried out by private firms, but at the same time it defines the range of new technological solutions and products which can be successfully brought to the market" (Castellacci et al., 2005: 111).

Another topic indicated for future research refers to the theories that will support the concept of "innovative consumer"; however, this topic deals with the advent of a new age of consumers, an idea that does not fit directly in this dissertation.

On the basis of Schumpeter's growth theory, Aghion et al (2013) outline through modelling how that theory delivers predictions, with relevant input on the effects of innovators on follower firms, as well as the idea of innovation and creative destruction. These authors also reflect on the inverted-U relationship between competition and growth, as identified by Schumpeter. This theory suggests that in an environment with lower competition levels, innovation implies lesser growth comparing to when competition is high. This level of concentration was confirmed by Apergis et al. (2015) through a panel data approach of EU banks, for the period 1996-2011. This study concluded that the EU banking sector shows patterns of a monopolistic competition, with the impact of mergers and acquisitions occurred since the 2008 crisis. This view is also underscored by Bos et al. (2013) who examined the US banking industry to understand how competition relates to innovation. Through their applied model, these authors conclude that the inverted-U relationship is consistent in this market and that the concentration movement in US banks, which lead to a decrease in competition, has actually reduced innovation levels. This is particularly relevant as the financial markets have seen growing levels of concentration, diminishing competition levels. In this scenario, innovation brings lower levels of growth, as innovators will probably have fewer incentives to act, firms won't be willing to invest in innovations, resulting in a somewhat rigid market. This is a confirmation of what Schumpeter (1934) had already

affirmed, in that technological competition, where firms compete through innovation, was the driver for economic development.

Based on the Schumpeterian theory, Michalopoulos *et al.* (2009) developed a model that explains the joint evolution of financial and technological innovation. This combination reflects decisions by individuals towards profit maximisation and their implications on economic growth. In this study, the authors highlight the role of financiers in economic growth. They argue that growth can be a result of entrepreneurs who develop new ways of screening and financing, as financiers come in to monitor their progress. This means that innovators bring in new processes and products as they are driven by financiers to do so. Successful financiers will be the best placed for assessing their progress, but will only be interested when that particular financial innovation can allow for monopoly rents. The authors of this study conclude that since *innovation becomes naturally obsolete "technological innovation and economic growth will eventually stop unless financiers innovate"* (Michalopoulos *et al.*, 2009: 36).

A further study, developed by Spencer and Kirchhoff (2006) also on the back of Schumptererian theory, reflects on creative destruction brought in by the new technology-based firms. This study provides a framework for understanding how technological innovation and its application on businesses has paved the way for disruption and breaking the standards. The authors support Schumpeter's theories on creative destruction and explain the way the new type of firms, based on technology, will bring change in the economy.

2.2.2Innovation in financial services

Looking specifically at innovation in the context of financial services, a significant amount of literature is available. Avgouleas (2015) contributed significantly to the understanding of what is financial innovation providing a summary of what can be framed as such. According to the author, the term refers to developments that result from the combination of human knowledge and of other creative inventions. Those developments may be, as mapped in Schumpeter's theory, in the form of new financial products, new organisations and processes, new risk management techniques, or technological innovation used in improvements of product and process innovation. Some examples of historical financial product innovation include bonds, stock trading;

in the field of product and process innovation, bills of exchange; for technological innovation, the use of algorithms is a significant example.

This theory is somewhat challenged by Johnson and Kwal (2012), who consider that although innovation in general can be understood as new processes, new products, or new ideas that allow doing something that could not have been done before, in an easier or cheaper way; financial innovation is of a rather different type. For these authors, financial innovation has indeed contributed to change in the way financial services are provided, however it has not changed the core function of intermediation. This idea is a rather simplistic way of looking at financial innovation, since it has indeed allowed for a shift in the cost of services, and created a new string of processes that changed the way financial services are provided.

A further review on literature on financial innovation is provided by Lerner and Tufano (2011), pointing out that it is a historical phenomenon, mentioning literature to document the span of four thousand years during which nineteen major financial innovations were seen, including the innovation of interest and the creation of Eurobonds. For these authors, financial innovation is the act by which new financial instruments, and even technologies, institutions, and markets are created and made popular. These innovations can be divided into two major variants: product or process, and process improvements. For these authors, economic theory supports that the benefits of financial innovation can be quantified in terms of the increase on social welfare it brings, when compared to the previous similar choice options. This is a particular challenge in itself, as the effects of this type of innovations are usually in the form of externalities. Therefore, as regulators tend to intervene to contain the potential for negative externalities, there is a tendency to regulate financial innovation.

Looking at how financial innovation relates to the traditional finance markets, where banks assume the most important role, Beck *et al.* (2016) studied the benefits and perils brought in by innovation in the banking sector. Using data from 32 countries in the period between 1996 and 2010, the authors determined innovation was associated with both faster growth, and fragility and worse performance. This study provides a framework to understand that financial innovation does not always result in positive

outcome. In fact, innovation thrives in the boundaries of established markets and is usually perceived as a driver for detriment to participants.

A related study by Thakor (2011) focused on how financial crisis lead to innovation. The author concludes that "*First, the more competitive the financial system (the lower the cost of entry), the stronger are financial innovation incentives and the greater is the amount of innovation. Second, more innovative financial systems are more prone to financial crises.*" (Thakor, 2011: 144). This theory builds on from the inverted-U theory (as described earlier) introduced by Schumpeter. However, the idea of higher proneness for financial crisis in a more innovative scenario seems harsh and may be a trigger for the negative scope through which regulators see financial innovation.

In their paper, Barrel and Davis (2008) express this negative position towards the impact of innovation, concluding that one of the drivers for the 2007-08 crisis was the bubble that was stocked by financial innovation. However, it is important to state here that these authors refer to financial innovative products in the form of asset backed financial instruments, which are substantively different to the form of innovation referred to in the field of alternative finance.

These studies highlight the distinctive roles that financial innovation can play. If, on the one hand, they can be facilitators to allow for different sources of funding and increase choice for consumers, introduce cheaper costs for products and services, and leaner or faster processes, they can, on the other hand, be the drivers for instability, uncertainty, and provoke a crisis scenario. The new technology-based firms are promoters of disruption in the form of innovation affecting the whole economy. Thus, there is merit in the assessment of the relevance of alternative finance and FinTech as emergent players in the financial market and of how regulation has been applied to financial innovation.

2.3 The phenomenon of FinTech

2.3.1Alternative finance and FinTech

As a result of the financial crisis of 2007-2010, several banks failed, firms went bankrupt, and individuals were left unemployed and lost their savings and possessions, more important of which their homes. As the crisis became evident and widespread,

financial markets saw a gradual advent of new players. Some of these new firms competed with incumbent firms while others began working alongside them. In fact, in a very recent report, published in August 2017, the World Economic Forum concludes that companies like Amazon and Facebook, so-called tech giants, will bring the disruption initiated by FinTech start-ups.¹

The effects of the crisis were significantly felt in the access to capital, resulting from restrictions on loans and investment imposed by banks and traditional funding sources. The restrictions resulted from a combination of own initiative decisions, new and stricter regulation (as in Basel II and III), and decrease in new investment from small and medium enterprises (SMEs) and individuals. However, there was still a demand for capital that needed response.

SMEs mainly resort to equity and debt financing for their activities (Daskalakis *et al.*, 2013). In their analysis of the Greek SMEs financing preferences, the authors observed that debt is preferred over equity. The authors identify a finance gap concluding that SMEs would use more long-term debt financing if they had access to it. The analysis published by Iyer *et al.* (2013) showed the way the bank credit crunch in Portugal limited firms' access to finance and concluded that there was no real alternative, adding that the credit reduction had a binding effect. These conclusions can be extended to other countries as the limitations were similar.

In parallel, there was a surge of new solutions providing financial services, namely those based on internet and mobile technologies. These new services and players are commonly placed under the umbrella term of FinTech.² An appropriate definition is given by Lacasse *et al.* (2016:1) as "A field or sector arising from the symbiosis of digital platforms and artificial intelligence in financial services, generally at odds with traditional financial services". These authors mention that a new "digital ecosystem" has surged, combining Artificial Intelligence, the Internet of Things, Digital Platforms, and the Wi-Fi Generation. This new ecosystem is the birthplace of new solutions for

¹ As reported by CNBC <u>https://www.cnbc.com/2017/08/22/tech-giants-more-disruptive-to-banks-than-FinTech-startups.html</u>, accessed on 20 September 2017.

² The Oxford Dictionary defines it as "*Computer programs and other technology used to support or enable banking and financial services*" - see <u>https://en.oxforddictionaries.com/definition/FinTech</u>

payments and remittance, deposits and lending, and new forms of currencies (digital and virtual). Lacasse *et al.* (2016) conclude that FinTech solutions will have a major impact transforming financial services. The Financial Stability Board (FSB) defines FinTech as financial innovation enabled by technology which may bring a material effect on financial markets and institutions. The innovation may result in new business models, applications, processes or products applied in the provision of financial services.³

Figure 1 provides a picture of the landscape with a short list of services that fit under the FinTech term.



Source: own design

An overview of payment solutions within the FinTech ecosystem is provided by Lee and Lee (2016), which includes companies such as PayPal, Amazon, Apple, Google, and AliPay in their study. These companies are internet giants and their influence and dealings in FinTech show how relevant this ecosystem has become.

To assess the impact of digital transformation for the banking industry, Sharma (2015) provides a framework of the main drivers and challenges of digital solutions. The author lists them as follows: regulatory environment, requiring firms to change their IT processes to comply with the complexity of rules; higher consumer expectations, as new

³ See <u>http://www.fsb.org/what-we-do/policy-development/additional-policy-areas/monitoring-of-FinTech/</u>

technologies have boosted consumers' demand for better, quicker, and cheaper services; lower appetite for risk, as a direct result from the crisis; evolution of the FinTech sector, with new business models and big players, forcing banks to react; and transformation over the years, especially with the rise of outsourcing. This assessment is an example of Shumpeterian theory of creative disruption, showing that technology evolution and human invention created a new era for financial services.

To understand the advent of crowdfunding in the context of alternative finance, a study by Bruton *et al.* (2015) provides an academic foundation of the new options that entrepreneurs have available. For these authors, crowdfunding can be defined in short as a social media platform that uses a collective process for decision making, which assesses new projects and ventures to raise capital. They add that crowdfunding platforms allow average investors to take part in a very early stage of the investment process, which is not possible in traditional funding cycles, turning these investors into an alternative source of capital for entrepreneurs. This definition leads the way to the disintermediation potential of crowdfunding.

2.3.2The rise of crowdfunding

There is growing interest on crowdfunding in academic research. Research shows that the first crowdfunding campaigns using internet platforms date back to the early 2000's, where artists launched campaigns to raise funding from family members, friends, and followers/fans.

As a first step, the question of what is crowdfunding arises. A structural definition is provided by Belleflame, *et al.* (2013: 8) as "*an open call, essentially through the Internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes*". As Schwienbacher and Larralde (2010) point out, the term crowdfunding derives from the term crowdsourcing firstly used by Howe and Robinson (2006). In their research, Schwienbacher and Larralde present reasons why firms use crowdfunding listing mainly cost reduction issues. To begin their analysis, these authors provide a summary of traditional sources for funding, differentiating equity and debt, as shown in Table 1.

Table 1 - Different types of entrepreneurial finance investors		
	Investor	Description

	Investor	Description
	Entrepreneur and team members	The entrepreneur invests his own money in the company, or money he obtained through a personal loan
	Friends and family	The entrepreneurs' friends and family
	Business angels	Wealthy individuals willing to invest in small projects
Equity	Venture capitalists	Specialized investors gathering money from non specialists and placing it into bigger projects for a period of 5-7 years
	Other companies/ strategic investors	Other companies can decide to invest in projects they believe have strategic importance to them
	Stock markets	Members of the public invest in the company through a public offering
	Banks	Loans
	Leasing companies	Provide equipments and office space to entrepreneurs against lease payments
Debt	Government agencies	Subsidy for particular projects
	Customers/ suppliers	e.g., trade credit
	Bootstrapping	Use of trade credit, credit card and other methods, including working capital management

Source: Schwienbacher and Larralde (2010)

As traditional financing became limited in its availability, alternative sources were brought in. One of such alternatives was crowdfunding, in its different forms. Figure 2 compares traditional funding and crowdfunding. The picture shows that in this alternative form of finance the funding comes from a large base of fund providers instead of the traditional model of one (or a few) provider(s).

Figure 2 – Comparing traditional funding with crowdfunding



Source: European Commission⁴

⁴ See <u>https://ec.europa.eu/growth/tools-databases/crowdfunding-guide/what-is/explained_en</u>

A comprehensive state of the art in theory and practice is provided by Brüntje and Gajda (2016), who argue that crowdfunding became noted by the industry, economists, politicians, and corporations in 2013. This raised the interest of institutions and regulators, such as the EU Commission and the US Government. Nevertheless, for these authors, theoretical studies are far from being an elaborated research field, even though there has been growing research in diverse study areas.

It is important to note that, although the activities of crowdfunding through online platforms are a recent innovation, the concept behind crowdfunding is not new. In fact, the basic idea of raising funds from a group of investors is reported throughout history (Beck *et al.*, 2016). A similar view is presented by Galloway (2009) who advocates that an offline model of peer-to-peer (P2P) lending is what is seen historically as traditional lending between two parties, the lender and the borrower. This occurs without the intervention of intermediaries. These come up in the modern-day lending models, where banks, credit unions, credit card companies, pay day lenders, mortgage companies, and others, intervene.

There are generally three participating stakeholders as pointed out by Gierczack *et al.* (2016): fund seekers (borrowers), fund providers (lenders), and the platforms which intermediate the process. These authors list the following potentials of crowdfunding: access to funds, raising them from the crowd; (pre)-sales features which allow firms to get funds before the actual selling; marketing vehicle as projects are announced and shown through online platforms; market research tool gaining from an internet based exposure of ideas; co-creation where the crowd participates in developing further ideas initially shown. The latter idea supports the theory of democratising innovation through crowdfunding.

However, crowdfunding bears challenges that need attention. Gierczack *et al.* (2016) indicate the following issues arising from crowdfunding activities: uncertainty and risk, especially in the decision process, as lenders may follow a herd like attitude, using emotions rather than reason; and capital cost, as pointed out by other authors, since platforms seem to charge a higher cost for their services.

In light of the theory on innovation and FinTech, on the back of the definition of financial innovation suggested by Lerner and Tufano (2011), one may argue that

crowdfunding is a process improvement, as the innovation is in the distribution channel for funding – as funding in itself is no novel product, thus classifiable as financial innovation. Considering that it is typically provided through an online platform, making use of technological processes, it falls also under the FinTech umbrella.

Crowdfunding is present in several business models. The more common forms refer to donations, rewards, lending, invoice trading, and investment or equity. The first two forms offer no financial returns. The remaining models of lending, invoice trading, and investment, or some hybrid models which combine these, do offer financial returns. These are the ones referred to in the context of alternative finance. The fact that there is a lack of a reputedly accepted taxonomy leads to some discrepancies in defining the business models⁵.

In the donation model, traditionally fund contributors do so without expecting a return, on a voluntary basis. This is usually a model used in humanitarian causes, social or community initiatives. In the rewards model, campaigners ask for funding and in return give out goods, products or services. A typical example is when an author needs capital to launch a book, and in return for the capital invested sends a signed copy.

Looking at financial returns models, in lending based crowdfunding, also known as peer to peer (P2P) lending, campaigners raise capital and in return commit themselves to repay with interest (in some exceptional cases even without interest). This is a typical loan which rivals traditional lending, for example provided by banks. Equity or investment crowdfunding is a model where campaigners raise capital and in return promise to give out a share of the (future) expected profits, or a share in equity of the firm. Finally, invoice trading is similar to factoring, where campaigners sell out invoices to the crowd, anticipating their revenue.

The fact that the crowd participates in the capital raising stage allows firms to gather the crowd's views and input in terms of their expectations and future products. This is a form of democratization of innovation and capital access. Hippel (2005) studied indepth how innovation can be democratized. In his book, Hippel describes the growing

⁵ This is pointed out by CrowdfundingHub in their 2016 report "Current State of Crowdfunding in Europe"; see <u>http://www.crowdfundinghub.eu/the-current-state-of-crowdfunding-in-europe/</u>

phenomenon of user driven innovation and how this is driving towards an easier access to innovation.

This topic is further explained by Mollick and Robb (2016), who view crowdfunding as a new age for access and innovation in financing. These authors conclude that there is potential for crowdfunding to democratize access to capital, adding new ways for those who create projects to interact with those who can invest. They add that "by engaging the crowd in funding and supporting projects, these crowdfunding platforms can reduce the need for inefficient (and often biased) middlemen" (Mollick and Robb, 2016: 85).

The intermediator role taken up by banks, credit unions, and similar organisations, has its benefits. As Galloway (2009) points out, interpersonal relations require time and confidence; those who are willing to lend will not be able to know those who require capital; and organisations can reduce the burden of credit allocation processes and take advantage of economies of scale.

This brings about the potential of disintermediation of crowdfunding. Morse (2015) surveyed the literature on this topic and concludes that there is such potential, although under some caveats. Hernando (2016) contributes to the study of that potential, examining empirical data from a reference lending crowdfunding platform. The author mentions the inefficiencies in financial markets and shows how access to capital is not fully available to SMEs and individuals. Hernando concludes that lending crowdfunding does indeed represent an opportunity to increase capital access and disintermediate, but also raises the questions regarding potential risks in this form of lending. This opens the door for the role of regulation. When regulation is looming for any new financial service, there should be an evaluation of benefits and risks that the service brings. That was the case also for crowdfunding. The potential risks for participants - those seeking funds, those willing to contribute, platforms, competitors, and regulators - in the crowdfunding market have been analysed and detailed by academics and regulators around the world. The main benefits are related to the power for disintermediation and democratising access to funding. This has been the approach taken by regulators, as conveyed in European organisations' documents addressing crowdfunding and on the different national regulatory regimes brought forward.

Looking at the impact of crowdfunding in terms of volumes, the amounts raised through this funding source have grown in the period between 2013 and 2015, from USD 6.1 billion to USD 34.4 billion, according to Massoluition's crowdfunding report 2015.⁶ However, notably crowdfunding volumes, although growing, remain significantly low, and the evolution has been at a different pace across the globe. The same report mentions that the Asian market grew by 320% in 2014 reaching USD 3.4 billion, surpassing the European market which raised USD 3.26 billion. Topping this ranking, the North American market reached USD 9.46 billion.

On the European spectrum, there are significant differences in pace. This is mainly due to the different levels of development of the crowdfunding industry, and the way national competent authorities have addressed specific regulation for crowdfunding.

The EC report on crowdfunding estimated that investment through crowdfunding platforms raised EUR 4.2 billion in 2015 across the EU, of which EUR 4.1 billion came from financial returns models. Of these, lending based crowdfunding originated over EUR 3.2 billion, representing the bigger share of this activity.

2.3.3Lending based crowdfunding

This dissertation will focus on lending based crowdfunding, as it is significantly growing in volume, and represents an alternative source of funding for SMEs and individuals (since equity crowdfunding is an option available only for firms), bringing it closer to concepts of democratizing innovation and capital access.

As mentioned earlier in this study, there is a lack of an established taxonomy for crowdfunding. As a result, lending based crowdfunding, loan crowdfunding, P2P lending, and crowdlending are usually used to classify crowdfunding campaigns where fund raisers resort to platforms to gather fund contributions, to which the raisers will repay the capital invested possibly with interest added. For the sake of uniformity, this dissertation will use lending based crowdfunding.

To have a view of the historical background for lending based crowdfunding, Bruton *et al.* (2015) outline that due to low interest rates on savings, there was growing interest and participation of individuals as lenders. These authors indicate that Zopa, the first

⁶ As seen on <u>https://dazeinfo.com/2016/01/12/crowdfunding-industry-34-4-billion-surpass-vc-2016/</u>

platform in the UK, began with a pure P2P model, but then evolved to allow lending to firms through other platforms. In short, there can be business to business, business to consumer, consumer to consumer, and consumer to business lending. All these forms work under the assumption of capital loans and the return with interest (only in very few cases there is no interest returned). These loans are usually unsecured relying mostly on personal guarantees. A similar description is provided by Galloway (2009), who states that lending based crowdfunding through the internet began in 2005, emerging as a credit alternative. The author identified several variants of activity, "P2P lending platforms differ dramatically in type and approach. Some connect borrowers and lenders directly; others connect them via a third-party intermediary. Some P2P sites allow lenders to set interest rates; others preset rates based on historical performance and credit score" (Galloway, 2009: 2).

In a more in-depth review of literature, Morse (2015) depicts how lending based crowdfunding works. In this study, Morse lists risks and benefits that this form of lending brings to participants. The risks are referred later in this dissertation. For Hernando (2016), there is room for optimisation for investors when comparing lending based crowdfunding with traditional investment vehicles. Aveni *et al.* (2015) provide a comprehensive picture of the evolution of the definition of lending based crowdfunding; and refer to the risks and how regulation is playing catch up with this growing industry.

Lending based crowdfunding has evolved into several different business models. There is also a growing intervention of institutional investors who are placing large funds into platforms who in turn apply those funds rather than looking for small investors. In this scenario, P2P lending is gradually being rebranded as marketplace lending.

To better understand the evolution of lending based crowdfunding in Europe, we look into the total amounts raised through these platforms and the number of campaigns supported. Figure 3 below depicts this evolution.







Source: Crowdsurfer/TAB dashboard

It is visible that lending based crowdfunding has grown in the past four years. There is a steady growth since January 2013, when crowdfunding started to draw more attention and the number of platforms in the EU grew. By the end of 2016, debt crowdfunding had raised close to 250 million Euros in the EU on the specific models under the TAB dashboard. This allows inferring the evolution of the whole lending based crowdfunding industry in the EU.

2.3.4Variants to models of lending based crowdfunding

On a typical model, as depicted in Figure 4, those looking for funds (borrowers) will present their projects, themselves, and publicise their pledge - the timing for the pledge, how much they want, how they are willing to return the amounts received (how long to repay, on which periodicity, and if there will be an interest rate applied to reward the lenders).

All this information is made public by the platform, which may conduct some due diligence and credit worthiness assessment to ensure the borrower is credible and will be able to repay. The platform will have rules regarding the time during which the pledge will be available, the minimum amount required to consider the pledge as

successfully funded, and timings for the funds to be delivered to the borrower, or returned to the lenders. For this service, the platform will charge a fee to the borrowers, the lenders, or both.

The users of that platform will have access to the fund request by the borrower. Those willing to invest (lenders) will decide based on the available information and repayment conditions. After the pledge timing is over, the platform will assess whether the funding goals have been reached in order to consider the pledge as successful. If so, the platform transfers the amounts gathered to the borrowers. If the pledge is not successful, the platform must return the amounts to each lender. In case the pledge is successful, the borrower receives the funds and begins its project. Following the plan in the pledge, the borrower will repay the lenders accordingly.

Figure 4 – Typical flow for lending based crowdfunding



Source: own design

However, there are different models already in place, varying in the way the platform intervenes, the decision process for lenders and borrowers, or the specific loan purpose.

In one model, the platform provides a pool of loans for the lenders to invest in, according to their risk appetite and the desired return interest rate. There are models where lenders can choose the projects in which to invest. Alternatively, in other models lenders don't decide on which project to invest, that is done by the platform. In this model, the platform's intervention is considered to be very much of an investment intermediary activity, and thus the relevant regulatory requirements should be applicable.

Another variant refers to the specific lending based crowdfunding for real estate investment. Loans in these models are channelled for real estate investment, where the property is not always given as collateral, thus the risk is significantly high in this model as the amounts are higher and there is no guarantee. The investment can be made directly, where the real estate buyer asks for investment directly through the platform, or indirectly, where the real estate company collects funds through the platform to invest in property using a specific investment vehicle.

A growing trend is the partnering between traditional financing firms (e.g. banks) and crowdfunding platforms. In some cases, banks channel loan applications that are too risky for their portfolio to be pooled by their partner platform. This variation brings along opportunities and risks. On the positive end, there is the advantage of allowing for access to capital through this alternative (platform). On the negative end, however, there is a higher risk for investors as there are possibly fewer procedures in place regarding due diligence, project assessment, and credit worthiness. This may be a gateway for cherry picking by banks, looking to maintain their portfolios less prone to non-performing loans (NPL), while placing higher risk on crowdfunding activities, reducing its appeal for investors as defaults may rise.

This chapter provided a review of the theory on this phenomenon of FinTech and its role on filling the gap for funding faced by SMEs and individuals. Among the several new services and processes under the umbrella term of FinTech, crowdfunding has risen to take up a big slice of alternative finance. In The EU, lending based crowdfunding has gathered the highest amounts and funded campaigns. In keeping up with this phenomenon, regulators are called upon to provide safeguards for the market.

2.4 Regulation theory

2.4.1Regulation of innovation in financial services

To understand how regulators develop their policy, it is useful to look into concepts of social welfare and policy making decisions when it comes to financial products. Hippel (2005) refers to the increase in social welfare when both users and manufacturers innovate. This analysis establishes the foundations for policy choices addressing innovation. Marti and Scherer (2016) provide a framework on financial regulation theory, going through existing literature. These authors criticise what they call a monistic conception of social welfare, which reduces its idea to one indicator (e.g. GDP). They add a judgment call in saying that "because existing research on financial innovations ignores questions of justice, it reinforces a technocratic approach to financial regulation that is likely to undermine social welfare." (Marti and Scherer, 2016: 6)

As mentioned previously, regulators are called upon to intervene to contain the potential for negative externalities from innovation, more so when it comes to financial innovation. This is a trigger to the introduction of regulation, and that is evident when analysing historically the evolution of the number of regulatory acts and of novel financial products and services.

Avgouleas (2015) points out that while there were massive gains throughout history in welfare with the introduction of such financial innovations, there was also a dangerous side of their application, the most relevant of which was fraud. This leads to Avgouleas' argument that financial innovation has always been, simultaneously, a vehicle to increase welfare and a driver of major financial crisis.

When it comes to an assessment whether there should be any sort of market intervention, potentially through regulation, such evaluation must result from identified or anticipated market failures. Campbell *et al.* (2011) begin their analysis on consumer financial protection by referring to the neoclassical taxonomy of market failures, and by stating that these failures are all applicable to consumer financial markets. The list of market failures indicated in this analysis refers traditional failures - externalities, information asymmetries, market power, and coordination failures like those that arise

with public goods. In their analysis, these authors support the theory that regulation is needed when lack of trust actually pushes away consumers from a certain type of financial products, which are considered as beneficial. They also argue that information provision or disclosure is commonly used by regulators in addressing traditional market failures. However, as they point out, it is clear that such requirements will not be effective should consumers not understand the information received. In the concluding remarks, these authors strongly advocate that regulators should bear in mind that a "one size fits all" approach may not be effective, since financial products are so diverse; encourage financial innovation; and be aware that financial innovation will circumvent regulation that is poorly designed and costly.

In his lecture on the specific topic of consumer finance regulation, Campbell (2016) wrote on the topic of how concerns for interventionist economists. Campbell observed that, in several spheres, including financial services, the reasons for intervention included monopoly power, since the late 19th century, aggregate demand management, since the 1930s, and consumer protection, for over the last hundred years. For the author, intervention aims to restore markets where welfare properties may have been reduced by existing failures, and therefore allowing for validation of economic theory, adding that consumer regulators act with a view to allow for consumer choice to stay at the level it would be when consumers are rational and well informed.

Using a different angle in his research, Avgouleas (2015) argues that, in recent years, regulatory reforms in response to financial innovation have aimed to introduce standardization and homogeneity, making little distinction between good and bad innovation. This strong statement does portray some views of how regulators in the US and in Europe look at innovation, putting together those drivers of the financial crisis, such as asset bundling investment vehicles, and new products which may merit a positive regulatory approach, where we place crowdfunding.

To get a more analytical research, Michalopoulos *et al.* (2009) show through their model that there is a positive relationship between financial innovation and economic growth, concluding that when forms of impeding financial innovation are put in place, for instance through laws or regulation, this will slow down technological change and economic growth.

In favour of regulating, Lumpkin (2009) produced a note for the OECD on regulating financial innovation and concluded that in a time where financial markets evolve under rapid innovation, where consumers change their needs in the long-term, new participants enter these markets, with new products and using new channels, which require an adequate regulation. For Lumpkin, "*The ideal approach is to find an appropriate balance between preserving safety and soundness of the system and allowing financial institutions and markets to perform their intended risk management functions*" (Lumpkin, 2009: 27).

For a more practical view, the OECD published in 2010 a guide called "Policy framework for Effective and Efficient Financial Regulation". This guide provides a significant contribution to understand how policy makers develop their thinking towards regulation for financial services. For the OECD, financial regulation must be seen within the ongoing context of financial services, the policy objectives foreseen as desirable for the benefit of the financial systems, and the available policy instruments. The necessary steps to develop policy must include an assessment of the problems, in the form of market failures and risks, which need to be addressed. This is the critical stage of policy development, where a proper outline of issues will determine the best approach to be taken. The OECD considers that governments have the following policy instruments available: surveillance; moral suasion; regulation; guarantees; lending; subsidies, grants, and programmes; and government ownership and control.

The ideal path in establishing intervention is to identify the policy options and match them with the most effective instrument to achieve the goals set. For the OECD, the use of regulation as an instrument should take into account the potential costs, aiming to minimize them as much as possible.

2.4.2Regulation on lending based crowdfunding

On the basis of the theory on regulation and financial services, this dissertation dwells into the study of regulation on lending based crowdfunding.

Understanding the benefits of crowdfunding as a whole, Jegelevičiūtė and Valančienė (2015) compared the ways by which crowdfunding is promoted, analyzing seven countries, selected as being the highest performing in terms of number of successful

projects. Their study looked into how regulators and associations promoted crowdfunding, and concluded that the specific actions taken in addressing this alternative form of finance is due to its merits. This is an assumption that may have lead regulators to look into crowdfunding with a positive lens, rather than starting off with the idea that it is harmful. However, should there be a negative lens, meaning regulation that restricts innovation, the outcome is that innovation will be restricted, and thus slow down technological change and economic growth.

Introducing regulation usually means adding costs for participants. In such an industry, where crowdfunding platforms are mostly small firms or plain start-ups even, those costs may be deterrents to enter in this market. In this sense, regulation is perceived to be welcomed by incumbents (traditional financial services providers) as entry barriers become higher.

Suggesting an alternative route, Cohen and Sundararajan (2015) advocate that regulatory approaches on peer-to-peer sharing economy should include self-regulation, which the authors defend to be different from deregulation. As the term indicates, such an approach shifts some of the responsibility towards other parties involved, along with the governments. For these authors, platforms should not be looked upon as entities to be regulated but instead as a part of the regulatory framework, where a code of conduct could take up some of the requirements desired by regulators, but maintaining an oversight role for governments. In their study, Cohen and Sundararajan mention four types of self-regulation: voluntary; coerced (when industry sets rules and forces them because of threat of regulation); sanctioned (industry created rules which are approved by government); and mandated (imposed by government). A concrete example of such rules is the case of the Peer to Peer Finance Association (P2P FA)⁷, in the UK, which have a set of rules that their members (platforms) should follow.

The issues raised by self-regulatory approaches are notably related to reputation, legitimacy, and enforcement (sanctions). The limited power for such rules to be enforced, and the way that consumers may perceive firms' compliance to such non-government rules turn such an approach flawed. More so when it comes to financial

⁷ See <u>http://p2pfa.info/rules</u>

crowdfunding in a time where trust and confidence in financial services providers reached a low point.

2.4.3Regulating crowdfunding in the EU

Shifting the lens to actual regulation in place, this dissertation will focus on how the European countries have considered crowdfunding, looking into the policy instruments drafted by the European Banking Authority (EBA), the European Securities and Market Authority (ESMA), the European Commission (EC), and national regulators that have drafted specific regulation addressing lending based crowdfunding.

Lending based crowdfunding relies on the basic concept of lenders meeting borrowers, through the service of an internet based platform which acts as a meeting place. This very simple description entails the essence of this type of lending. This is in itself a disclaimer for the risks involved. As Galloway (2009) described, intermediation organisations in traditional finance generally seek, assess and allocate credit in a more cost-effective process than individual lenders could.

The analysis on how to address lending based crowdfunding in Europe falls into the scope of action of the EBA, as lending is considered a banking product/service. In its assessment, the EBA started by listing all potential risks for participants in lending based crowdfunding, and crosschecking these with existing EU rules and regulations (e.g. the Payment Services Directive). The EBA published in 2015 its Opinion on lending based crowdfunding⁸, addressed to the European Parliament, the EU Council and the Commission. In developing this policy statement, the EBA began by analysing the risks for lenders, borrowers, platforms, and regulators that were involved in dealing with lending based crowdfunding; and by looking at the different business models in place. There were several risks identified, classified under the following categories: counterparty or credit risk; risk of fraud; lack of transparency or misleading information; legal risk; liquidity risk; operational risk; and money laundering.

The EBA cross examined those risks and models with existing EU rules in order to understand which were already addressed. The EBA concluded that several risks were

⁸ See <u>https://www.eba.europa.eu/documents/10180/983359/EBA-Op-2015-</u>03+%28EBA+Opinion+on+lending+based+Crowdfunding%29.pdf

left unaddressed referring to the lack of or insufficient requirements on: information and disclosure rights for participants; due diligence process and credit worthiness assessment; platform's complaints handling procedures, internal processes, and default safeguards; and project ownership safeguards. In conclusion, the EBA recommended it was desirable to have convergence of practices across the EU for the supervision of lending based crowdfunding. In doing so, the EBA also recommended EU institutions to provide clarity on the application of how existing EU rules would be applicable. For the authority, these steps would avoid regulatory arbitrage, create a level-playing field, ensure confidence in the market for such an innovation, and contribute to the single European market.

Looking at the EU Member States, there are significant differences in the way national regulators have enacted, as this dissertation will show. The EC considered in its Report on Crowdfunding that, although there is a fragmented regulatory framework across the EU, there still isn't a case for a European wide regulation (e.g. in the form of a Directive). On March 2017, the EC launched a public consultation⁹ seeking to gather input from different stakeholders on the impact of FinTech services' providers in the EU. More specifically, the EC aimed to collect views on how that impact was materialised, the issues that needed to be addressed, and how regulators and supervisors should enact. On this point, the consultation focused on whether respondents viewed that the regulatory and supervisory framework fosters technological innovation in line with its three core principles of technologic neutrality, proportionality and integrity.

It is clear that, as some authors mention in regulation for innovation and in regulation for crowdfunding, any sort of regulation must strike a compromise between promoting capital raising for SMEs and individuals, and with investor/lender and borrower protection. This is surely the biggest challenge that policy makers face.

This chapter allowed us to understand what are the key concerns and reasons for regulating financial services and innovative forms of it. The fundamental reasoning should allow for and approach that strikes up a balance between promoting market competition and growth, a safe and sound financial system, and protect participants – firms, institutions, and consumers.

⁹ See <u>https://ec.europa.eu/info/sites/info/files/2017-FinTech-consultation-document_en_0.pdf~</u>

Outside of the EU, the United States of America (USA) and China are the markets where crowdfunding has reached significant volumes. Boxes 1 and 2 show the way these countries are regulating this phenomenon and the most notorious fraud cases.

Box 1 - Regulating crowdfunding in the USA and in China

In the United States of America (USA), P2P lending occurs in two major models: platforms operate in partnership with banks originating loans and then purchase them for sale as a pure loan or as securities; platforms originate loans and hold them on their balance sheets. In the first scenario, platforms are overseen by banking regulators. Should they sell loans as securities, then they are subject to the securities rules under the SEC. For the second scenario, platforms are required to get a lending license for each state in which they plan to perform their activities. When platforms engage in lending with individuals, other US rules and regulations are also applicable, related to consumer protection, interest rate limits, data protection, and anti-money laundering.

In China, crowdfunding in general, and lending based in particular, is viewed as a crucial alternative source of funding for individuals and SMEs. However, while supporting its growth, regulators were forced to issue a set of guidelines in July 2015 to address issues related to lack of supervision, investment limits, capital requirements, and rules in general. In December 2015, the China Banking Regulatory Commission released its draft regulation on P2P. In it, platforms are considered information intermediaries, liable only of assessing information, checking lenders and borrowers qualifications, project veracity, legitimacy and legality. Therefore, since platforms are not subject to credit risk, the regulation does not impose any capital or licensing requirements, basing its regulation on registration requirements. There are requirements on fund segregation and the usage of banks as third-party custodians. Platforms have limitations or sales of other financial companies' services. In parallel, the People's Bank of Chine issued regulation on online payment services provided by non-banks. These rules became effective as of 1st July 2016.

Box 2 - Most notorious fraud cases

The advent of innovative forms of business in general and of financial innovation is challenging for regulators. The potential for fraudsters and criminal activities is always looming.

In China, one of the largest P2P platforms, Ezubao, launched in 2014, was shut down by the government in late 2015. The authorities discovered, after putting in place new regulations on alternative finance, that the platform was a front for a Ponzi scheme that lead to a staggering estimate of 7.6 billion US dollars scam.

In the United States, one of the first notorious fraud cases referred to Ascenergy. This oil and gas energy company raised over 5 million US dollars through crowdfunding campaigns. Following an assessment carried out in 2015, the Securities and Exchange Commission (SEC) accused Ascenergy of fraud as the report showed that practically none of the funds raised were actually used in oil or gas exploration, rather in payments to other affiliated companies or travel and food expenses.
3. Research design

3.1 Introduction

This chapter outlines the research objectives that guide this dissertation and explains the research methodology adopted to respond to the questions identified. The option taken for the research is explained and supported by selected existing literature. This chapter paves the way for the findings, discussion, and conclusions set out in the following chapters.

3.2 Objectives and research questions

On the basis of the previous background, this dissertation focuses on regulation objectives and their impact on the evolution of lending based crowdfunding. The benefits and risks associated with this financial innovation are identified, therefore, it is essential to carry out an assessment of whether there should be regulation specifically addressing it, and, if so, in which form and with what sort of policy approach.

To that end, the questions that this dissertation will try to answer are:

- 1. Why and how is lending based crowdfunding regulated in the EU? and
- 2. Was there an impact of regulation in the evolution of the lending based crowdfunding industry?

In developing the research to respond to question 1, this dissertation looks into the following sub-questions which allow for a more structured assessment:

- 1.1 Was there a need to introduce specific regulation on lending based crowdfunding in the European Union market?
- 1.2 What was the regulatory framework on lending based crowdfunding at the end of 2016, in the European Union?
- 1.3 What are the commonalities and differences in the regulation policies brought forward by France and the UK?
- 1.4 What is the rationale behind the most relevant choices in the policies set in France and in the UK?

These research questions address very actual issues as seen in the theory discussions outlined in the early chapters. In addition, these questions have not been addressed in such detail. However, the limitation faced in taking this analysis forward is the lack of European wide robust detailed and accessible data on crowdfunding activities.

For future analysis, subject to the availability of standardised data collection, there is merit in assessing how much regulation has impacted all models of crowdfunding activities, how regulators have assessed the effects of their intervention, and how the EC develops its policy regarding crowdfunding.

3.3 Mixed methods approach

To develop the assessment as proposed, this dissertation will combine qualitative and quantitative methods. The use of mixed methods approach has been quite debated, with divided opinions. An in-depth theoretical analysis by Bryman (2006) on the integration of quantitative and qualitative research methods showed that the use of mixed-strategy merits encouraging so long researchers are explicit about the grounds on which it is conducted and acknowledge that, at the same time, there is unpredictability in its outcomes.

For the understanding of the appropriateness of its application, Creswell (2009) explains the rationale behind the use of mixed method in social science. His assessment covers a theoretical overview on when these methods are used and how they can be used. In his analysis, the author splits the ways of combining quantitative and qualitative methods into sequential and concurrent designs, adding sub-layers to come up with six approaches. While concurrent designs are meant to use the quantitative and qualitative to compare and counter-analyse results, sequential approaches are used to build upon the results of the first method chosen. One of the sub-types is called "sequential explanatory strategy" and refers to the collection of quantitative data first and developing a qualitative assessment to further explain the initial results, or to build upon them.

A sort of a mapping exercise was presented by Venkatesh et al. (2013) with a theoretical overview of this debate. The authors highlighted that researchers have considered that diversity in research methods is considered strength. The authors support the idea that the use of a mixed methods approach should not be a cause for disagreement, adding that its use should be encouraged when researchers can draw the answers to the questions in hand, as long as there is a clear awareness of the necessary caution in assessing the methods to use. As the authors mention, a mixed method approach that

uses quantitative and qualitative research can be done either concurrently (i.e. separately) or sequentially.

In this dissertation, we follow a sequential method, using quantitative and qualitative methods to build the results for the analysis. As the authors support in their article, using interviews (qualitative method) can provide deep and rich insights, while surveys (quantitative) allow gathering broader data from many participants. The resulting analysis will allow for meta-inferences which, as Venkatesh et al. (2013) define, are arguments or statements that can be formulated from the combination of methods.

3.4 Methods applied and their appropriateness

On that basis, the qualitative approach in this dissertation will rely on the interview questionnaires sent to the UK Financial Conduct Authority (FCA), and to the Autorité de Contrôle Prudentiel et de Résolution (ACPR), the regulatory bodies that developed or supervise the regulation for the UK and France, respectively; to the European Crowdfunding Network (ECN), which is a network that promotes the crowdfunding industry; to representative platform associations in the UK - UK Crowdfunding Association, and the Peer-to-Peer Finance Association (P2PFA), and in France - Financement Participatif France (FPF); and to a selected¹⁰ group of platforms in France and in the UK. We received responses from the UK FCA, the ACPR, the ECN, and the FPF.

Adding to these interviews, and to assess the level of intrusiveness of regulation, this dissertation compiles and compares the regulation in place by the end of 2016.

For a quantitative analysis, this dissertation will assess the results from a survey carried out in 2015 by the Financial Services User Group (FSUG)¹¹, commissioned by the European Commission. The FSUG launched two questionnaires, one regarding investment based crowdfunding and the other one regarding lending based crowdfunding. Among other questions, the survey aimed to explore regulatory issues

¹⁰ The platforms selected were the ones with the highest volumes or numbers of projects in the UK and in France, in the period 2012-2016, as reported by the dashboard on Crowdsurfer.

¹¹ The Financial Services User Group (FSUG) was set up by the European Commission in order to involve users of financial services in policy-making. See <u>https://ec.europa.eu/info/business-economy-euro/banking-and-finance/financial-reforms-and-their-progress/regulatory-process-financial-services/expert-groups-comitology-and-other-committees/financial-services-user-group-fsug_en</u>

such as the level of awareness and approval of regulation, the levels of trust in the industry, and the effects of regulatory restrictions.

In addition, this dissertation will gather data to describe the evolution of the lending based crowdfunding market in the EU.

Finally, a more recent source was gathered to allow for a robustness check of the findings from the previous list of sources. This is the case of the publicly available set of responses to the EC public consultation on FinTech, which was in place between 23 March and 15 June 2017.

To view how each method contributes to this dissertation, Table 2 below specifies the different methods used to develop the research for this dissertation and the way those methods address the research questions identified.

Question number	Quantitative – FSUG survey results	Quantitative – EC public consultation responses	Quantitative – data collection	Qualitative – interview responses	Qualitative – analysis of regulation
Q1.1	Responds to this question as participants are registered users of crowdfunding; Insights on the way the market and the relevance of regulation are perceived	Not applicable	Not applicable	Responds to this question as all addressees are relevant stakeholders in the market.	Not applicable
Q1.2	Not applicable	Not applicable	Not applicable	Not applicable	Allows to check where there is regulation in place and to develop a summary of the policies chosen by the regulators
Q1.3	Not applicable	Not applicable	Not applicable	Not applicable	Allows to have an in- depth picture

 Table 2 - Research questions and methods applied

					of the FR and UK regulations
Q1.4	Not applicable	Not applicable	Not applicable	Relevant as this method ensures gathering the input from the regulators on why policy choices were taken	Allows to identify trending issues in the regulation statements, which imply the rationale
Q2	Indicates how participants viewed the initial stages of regulation	Indicates how participants perceive the current effects of regulation	Provides a picture of the evolution of the market, allowing to check whether there was an impact of regulation	Relevant as different stakeholders will provide input on how regulation has impacted this activity, and identify issues that might need addressing	Not applicable

This chapter presented the objectives of the research carried out for this dissertation. The questions identified show the link between the different sections outlined in the theory presented in the second chapter of this dissertation. To that end, they relate the way a particular innovation in financial services, lending based crowdfunding, is regulated and how this regulation is impacting the development of the lending base crowdfunding market.

4. Research findings and discussion

4.1 Introduction

This chapter dwells into the main findings from the research carried out as per the methodology outlined previously. The following sections are organised according to the sequence of research questions identified in chapter 3.2. To that end, the subsequent sections will include the different data and insight sources accordingly to their contribution to the responses to each of the research questions.

4.2 Objectives of regulation of lending based crowdfunding in the EU

This section aims to respond to research question 1. As mentioned, this is unfolded into four sub-questions which will cover the perceptions of users of the lending base crowdfunding in the EU, in 2015; the landscape of regulation on this market in the EU, by the end of 2016; the way two major countries in the EU, France and the UK, developed their regulatory stances, comparing them; and the rationale behind the policy choices in those two countries.

4.2.1The rationale for regulation on lending based crowdfunding

To assess if there was a need or call for regulation, we go through the results from the FSUG survey (2015) and responses to the interview questionnaires developed for this dissertation.

Survey results

We resort to the results from a survey carried out by the Financial Services User Group (FSUG), commissioned by the European Commission. The FSUG launched two questionnaires, one regarding investment based crowdfunding and the other one regarding lending based crowdfunding. Among other questions, the survey aimed to explore regulatory issues such as the level of awareness and approval of regulation, the levels of trust in the industry, and the effects of regulatory restrictions.

The questionnaire was distributed through the network of the European Crowdfunding Stakeholders Forum (ECSF) of the EC. Platforms' representatives at the ECSF were asked to disseminate the questionnaire to their members in their countries (i.e. crowdfunding platforms), and ask the platforms to notify their registered users. Thus,

the population of the survey were registered users in crowdfunding platforms with financial returns. The questionnaire was publicly available between May 2015 and January 2016, and it was noted that the majority of responses were collected by mid-August 2015. A total of 640 responses from 22 of the 28 EU countries were registered for the lending based crowdfunding survey.¹²

Going through the questionnaire results, it is important to highlight that 548 of the respondents (86.7%) answered affirmatively when asked whether they had ever lent through a platform, with the remaining 84 saying 'No' (13.3%). This indicates that a significant majority of the respondents responded to the survey having experienced investing through a platform. The highest number of respondents who had lent via platforms came from the UK (314), Finland (92), Italy (37), Germany (27), Estonia (22), and Denmark (14).

As we look at the way these investors related to the different crowdfunding models, it is notable that a vast majority (72.5%) had only used lending based crowdfunding. As Figure 5 shows, the second most indicated behaviour was the use of lending based and equity crowdfunding (13.5%). The percentage of users that had used all models was the least of all (1.5%).



Figure 5 – Respondents' usage of crowdfunding models

Source: From responses to the FSUG survey, 2015

Respondents were also asked to self portray with regard to their experience in investing, where an experienced investor would be one who regularly invests in their own right

¹² The survey details and questionnaire in full are presented in Appendix 1.

and should therefore have a clear understanding of the risks and rewards involved. A share of 71% of the respondents classified themselves as experienced, and 28.3% as inexperienced. This self-classification allows for an assessment of the pattern of usage of crowdfunding models. This is shown in Figure 6 which shows how experienced and inexperienced investors indicated their usage.





Source: From responses to the FSUG survey, 2015

The figure above shows that experienced investors combined more models when compared to inexperienced investors. Of the experienced investors, only 70% responded as having experienced only lending based crowdfunding, while almost 15% also used the equity model. This was also the category of respondents that indicated having experienced all models, although with a very low percentage (2.1%). Of the inexperienced investors, almost 80% had only used lending based crowdfunding, and 10% had invested on equity.

This analysis can be interpreted as indicating that experienced investors were more prone to risk in using different models of crowdfunding, on the basis of their understanding of the risks and potential rewards.

Those respondents that had not yet lent through a platform were asked to indicate the most significant reasons for that decision. The highest percentage was registered for

option '*lack of regulation in P2P lending*' as being of '*very high importance*' by 34.1% of the respondents. The option '*lack of trust about the reliability of investing in P2P lending*' received a significant percentage of votes as well (26.8%). These results show that registered users of lending platforms were worried about the absence of regulation in lending based crowdfunding, deterring them away from that activity. Figure 7 below shows the way respondents classified the reasons for not yet investing through lending based crowdfunding platforms.





Source: From responses to the FSUG survey, 2015

When asked to rank influential reasons for possibly, in the future choosing to lend on these platforms rather than elsewhere, the most significant number of responses referred to the '*expectation of getting higher returns*' (50.6%), and to '*taking advantage of a new form of investment*' (23.2%), and to '*disappointment/mistrust of traditional finance*' (22%).

Those who had already done business through a platform were asked to indicate the importance of some reasons for their decision. A similar pattern of responses was registered, with the options *'higher expected financial returns'* (60.9% very high and 26.6% high) and *'taking advantage of a new form of investment (increased*

diversification)' (30.6% very high and 40% high) as the most commonly mentioned as of 'very high importance' and of 'high importance'.

When asked to identify the relevance of potential risks related to lending via crowdfunding, respondents were given four options to classify between 1 and 5 according to the importance. The option "*The borrower may prove to be fraudulent*" was ranked with the highest average of importance, getting an overall average total of 533.4 points (resulting from adding classifications for each option and dividing by the number of respondents). The other three options were ranked as follows: "*Poor returns or losses on the money lent*", "*Poor ongoing information about the borrower*", and "*The platform may prove to be fraudulent*". Analysing the classification according to the respondents' residence, we notice that respondents from France and the UK classified each risk with a lower grade comparing to the residents from the other EU Member states. This is shown in Figure 8 below. Although the order of risk perception is the same for both groups of respondents, there is a lower value for that risk in the UK and French respondents.



Figure 8 – Risk perception according to residence

Source: From responses to the FSUG survey, 2015

We carried out a Chi-square test to assess whether the results above are actually portraying an association between residence and risk perception. This test is adequate when analysing categorical or qualitative data. To apply this test, generally, data should

be of the qualitative nature; there should be two or more categories (groups) for each variable; there should be no relationship between the subjects and the variables should not be linked in any way - no more than one measurement per subject; and sample size must be large enough - expected frequencies must be ≥ 5 .

For its application in this particular case, we looked into the responses to the question "How would you rate the following risks (if any) associated with p2p lending? [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]?", for which four risks were classified: "The borrower may prove to be fraudulent"; "The platform may prove to be fraudulent"; "Poor ongoing information about the borrower"; and "Poor returns or losses on the money lent". We split the respondents into two groups according to their residence and the four options for risk perception were assessed for association (which means the test ran on a 2x4 table). There were 632 observations and only one answer was recorded per respondent.

The hypotheses set for this analysis were:

H₀: "Perception of risk #" is not associated with "country of residence"
H₁: "Perception of risk #" is associated with "country of residence"

where # is each of the four risks ranked by respondents.

We ran the test in SPSS¹³ and recorded the outputs shown in Appendix 6.¹⁴ The individual distributions of the rankings for each risk according to the residence show that there were significant differences among the respondents from both groups. The analysis allows determining whether these distributions are due to an association or not.

¹³ IBM SPSS predictive analytics software

¹⁴ Reading the results, the Pearson Chi-Square statistics were 55.44; 13.71; 31.88; and 42.12, respectively, and there were no cells with an expected less than 5 as mentioned in the footnotes of the tables in the referred Appendix.

The *p* values in each distribution were of p<0.001; p=0.008; p<0.001; and p<0.001, respectively. When the *p* value is so small that the output shows as .000 we can say that p<0.001

The degree of freedom (df) is 4, shown in the tables and resulting from df=(R-1)*(C-1)=(2-1)*(2-1)=1, where R is number of rows and C is number of columns. We decided to set a significance level of 95% which means that we aim at *p* value of 0.05. Knowing this, we need to find the critical value of the Chi-square for p = 0.05 and df = 4. Consulting the table we find that the critical value is 9.49. (http://www.reading.ac.uk/ssc/resources/Docs/Statistical%20Tables%20(title%20page).pdf)

We can now decide on whether or not to reject H_0 . There are two ways to make this judgement using the outputs: if the Pearson Chi-Square value is higher than the critical value, we reject H_0 ; if the *p* value in the analysis is lower than the *p* value set for the test, we also reject H_0 . We notice that the Pearson Chi-Square was higher in all four analysis than the critical value of 9.49. Also, in three of the cases, the p value is lower than our expected *p* value of 0.005. Therefore, under both rules we reject that there is no association between the respondents' country of residence and their perception of risks *"The borrower may prove to be fraudulent"*; *"Poor ongoing information about the borrower"*; and *"Poor returns or losses on the money lent"* In these cases, we conclude that residents from the UK and France have a statistically different perception of the three risks comparing to the residents in other EU countries.

For risk "*The platform may prove to be fraudulent*", the Pearson Chi-square value of 13.71 was the lowest but still above the critical value of 9.49. However, the p value of 0.008 is above the expected value of 0.005, so we cannot reject H_0 for certain. Therefore, the perception for this risk might not be associated with the respondents' residence.

On questions regarding regulation, 40.4% of the respondents said that platforms they used were regulated by law, while 28.7% referred the market to be self-regulated, 24.2% didn't know if there was regulation in place, and only 6.6% said there was no regulation at all. This indicator may be read as portraying how much unawareness there was of the regulatory framework, as shown in Figure 9.

Financial innovation and alternative finance: a comparative analysis of the objectives of regulation and its impact on lending based crowdfunding in France and in the UK







Source: From responses to the FSUG survey, 2015

Drilling down these regulation perception responses, we get some interesting results. We begin by distinguishing how experienced and inexperienced investors responded to this question. Figure 10 shows that experienced investors were significantly more aware of regulation being in place.



Figure 10 – Awareness of regulation in place according to investing experience

Source: From responses to the FSUG survey, 2015

However, it is important to know whether this unawareness was somewhat equally widespread or, on the contrary, the unawareness was present in a different pattern according to the respondents' residence. For this assessment, we looked into the responses to the question *"How are the platforms regulated?"* for which there were four options available (as shown in Figures 9 and 10). We grouped these four responses into two by adding together *"They are regulated by law"* and *"The market is self-regulated"*, and joining *"There is no regulation at all"* and *"I do not know"*. We excluded the empty cells. These two categories allow us to understand whether the respondents have a perception of regulation being in place for lending based crowdfunding platforms. It is clear that this analysis will not dwell into the distinction between self-regulation or regulation by law, however, the perception of the existence of regulation of some kind is already an indicator of the respondents' awareness of it. We then grouped respondents from France and the UK and compared their responses with the remaining EU Member states.

Figure 11 shows that a higher percentage of respondents from the UK and France were aware of regulation of some kind in place when compared to the respondents from other EU Member states.





Source: From responses to the FSUG survey, 2015

Continuing the assessment of the survey results, those respondents that said there was no regulation were then asked whether regulation would increase their trust in P2P lending. A staggering 87.8% responded affirmatively, versus the remaining 12.2% who said no. A similar question was asked to the respondents who said there was some kind of regulation in place. Again, a substantially high number of respondents (87.3%) said that the fact that there was regulation in place did increase their trust in P2P lending. Figure 12 shows the impact that regulation could bring (graph on the left) and actually has (graph on the right) on crowdfunding users. An interesting difference is observed when looking at the *"Yes"* responses. From the respondents who considered that there was no regulation, the majority would feel encouraged to invest higher amounts should regulation come in. In opposition, from the respondents who saw regulation already in place, the majority said that regulation had not changed how much they were willing to invest.



Figure 12 – Impact of regulation in trusting lending based crowdfunding

Source: From responses to the FSUG survey, 2015

Interview responses¹⁵

Another source used to assess whether there was a need for regulation were the different organisations consulted through interview questionnaires. On the regulators side, we interviewed the ACPR in France, and the FCA in the UK.

From the first mention to the respondents, this dissertation will refer to their responses by indicating the organisation, to avoid the repetition of the respondents' identification.

In France, the regime was created by the Ministry of Finance, as pointed out by Pierre Bienvenu, an Expert at the ACPR. The ACPR is mandated to supervise the implementation of the regulation and registering the lending based crowdfunding platforms. In a report prepared for the French President, explaining the regulatory proposal,¹⁶ the French Treasury outlines that the Government aimed promoting the development of crowdfunding as it was perceived as a relevant alternative source of finance for businesses, especially for SMEs and start-ups. In doing so, the regulation was drafted aiming at creating a framework that was adapted to this new form of finance, ensuring its growth under a secured legal background, and guaranteeing protection for investors and lenders.

Regarding the UK, Emanuel Schizas, Senior Associate at the FCA, clarified that P2P lending was already under regulation of the Office of Fair Trade (OFT). In 2014, the FCA took up the regulation of consumer credit and, consequently, the regulation on lending based crowdfunding. By establishing the regulatory regime on crowdfunding, the UK Government intended to improve access to finance for businesses and individuals.

It is important to note that the French regulation on lending based crowdfunding only caters for business-oriented purposes and for education-oriented purposes but not consumer-oriented purposes.

¹⁵ From the first mention to the respondents onwards, this dissertation will refer to their responses by indicating the organisation, to avoid the repetition of the respondents' identification. ¹⁶ See

https://www.legifrance.gouv.fr/affichTexte.do;jsessionid=ED3B50014400EA94BE3DDBE752988AEF.t pdjo05v_1?cidTexte=JORFTEXT000029008403&dateTexte=&oldAction=rechJO&categorieLien=id&id JO=JORFCONT000029008239

On the industry side, Oliver Gajda, the Executive Director of the ECN, considers there is a need for regulation on lending based crowdfunding.

Discussing these results and findings

The analysis of the responses to the FSUG survey show that lending based crowdfunding was perceived as an alternative form of financing, whether to get funding or to obtain returns for the amounts invested, confirming the theoretical framing of lending based crowdfunding under the alternative finance umbrella term.

This innovative process of matching fund seekers with fund providers has raised attention and regulators are also aware. Looking at the way the introduction of regulation would impact the behaviour of platform users, we see that respondents to the survey affirmed massively that if regulation would be in place it would encourage them to invest bringing in more trust.

The FSUG survey respondents from the two countries in the EU, France and the UK, which had already come up with regulation for lending based crowdfunding at the time of the survey (2015), had a higher perception of regulation being in place comparing to the respondents from the other EU Member states. And this has resulted in a higher number of investors, especially in the UK.

From the interview results, we verify that there are three main objectives of regulation that run in parallel: promoting competition in the financial services market; supporting the development of crowdfunding as an alternative source of financing; and ensuring a safe environment for participants, whether these are SMEs or individuals, borrowers or lenders. The views collected perfectly match the theory on regulation as laid out earlier in this dissertation.

As referred in the literature review section, the benefits of financial innovation tend to be accounted for in terms of the increase on social welfare it brings. Usually, externalities show the effects of this type of innovations and that is why regulators tend to intervene. The fact that financial innovation is perceived in parallel as a promoter of increasing welfare and a bearer of financial crisis is also a trigger for regulation.

The interviewees indicate that in developing their policies, the UK and French authorities did so with a clear objective of introducing a level playing field for incumbent firms and new entrants, these in the form of FinTech companies.

4.2.2Landscape of regulation on lending based crowdfunding in the EU

To understand the existing framework on lending based crowdfunding, this dissertation will summarise the national regulatory approaches in the EU countries, looking only to those that were in effect by the end of 2016. This summary will provide a picture of how fragmented is the playing field in terms of regulation.

National regulatory regimes in the EU

By the end of 2016, eight EU Member States had come forward with policy statements regarding lending based crowdfunding. Some of these statements were in the form of regulation, others in the form of a classification of the boundaries under which lending based crowdfunding was framed.

In Austria, the Financial Market Authority (FMA) issued a policy statement on crowdfunding. In this document, the FMA clarified its view that the activity of collecting loans under a standardised loan agreement is reserved to credit institutions, requiring a license by the FMA. This position put a halt on lending based crowdfunding activities, preserving what is known as a banking monopoly.

In France, a regulation specifically designed for crowdfunding entered into force on 1 October 2014. The regulation brought in two optional specific statuses for platforms: the CIP – *conseil en investment participatif*, and the IFP – *intermédiaire en financemenet participatif*. There are derogations to public offering rules and to the banking monopoly, regarding the investment and the lending models, respectively. For lending based crowdfunding, platform operators may choose the IFP status. These are legal entities which can be established in France or acting as branches of foreign companies, putting in contact through a website project owners and those available to finance such projects by way of loans, within conditions and limits set. To qualify as IFPs, a platform shall be registered with the ORIAS¹⁷, present certain moral guarantees,

¹⁷ Registre unique des intermédiaires en assurance, banque et finance

subscribe specific insurance policies; and abide by a good conduct code implemented by the regulation. If an IFP wishes to handle money flows, it will need to be authorised by the French Supervisor, the ACPR - Autorité de Contrôle Prudentiel et de Résoltution, and to hold a license as a payment institution under a simplified regime, with own funds of at least EUR 40.000. IFPs can receive a maximum payment amount set to EUR 3 million per month. An exception to the banking monopoly has been set, allowing for individuals to lend money to project owners via crowdfunding platforms. There are limits set: a project owner can only raise up to EUR 1 million per project; interest-free loans are capped at EUR 4.000 per year, per project and per lender, while no limitation is currently set on their duration; interest bearing loans are capped at EUR 1,000 per year, per project and per lender.

In Finland, the Crowdfunding Act, which entered into force on 1 September 2016, was brought forward to regulate these activities, covering lending and investment based crowdfunding. In general, there is a first obligation for platforms to register as a crowdfunding intermediary, with a requirement of EUR 50.000 in own funds or an insurance coverage for a minimum of EUR 1.000.000 per loss and a total of EUR 1.500.000 for all losses in a year. In addition, if the platform operator intends to receive funds, there is a further register required. On top of this requirement, client funds should be kept separately from own funds, individually itemised, and be deposited in an authorised bank. The Act has a section covering consumer protection requirements, which cover transparency, information, disclosure, and "know your costumer" (KYC) requirements.

In Germany, the Retail Investors' Protection Act (Kleinanlegerschutzgesetz) entered into force on 10 July 2015. In this market, lending based crowdfunding is performed using subordinated and profit-sharing loans¹⁸, which were previously not classified as investment products. These instruments are brought under the Retail Investors' Protection Act, avoiding possible circumvention of investors' protection. However, the

¹⁸ According to Bafin, the German Federal Financial Supervisory Authority, "Under a **profit participation loan** (*partiarisches Darlehen*), investors transfer capital to the borrowing entity for a specific purpose and receive an interest in profits in return. Under a **subordinated loan** (*Nachrangdarlehen*), if the company becomes insolvent, the investor's claim is not honoured until the claims of all of the company's creditors are satisfied." (bold in the original)

regulation introduced an exemption tailored to fit crowdfunding activities, which is only applicable when the offering is of profit participating loans, subordinated loans, or comparable investments. In these cases, there is no prospectus requirement up to a threshold of EUR 2.5 million per project; the total investment amount for each investor is limited to a maximum of EUR 10.000; if investors exceed a threshold of EUR 1.000 in each participation, they must comply with further requirements, i.e. self-exploration on wealth or income; corporations are not limited to the absolute maximum investment of EUR 10.000 per investor; online platforms need a licence under the German Trade, Commerce and Industry Regulation Act, under the German Banking Act, or the German Securities Trading Act; and there has to be a mandatory right of withdrawal.

In the Netherlands, the regulator amended, since 1 April 2016, the requirements on lending based crowdfunding. There are requirements which will allow the AFM, the Dutch Authority for the Financial Markets, to monitor the activities, the evolution, and soundness of the market. Platforms are required to be licensed by the AFM, and need to conduct an investors' test in order to assess whether the investment is appropriate for that particular consumer. These assessments have to be carried out whenever investors wish to allocate more than EUR 500. The AFM considers that individual investors should limit their investments through crowdfunding to 10% of their available assets. The investment limits applicable to the lending model mean that a retail investor can invest up to EUR 80.000.

In Portugal, a regulation on crowdfunding in general was developed in 2015. However, by the end of 2016 it had not yet come into force. According to the new legal framework, the access to the activity of equity or lending crowdfunding intermediation is made through a prior registry of the platforms operators at the CMVM – *Comissão do Mercado de Valores Mobiliários*, which is the entity responsible for the regulation and supervision of their activity. The CMVM will control the compliance with requirements for the access to the activity, the causes of rejection, the supervision and will assure the integrity of the platforms operators, deadlines, suspension, cancellation of the registry, as well as establish the annual limit for investment in crowdfunding per investor. In general terms this new crowdfunding regulation establishes several information requirements applicable to the crowdfunding beneficiaries (including transparency

obligations), limits to the amounts invested (applicable to the investors, either per project as per year) and means to prevent conflicts of interest applicable to the platforms operators. It was envisaged that the investors would be subject to the following investment limits: (i) EUR 3.000 /per offer and (ii) EUR 10.000 of total crowdfunding investment/per year. These limits are not applicable to companies and to investors with an income of EUR 100.000 or more. It would also establish a maximum limit for fundraising through crowdfunding of EUR 1 Million per each 12 months (by a single offer or by the total of offers within the European Union).

In Spain, the Promotion of Corporate Finance Act 5/2015 of 27 April ("LFFE") regulates different forms of crowdfunding. With regards to the lending based model is the other form of crowdfunding regulated under LFFE. The Spanish Stock Market Commission (CNMV) is the body in Spain competent to authorise and register crowdfunding platforms, following a mandatory and binding report by the Bank of Spain in the case of platforms that publish projects related to applications for loans, including subordinated profit-participating loans. The LFFE sets a number of requirements for an entity to obtain and maintain authorisation as a crowdfunding platform and so that it can operate in the Spanish market, covering location, capital, management body, transparency, disclosure, code of conduct, and safeguards against platform failure. On capital, the share capital fully paid up in cash should be of at least EUR 60.000 or covered through a professional liability insurance or a guarantee or other equivalent assurance that deals with responsibility for negligence in the exercise of their professional activity, with a minimum coverage of EUR 300.000 for each claim, and a total of EUR 400.000 per year for all claims, or a combination of initial capital and professional indemnity insurance.

Finally, in the United Kingdom (UK), crowdfunding became a regulated activity in 2014. The UK Financial Conduct Authority (FCA) is the regulator and supervisor of lending based platforms, which need authorisation to perform their activities in the UK. It is generally accepted that the regulatory regime for P2P platforms constitutes "light touch" regulation, which is in keeping with the UK's ambitions to encourage increased responsible SME business lending and make the UK an international hub for crowdfunding. The definition of this activity is summed up as "operating an electronic

platform in relation to lending". The rules set are applicable only when the lender is an individual, or the borrower is an individual, and either the loan is of up to GBP 25.000 or the individual is not asking for the loan for business reasons. A summary of the main rules must include the requirements for: publication of historic performance data on loans; arrangements for investor protection in the event of platform failure; capital adequacy requirements, based on the higher of a fixed requirement (GBP 20.000 rising to GBP 50.000) and a variable requirement relating to loan volumes; client money segregation; and clear, fair and not misleading communications with lenders. A platform operator will require separate FCA authorisation if it is conducting payment services. In general, client accounts for investors are not viewed as payment accounts and the account holding credit institutions are the parties with whom the Payment Services Regulation compliance obligations sit.

Interview responses

Oliver Gajda, of the ECN, mentions that this scenario is not beneficial for the development of crowdfunding in the EU, saying that "For lack of EU regulation enabling lending based crowdfunding in a harmonised way, ie not including it in EU banking and securities regulation, platform operators are reliant on national rules. National rules however differ from member state to member state, some enabling others not, combining banking rules, customer protection rules, and payment rules."

On a more national level, the FPF, a French association of platforms, shares a similar view: "we have to go toward a European status, but it's complicate as each country has its own regulation and the sector is still new so we have to learn by progressing".

The FCA mentions that there is no restriction or ban on cross-border activity. On the French side, the ACPR indicates that it would require an EU-wide regulation to allow for cross-border activities. French platforms are looking to grow their volumes and reach profitable sizes through cross-border activity. However, they face limitations due to differences in national regimes.

Discussing these results and findings

The summaries listed above show the patchwork of regulatory approaches on lending based crowdfunding in the EU, by the end of 2016. The picture shows that there are

significant differences in the way regulators see the activity and how they aimed to intervene. However, it seems that in all cases the rationale was to foster the growth of these activities while protecting the investors, when these are individuals/consumers. The measures to promote crowdfunding include the creation of a special status, the introduction of a lighter touch regime, or the removal of the banking monopoly. On the consumer protection side, most regulators introduced requirements on disclosure, transparency, and rights to withdrawal. Some regulators went further and introduced limits to investment, whether it was on a per project basis, a per year basis, or as a percentage of the yearly available assets.

These differences are, however, hampering the potential for a cross-border growth of crowdfunding. It seems clear that, with such a patchwork of national rules, platform operators of an internet based activity will face a huge task of assessing if the activity is possible, if there is regulation, what are the rules, and which clients are approachable.

4.2.3Commonalities and contrasts between the regulation in France and in the UK

From this point forward, this dissertation will narrow its scope of analysis, focusing on two jurisdictions – the UK and France. Taking into account that there is limited data available that could be used in a thorough assessment of the issues raised in this dissertation, the decision to narrow to those two EU Member states was considered to be adequate. The selection of the UK and France was based firstly on the fact that these two MS were the first ones to bring specific regulation forward, both in 2014, and secondly, there are significant differences in the way the policies are set in these countries, thus being relevant for this study.

To allow for a better comparison of the two approaches, a summary is presented in Table 3. In addition, to understand some of the implications of these differences, we analyse further responses to the interview questionnaires.

Table 3 - Comparison between regulation in France and in the UK

	France	UK		
	Ordonnance n° 2014-559 du 30 mai 2014 relative au financement participatif	FCA 2014/13		
Entry into force	1 October 2014	1 April 2014		
Scope of lenders and borrowers	Consumers-to- Businesses; Business-to-business; Consumer- to-consumer (only if loan application for educational project)	Consumer-to-Consumer; Business to consumer; Consumer-to –Business; Business-to-business if the borrower is a sole trader or a partnership consisting of two or three persons or an unincorporated body of persons and the loan amount does not exceed £25,000.		
Authorisation or Registration	Registration with ORIAS (association in charge of a single register of finance intermediaries). The ORIAS has to check if the platform responds to the legal requirement (knowledge and competence, duty and professional indemnity insurance). Checks are carried out on a declarative basis. Platforms regulated by the ACPR and supervised by the DGCCRF for consumer protection purposes. No ex-ante authorisation required.	Authorisation by FCA. Platforms may also need other permissions, depending upon the activities they undertake		
Money handling	Platforms may provide payment services and, when doing so, must follow the specific rules applying to their other status allowing for such a service (credit institution, payment institution, electronic money institution).	Where firms are responsible for client money, they are subject to rules in the FCA Client Assets Sourcebook (CASS), especially the client money rules (CASS 7), which ensure adequate protection of client money.		
Minimum capital requirements	None (but have to take professional indemnity insurance).	€50,000 or a percentage of loaned funds – whichever is higher		
Business continuity requirements	IFP must define and organize any arrangements to ensure business continuity, including in the event of the failure of the platform.	Continuity arrangements need to be in place so existing loans can be administered even in the event of a firm running a platform failing.		
Disclosure requirementsDisclosure requirements imposed on the platform.		Where creditor does not lend in the course of business and borrowers are consumers: platform must provide		

		adequate pre-contractual explanation to the borrower. In addition, all communications by the platform must meet FCA requirements to be clear, fair and not misleading. Where the creditor lends in the course of business the full protections required by the Credit Consumer Act and FCA rules apply.	
Information requirements & risk warnings by platforms	Warn the lender about the risks an provide to lenders: with tools to assess the possible loan amount they can afford given their income and expenses; the relevant elements enabling them to assess the economic viability of the project, in particular the business plan.	Information on the platform and its services, including: contact details, a statement that the firm is authorised, details of what performance reports the client can expect, and the firm's conflicts of interest policy. General description of the nature and risks of a product, in sufficient detail so the client can take investment decisions on an informed basis. Platform must send a statement at least once a year of the investments and client money held by the firm for him.	
Due diligence	Platforms must perform due diligence in selecting the projects and disclose the pre-determined criteria used in the selection process.	No obligation on what due diligence procedures must be followed. Platforms must disclose the nature of their service and appropriate information about it. Disclose sufficient information about the nature of service so investors understand what due diligence is undertaken and the need to conduct additional due diligence of their own before investing.	
Type of loans	Loan cannot exceed 1 M€, with a fixed rate and a maximum duration of 7 years. Only natural persons are allowed to lend on an IFP platform, with a maximal amount of 1,000 € per project.	All types of loans, including secured and unsecured loans, loans to businesses and loans to consumers.	
Size of loans	€1 million per year per project (duration up to 7 years).	No maximum	
Maximum investable amounts	Lender can finance up to $\notin 1,000$ per project if financing is in the form of a loan with interest and up to $\notin 4,000$ per project for an interest free loan.	No maximum	

Source: Adapted from the EC Report on Crowdfunding

The table shows a selection of policy choices taken by the UK FCA and the ACPR in developing their regulation. These items were chosen to show the differences in policies between the two frontrunners in regulating lending based crowdfunding in the EU. While the final three items reflect the requirements on the loans themselves, the other items are requirements on the platforms and their operation.

On the platform operators, in France there is a requirement for registration, in the UK an authorisation requirement. There are no capital requirements in France, whereas in the UK there is a minimum limit of GBP 50.000 or a percentage of loans. In both cases, there are requirements of insurance policies to safeguard failures. These measures make it more burdensome for platforms to operate in the UK as authorisation and capital requirements are more costly.

On the other hand, looking at the limits established in France regarding loan types, sizes, and amounts, which are not imposed in the UK, there is a restrictive approach with regard to the activity itself. In principle, these measures are brought forward in order to protect individual lenders and borrowers.

Interview responses

On this particular point, the FPF considers that setting such limits is beneficial as it allows for a diversification of investors through different projects and platforms.

For Oliver Gajda (ECN), setting authorisation or registration requirements can be positive as they enhance the safeguards of the sector, so long they remain rather low on the cost to enter the market. On the money handling requirements, the ECN agrees that these are positive as long as there are third parties available and providing services at an affordable price. A similar view of positive impact falls on the minimum capital requirements, again with the assurance of proportionality. On the setting of limits to loans, Oliver Gajda sees these as a limitation on the growth of the industry, especially due to the cost factor. As for the limits on individual amounts for lenders, the ECN supports that individual limits should be set according to wealth capacity and not generic limits. Finally, on due diligence requirements, the ECN would prefer setting minimum requirements due to their cost implications.

4.2.4Exploring the rationale for the key choices in both cases

Lending based crowdfunding is an activity that is regulated in different ways in France and in the UK. A fundamental distinction is that this form of financing is available for any business relation in the UK, whether it is business to business, consumer to business, consumer to consumer. In France, this is limited to business oriented activities or educational purposes. To explore the rationale for the different choices taken in these two countries, we look at the interview responses and an output of the survey by the FSUG.

Interview responses

The French approach requires a registration of platforms under the ORIAS (French register of financial intermediaries), with a specific status of intermediary on participative financing (IFP). In order to obtain such a registration, platforms are subject to a check of legal criteria needed to carry out IFP activities in France (fitness and propriety of the general manager, civil insurance protection, and the IFP must be located in France). In the UK, there is an authorisation requirement, conducted by the FCA. According to the FCA, such requirements follow the same reasoning as applied for the requirements in any other sector of financial services. The thresholds already established were seen as sufficiently broad to include all business models. The authorisation imposition was set in two steps: firstly, before 1 April 2016, firms already operating were given time to adjust and require a full authorisation; after 1 April 2016, all firms were expected to apply for a full authorisation. The FCA acknowledged there would be some difficulties for platforms to carry out this process and thus failing firms were given a second chance.

Both regulatory approaches establish money handling restrictions in order to maintain a clear distinction of how the funds owners are identified, with a view to avoid misuse of lenders' and borrowers' funds by platform operators, as portrayed in the fraud example in China. However, in the UK money handling requirements follow a more expensive process. As indicated by Emanuel Schizas, "*This sector is doing investment sector business thus the CASS 7 was applied, which is a rigorous expensive and complex.* Money segregation requirements were imposed, added of primary pooling event

safeguards (this was criticised by firms). The amounts involved in P2P justified such application: 5 Bn GBP outstanding, 100 M GBP in client money".

On the establishment of capital requirements, the French regulation does not foresee such measures. As mentioned by the ACPR, since the activities of lending based crowdfunding platforms do not involve credit risk just the matching of borrowers and lenders, those requirements were not considered necessary. In opposition, the UK's regulation does impose such requirements. To the FCA, this option was taken to maintain similarity in the way financial services are regulated, therefore these measures somewhat mirror what was already in place for other investment firms. Nevertheless, these requirements are balanced according to the amounts held by platforms, aiming to keep the appropriateness in such requirements. The aim was also to make sure that there are enough funds available in case a resolution scenario arises.

Looking at the limits on the total amounts of loans and the individual mounts that each lender may provide, the French regulation introduced such requirements, with a maximum amount of 1 million Euros for a single loan, and a limit of 2.000 Euros for individual lenders (this limit was raised in 2016 from an initial limit of 1.000 Euros). The aim is to limit the risk for individual lenders while engaging in lending to businesses through an alternative form of funding which is still in its early years.

A significantly important measure to any regulatory approach on financial services refers to due diligence processes. For lending based crowdfunding this is even more relevant as platforms will publicise projects seeking funding to a variety of potential lenders, which include non-experienced investors. Due diligence measures would allow ensuring that those projects are credible, legal and credit worthy, while maintaining lenders aware of the risk of losing their capital, in part or integrally. The French regulation requires platforms to have due diligence procedures and inform how they select the projects. In the UK's approach, there are high level requirements for firms to explain which measures they put in place. The FCA refers that this approach to maintain soft requirements was taken to remain consistent to what was done in other sectors, to allow the sector to explore different business models, not to limit in advance, staying away from strict detailed requirements. In conclusion, the FCA's expectations were that the lending based crowdfunding industry could grow under this framework, anticipating

the development of new business models and that the investors would typically remain sophisticated and high earning. One issue that raises concerns is the potential for crowdfunding platforms to engage in activities and structure their performance very similarly to traditional funding firms. This scenario would open a window for regulatory arbitrage, which is an undesirable outcome. The FCA is conducting an ongoing surveillance of crowdfunding activities and remains vigilant.

From the platforms point of view, when going through the type of measures introduced, the ECN considers that the requirements on authorization or registration are positive so long they are not too burdensome, as they allow for the safeguards of the sector. On restricting money handling activities, they also agree that those should be carried out by authorized agents. On the capital requirements, there is also agreement that these requirements push platform operators to become professionalized, but again these requirements should not be set at a high value which would become prohibitive. On the limits on loan values, the ECN considers that these are limiting scaling the activity. The ECN adds that introducing limits for lenders investment values is beneficial but can also limit the scalability. They support to link them to wealth or assets, rather than setting a generic value.

Survey results

On the way regulation is developed, respondents to the FSUG survey were asked whether there were restrictions on how much they could lend. While 77.5% said there were no restrictions (which is a reflection of the fact that there were around 60% of respondents from the UK), 7.5% said there were indeed restrictions. From this sub-set of respondents, 53.1% considered that these restrictions were not useful.

Discussing these findings

The objectives for bringing up regulation on lending based crowdfunding in France and in the UK were similar. The goal was to ensure there are safeguards for participants, a level playing field in the financial services' sector, guarantee proportionality in the requirements brought forward for the firms, and sustain growth in this new form of finance. However, there are significant differences in the way both regulatory frameworks were designed. Looking at the requirements for platforms, in France, a

lighter touch regime has been designed for firms, where platforms must be registered at the ACPR but do not need authorisation and do not face minimum capital requirements. In the UK, platforms need now a full licence by the FCA to operate and have to meet the minimum capital requirements. On the other hand, the French regulation does not allow for all types of lending, contrasting with the UK regime. These differences in the approach taken aim at ensuring market growth and safeguard stability. The UK approach seems to follow a view of reducing costs as they might be deterrents to enter in this market. Reducing entry barriers is a positive impulse for innovative companies and business models.

On the lenders side, in France there are limits for the loan amounts and the amounts each individual lender may place in each project. This is not in place in the UK. Both regimes have requirements on disclosure, on continuity plans, and a light requirement on due diligence. On money handling, the UK regime is stricter, imposing a costly process for platforms to comply with. All these measures envisage protecting participants, especially individual investors as mentioned by the French supervisor. This is aligned with the theory on regulation which refers the aims of containing market failures to a minimum.

Regulators will need to continue monitoring the development of this innovation since, as the studies show, a "one size fits all" approach may not be effective. This will probably be the case for crowdfunding, where new variants are surging which will pose a challenge for regulation. As the theory already highlighted, financial innovation will find ways to circumvent regulation that might be poorly designed and costly.

4.3 The impact of regulation on the lending based crowdfunding industry

To assess the way this industry has developed in Europe and how regulation in France and in the UK has impacted those markets, this dissertation resorts to the results from the FSUG survey (2015), interview responses to the questionnaires designed for this work, and to data collected from the database available on TAB, previously called Crowdsurfer.

Survey results

We already looked at how the participants in lending based crowdfunding, in the EU, perceived the existence of regulation back in 2015. There was a clear distinction between respondents from the UK and France comparing to the other EU residents, as a higher percentage of respondents were aware of regulation. However, it is important to understand if this pattern is indicating an association statistically significant. To that end, we assess whether there is an association between the respondents' country of residence and their awareness of regulation. To do so, this dissertation applies the Chi-square test of statistical significance.

For its application in this particular case, we looked into the responses to the question "*How are the platforms regulated*?" for which there were four options available (as shown in Figure 5). We grouped these four responses into two by adding "*They are regulated by law*" and "*The market is self-regulated*", and joining "*There is no regulation at all*" and "*I do not know*". These two categories allow us to understand whether the respondents have a perception of regulation being in place for lending based crowdfunding platforms. We excluded the empty cells to allow for a more robust test. It is clear that this analysis will not dwell into the distinction between self-regulation or regulation by law, however, the perception of the existence of regulation of some kind is already an indicator of the respondents' awareness of it.

As explained, data was expressed under two variables for residence and two variables for the perception of regulation (which means the test ran on a 2x2 table). There were 623 observations and only one answer was recorded per respondent.

The hypotheses set for this analysis were:

H₀: "Perception of regulation" is not associated with "country of residence"

H₁: "Perception of regulation" is associated with "country of residence"

To begin the analysis, we look at how the variables are distributed. This is shown in Figure 13 below which shows there is a significant difference in the way the two options "*Don't know/No regulation*" and "*Self regulated/Regulated by law*" are distributed among the respondents, when grouped as residents in UK + France and in any other EU Member state. This is already a sign of the possibility of an association between both variables.



Figure 13 – Distribution of variables under the Chi-square analysis

Source: SPSS output

Running the test under $SPSS^{19}$ delivered the results shown in Figure 14. This is a summary of the results which are presented in full in Appendix 7.²⁰

Chi-Square Tests					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1-sided)
Pearson Chi-Square	15,550ª	1	,000		
Continuity Correction ^b	14,859	1	,000		
Likelihood Ratio	15,390	1	,000		
Fisher's Exact Test				,000	,000
N of Valid Cases	623	-			

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 76,74.

b. Computed only for a 2x2 table Source: SPSS output

We can now decide on whether or not to reject H_0 . There are two ways to make this judgement using the output in Figure 7: if the Pearson Chi-Square value is higher than the critical value, we reject H_0 ; if the *p* value in the analysis is lower than the *p* value set

¹⁹ IBM SPSS predictive analytics software

²⁰ Reading the results shown in Figure 10, the Pearson Chi-Square statistic is 15.550, and there were no cells with an expected less than 5 as mentioned in the footnote of the table.

The degree of freedom (df) is 1, shown in the table and resulting from df=(R-1)*(C-1)=(2-1)*(2-1)=1, where R is number of rows and C is number of columns. We decided to set a significance level of 95% which means that we aim at *p* value of 0.05. Knowing this, we need to find the critical value of the Chi-square for *p* = 0.05 and *df* = 1. Consulting the table we find that the critical value is 3.84.

for the test, we also reject H₀. We notice that the Pearson Chi-Square is 15.550, higher than the critical value of 3.841. The corresponding p value is so small that the output shows as .000 so we can say that p<0.001 which is lower than our expected p value of 0.005. Therefore, under both rules we reject that there is no association between the respondents' country of residence and their awareness of regulation.

We confirmed that respondents from the UK and France had a higher perception of regulation being in place comparing to residents in other EU Member states. The Chisquare test results allow us to infer that there was an impact of regulation in this perception. This must be because, at the time of the survey, both the UK and France had indeed put in place regulatory regimes which meant that platform users would be aware of it.

A similar assessment is carried out to see if there is a dependence on the category of experienced investor or not. The hypotheses set for this analysis were:

H₀: "Perception of regulation" is not associated with "investing experience"

H₁: "Perception of regulation" is associated with "investing experience".

We ran the test in SPSS for 629 observations and recorded the outputs shown in Appendix $7.^{21}$

We can now decide on whether or not to reject H_0 . There are two ways to make this judgement using the output: if the Pearson Chi-Square value is higher than the critical value, we reject H_0 ; if the *p* value in the analysis is lower than the *p* value set for the test, we also reject H_0 . We notice that the Pearson Chi-Square is 13.199, higher than the critical value of 7.81. The corresponding *p* value is.0.004, which is lower than our expected *p* value of 0.005. Therefore, under both rules we reject that there is no association between the respondents' investing experience and their awareness of regulation. We now confirm that respondents that self-classified as experienced

²¹ Reading the results, the Pearson Chi-Square statistic was 13.199, and there were no cells with an expected less than 5 as mentioned in the footnote of the table.

The degrees of freedom (df) are 3, shown in the table and resulting from df=(R-1)*(C-1)=(2-1)*(4-1)=1, where R is number of rows and C is number of columns. We decided to set a significance level of 95% which means that we aim at *p* value of 0.05. Knowing this, we need to find the critical value of the Chi-square for p = 0.05 and df = 3. Consulting the table we find that the critical value is 7.81.

invetsors had a higher perception of regulation being in place comparing to residents in other EU Member states. The Chi-square test results allow us to infer that there was an impact of regulation in this perception.

Interview responses

In the UK, the lending based crowdfunding market has grown consistently. The regulatory intervention allowed for a more secure landscape for participants. In a surprising decision, the UK Government allowed for fiscal incentives through platforms through the placement of Innovative Finance Individual Savings Account (IFISA). This is only available to fully authorised firms so this might be a trigger for the industry to seek that status. It is important to understand that this step entails some risks. As the FCA points out, there is a risk that lenders may perceive that the projects are endorsed by the Government as lending based crowdfunding is not a deposit taking activity (promoting savings) but now allows for tax benefits under the ISA format. Also in the UK, the FCA indicates that there is growing intervention of institutional participants in a market that was mainly for retail investors. This shift may change the landscape and regulation might need to be adjusted accordingly.

The UK regulation imposing the authorisation process has allowed for the FCA to have a chance to analyze platforms own requirements on business and consumer protection, while business models have grown to become more sustainable. For the traditional finance sector players, banks might start seeing lending based crowdfunding platforms as big competition once the big platforms start selling IFISAs. Some banks are developing partnerships with platforms allowing for the pooling of some loan applications. In 2016, the Government introduced regulation to require (big) firms to refer pooled loan applicants to platforms (not necessarily crowdfunding) where alternative funding sources could come in. There are safeguards in place, however the quality of borrowers varies significantly between platforms. There is a potential for crowdfunding platforms to become a secondary market where even smaller banks have incentives to offload their riskier businesses to. The UK market is also seeing a growing interest in property crowdfunding.

In France, the number of platforms has increased since the introduction of regulation. According to the ACPR "The French regulation promotes a proportionate approach for crowdfunding (direct matching of fund-seeker and fund-provider through a webplatform). This regime has been introduced in 2014 and subsequently revised in 2016 for adapting some rules after two years of concrete experience. According to publiclyavailable statistics, France counts around one hundred of crowdfunding platforms and is now the 2nd largest crowdfunding market in Europe".²² Lending based crowdfunding business models are changing rapidly. For the ACPR, there is evidence that the business model of lending platforms are currently turning into marketplace lending platforms, where loans can be purchased or financed both by retail and institutional investors. The ACPR will continue monitoring these developments. The ACPR believes that regulation has allowed for an independent risk assessment by lenders, due to the transparency rules. On the other spectrum, borrowers now have a quicker response comparing to banks, however lending based crowdfunding might be more expensive. The ACPR is positive that regulation has introduced a level playing field among competitors (platform operators and traditional finance), raising confidence on the sector and helping to restructure it. As for traditional financing, it still sees crowdfunding as a marginal competitor, and there are very few partnerships established.

At the industry level in France, the FPF considers that the introduction of regulation allowed for lending based crowdfunding to become legally available. This happens because prior to the specific regulation created in October 2014 for crowdlending platforms (the status of "intermédiaire en financement participative" regulated by the ACPR) individuals were not allowed to borrow to an enterprise (they needed to have a bank agreement). Thanks to the specific regime, a breach in the bank monopoly was achieved, enabling individuals to lend to enterprises through crowdfunding platforms.

On a European spectrum, the ECN considers that the requirement for platforms to have a license similar to a bank has limited the growth of crowdfunding in the markets where this is applicable. In addition, Oliver Gajda mentions that the setting of thresholds for retail investors has also limited the scalability of the business.

²² Cambridge Center for Alternative Finance, University of Cambridge (2016) "Sustaining Momentum: the second European alternative finance industry report"

Data on the lending based crowdfuding market

To complement this analysis, this dissertation collected data from one of the few recognised sources for crowdfunding analysis – TAB, previously called Crowdsurfer (*www.insidetab.io*/ previously *www.crowdsurfer.com*). This source has been used by the European Commission while developing its work on crowdfunding.

To provide a picture on the evolution of the lending based crowdfunding market, data was collected on monthly totals for the number of campaigns and total amount raised for the EU, the UK, and France. The time period covers January 2012 to December 2016. We already saw the evolution of the total amount of lending based crowdfunding in the EU, in the period 2012-2016, in Figure 3.

In 2014, when the UK and France regulators announced their intention to regulate, the amounts and campaigns grew on a steeper pace. To have an understanding of how the French and UK markets evolved, Figures 15 and 16 show the trend for lending based crowdfunding in those MS. However, there is a lack of data for France in the period 2012-2013, therefore, the chart starts on January 2014.





Source: Crowdsurfer/TAB dashboard






Source: Crowdsurfer/TAB dashboard

The trend for the UK market is very similar to the global EU market trend. This shows the high contribution of the UK crowdfunding industry in the EU. In fact, this is evidence for the argument that the UK market is the most advanced and represents the highest share in the EU total. Figure 17 depicts how much the UK market actually took of the total EU market share, in terms of amounts raised.





Source: Crowdsurfer/TAB dashboard

It can be seen that the UK's market share is diminishing since 2014, but is still of a significance, taking up 87% in December 2016. This share reached its highest value in November 2012, with 98.1%. The lowest value was registered in April 2016, with 76.6%. This was the point when the French share reached its highest value, with 10.9%, with the impact of the peek value shown in Figure 11. The French market share is growing at a slow pace, since mid-2015. The remaining MS are also growing their combined market share. However this is at a less regular pace with ups and downs in between. The highest share was on August 2016, with 16.9%.

Discussing these results and findings

The introduction of regulation in France and in the UK has impacted positively their respective markets. The users of crowdfunding platforms from these two countries that responded to the FSUG survey in 2015 showed a higher perception of regulation when compared to the remaining respondents.

The data collected from TAB portrays a growing industry in the EU overall and more specifically in the UK and in France. These two EU member states brought in regulation in 2014 and since then lending based crowdfunding has grown in amounts lent and campaigns funded.

The interviewees confirm the positive impact of regulation. In France, the ACPR registered a growth in the number of platforms. In the UK, the FCA considers that imposing the authorisation process is a means to assess platforms own requirements on business and consumer protection, and safeguard the whole industry. It is also a trigger for business models to have grown to become more sustainable. From the industry side, the ECN points out that introducing regulation has a positive effect as it brings in safeguards for the sector.

These sources corroborate what the theory indicated in that regulation can have a positive impact on a given financial innovation so long it is proportionate, allowing for a sound industry, encouraging investment and further innovation, while guaranteeing that participants have sufficient safeguards.

4.4 Robustness check – what is (really) happening in the EU

To further confirm the research findings listed in the previous sections of this chapter, this dissertation includes an analysis to the data from a public consultation by the EC. This analysis will allow increasing the robustness of the research carried out by adding the results from an independent source. This new and very recent data is not in any way contaminated by the research methodology adopted in this dissertation.

The EC collected input, in 2017, from different stakeholders on the future of FinTech in the EU, including how regulation and supervision impacted the industry. The public consultation addressed crowdfunding with the following three questions (EC Consultation on FinTech; 9):

1.6. Are national regulatory regimes for crowdfunding in Europe impacting on the development of crowdfunding? In what way? What are the critical components of those regimes?

1.7. How can the Commission support further development of FinTech solutions in the field of non-bank financing, i.e. peer-to-peer/marketplace lending, crowdfunding, invoice and supply chain finance?

1.8. What minimum level of transparency should be imposed on fund-raisers and platforms? Are self-regulatory initiatives (as promoted by some industry associations and individual platforms) sufficient?

The EC received 226 responses to the consultation²³. This dissertation goes through the responses to the first question above as published on the EC's website. In particular, this dissertation looks at whether or not respondents perceive there to be an impact of regulation on crowdfunding as this matches research question 2.

On the basis of the 177 responses published on the website, this dissertation begins by characterising the respondents. Figure 18 shows the geographical distribution of respondents. Belgium, the UK, and France were the most represented EU Member States, with 40, 32, and 20 respondents respectively.

²³ <u>https://ec.europa.eu/info/finance-consultations-2017-FinTech_en#contributions</u>

Vinay Pranjivan



Figure 18 - Country distribution of respondents to the EC consultation on FinTech

Source: Results from the EC public consultation on FinTech

Looking at the type of respondents, the vast majority of the respondents were companies or organisations, taking up 81% of the total, while public authorities or international organisations represented 14% and 5% were private individuals. To have a view of the company types, Figure 19 shows the way respondents were classified.





Source: Results from the EC public consultation on FinTech

As shown, around 37% of the respondents were industry associations, and 27% were companies, SMEs, micro enterprises or sole traders. The significant amount of respondents without any answer should be linked with the individual responses, as mentioned earlier.

From the respondents which identified their type of activities, it is relevant to note how many of the companies have businesses that may be related to FinTech, directly or indirectly. This is shown in Figure 20. It is important to keep in mind that some companies' business revolves around more than one type of activity. As the figure shows, 52 companies have their activities related to banking, 32 to asset management, and 31 to insurance, 28 were payment services, and 27 were related to financial markets infrastructure. Companies that identified themselves as directly related to Crowdfunding were 24, while 32 were identified as technology providers. Finally, 11 were trading platforms.





Source: Results from the EC public consultation on FinTech

Analysing question 1.6 of the consultation, the first part of the question refers to whether there is an impact of national regulatory regimes in Europe on the development of crowdfunding. Figure 21 shows the distribution of the responses. The majority of the respondents did not have a view or did not provide it (59%). Nevertheless, it is notable that 39% of the respondents consider there is an impact, in opposition to only 3% who consider there is not.



Figure 21 - Responses to the question 1.6 of the EC consultation on FinTech on the impact of regulation on crowdfunding

Source: Results from the EC public consultation on FinTech

Excluding those respondents who didn't give an answer, we grouped the respondents splitting them into two groups: those from the eight EU Member states with a regulatory stance on lending based crowdfunding (Austria, Finland, France, Germany, the Netherlands, Portugal, Spain, and the UK); and the remaining respondents. Figure 22 shows the distribution of the responses.





Source: Results from the EC public consultation on FinTech

These results confirm that the introduction of regulation on crowdfunding in Europe has had an impact on the development of the industry. Moreover, they show that there is a higher acknowledgement of the impact in those countries where regulation is already

envisaged or in place. It is also valuable to see how industry related respondents perceive the impact of regulation. Figure 23 below shows that there is a higher perception of an impact by Industry associations and Consultancy/law firms.

Figure 23 - Distribution of responses according to respondents type, business related



Source: Results from the EC public consultation on FinTech

5. Conclusions

This dissertation aimed to assess what were the goals in regulating a new form of funding, lending based crowdfunding, and what was the impact of introducing that regulation. Crowdfunding is a process innovation, in the sense advocated by Lerner and Tufano (2011), and is geared into the distribution channel for funding, thus classifiable as financial innovation. Considering that it is typically provided through an online platform, matching fund seekers to fund contributors, making use of information technology, it falls also under the FinTech umbrella, as defined by Lacasse *et al.* (2016). This dissertation focuses on lending based crowdfunding as this is the most representative model in the EU.

To respond to the questions identified, we resorted to a mixed methods approach as a research strategy. In doing so, we developed a qualitative analysis for which we developed interview questionnaires that were sent to regulators, platform associations, and platform operators; and looked into the regulatory regimes of the eight EU member states that had brought in regulation on lending based crowdfunding by the end of 2016. A more in-depth examination was carried out for the UK and French regulations, both introduced in 2014. For a quantitative analysis, we used data from a survey carried out by the FSUG in 2015, data collected from TAB/Crowdsurfer's database, and the recent output of data from the responses to the EC public consultation on FinTech, of 2017.

The interviews and the in-depth review of regulation in the UK and France confirm the main objectives of regulation as outlined in the state of the art analysis (responding to our first main research question). One was to promote growth in crowdfunding activities, seen as an alternative to traditional funding and which responds to the credit crunch faced especially by SMEs and individuals after the financial crisis of 2008. A second objective is to maintain financial stability and the soundness of markets. And the third one is to ensure safety for participants in this market, especially for SMEs and individuals. To that end, combining what Hippel (2005) and Avgouleas (2015) referred, and what the OECD recommends, regulators envisaged a proportionate and balanced framework that would encourage new entrants in the funding markets, promoting innovation with a light touch requirements approach.

However, there are significant differences in the way regulators have intervened in France and in the UK. While the UK allows for a larger variety of funding models, catering for a growth in business models, the French approach limits the funding models. On the other hand, the UK requirements are heavier on the platforms, as authorisation is compulsory for operating a platform, which has to be supported on meeting minimum capital requirements, and a strict process for money handling. In France, there are no capital requirements, only registration is required, and money handling follows a light touch requirement. In protecting participants, the most remarking difference is that there are no limits on loan amounts in the UK, opposing to limits set in France (thus responding to our sub-questions of identifying commonalities and differences in the regulation in France and in the UK, and the rationale behind these choices).

For the analysis of the impact of regulation (our second main research question), the assessment of the results from the FSUG survey, from 2015, indicates that this phenomenon of financial innovation has the potential to become an alternative source of financing supported on its digital nature (Sharma, 2015). These results show that lending based crowdfunding is growing, more so in the UK. Registered users of crowdfunding platforms expressed their supporting view that introducing and announcing regulation would bring trust into the crowdfunding market, encouraging regulators in conducting policy making in a positive manner, towards a balance of promoting innovation along with ensuring safeguards for participants, especially individual investors and contributors. Of these respondents, those from the UK and France were already more aware of regulation at the time of the survey comparing to the other respondents. Finally, respondents to the interview questionnaires coming from the industry side confirm that they welcome regulation and that it has positively impacted on lending based crowdfunding activities. The validity of these findings is corroborated by the recent data from the EC consultation on FinTech, which show that there is widespread view from market participants that there is an impact of regulation.

These conclusions derive from a deep and wide research effort carried out on the back of a mixed methods approach. This choice of methodology aimed at guaranteeing a wide range of sources for the sake of cross-validation. A qualitative review of regulation

and a contribution from regulators and the industry allowed for a direct view of what were the objectives set out while regulators were designing their framework. The quantitative analysis contributed with a view of the perception in the early days of regulation, from the FSUG survey of 2015, the development of the market, with the data from the TAB/Crowdsurfer database, and finally the robustness check with the very recent results from the EC consultation on FinTech, of 2017. The application of descriptive statistical analysis and of cross-tabulation techniques (Chi-square test), adequate for categorical variables, ensures a robust interpretation of the data.

Nevertheless, there are research limitations. These are mainly due to the lack of standardised data across Europe on the evolution of platforms, their business models, the amounts lent, the number of campaigns, successful or not, the default rates, among others. In addition, regulation is still very recent in most countries. Its impact is therefore still to be seen.

This dissertation points out the need for an EU-wide regulatory framework for crowdfunding in general. The review of national regimes highlights a patchwork of regimes in the EU (responding to our sub-question of knowing how lending based crowdfunding is regulated in the EU). As the interviewees from the industry point out, the differences in national regimes, where any, are hampering the growth of crowdfunding. Being an internet based activity, the fact that platforms are not able to easily provide their services cross-border is deterring them to invest and perform at a higher level. This dissertation hopes to contribute to this discussion by showing that there are positive impacts in introducing regulation, so there is a case for a call for EU-wide regulation, even though the amounts originated via crowdfunding are still very small in the majority of EU member states. In doing so, a possible route is to identify best practices in the different regulatory stances, to best fit a harmonised framework. It might be the case that by introducing such a harmonised regulatory regime in the EU will foster a quicker and safer development of crowdfunding, contributing to a stronger Single Market for digital services.

This particular aspect of cross-border activities of crowdfunding is currently under scrutiny by European authorities, national regulators, and market participants. In a preliminary analysis of the responses to the EC Consultation on FinTech, Commission

Services²⁴ indicated that respondents considered that national regimes were hindering cross-border activities and there is a need for a harmonised EU-wide framework. As this is a substantial topic in its magnitude and it is currently on the European Commission's table, to study it requires an autonomous and in-depth research having in mind the consolidation of the common market for services and the evolution of the digital economy.

Another avenue for future research is the future of regulation. There has to be a link with the ever evolving nature of the markets under its eyes. FinTech is here to stay therefore regulation is needed to provide a level playing field for participants, promote competition in the market, guarantee that investors are protected with sound safeguards, and ensure there is stability in those markets. The influence of technology will have its effect in regulation in that FinTech brings in RegTech²⁵. This new trend is the result of applying technology to facilitate regulatory activities. In the UK, the FCA issued a public consultation on the topic, in November 2015, and in the US several firms are already developing solutions to foster the use of technology in regulatory business.

RegTech is considered a subgroup of FinTech and is described as technology based solutions applied by companies in all financial sectors to ensure their compliance with regulatory requirements (Larsen and Gilani, 2017). RegTech will allow firms to face the considerably burdensome requirements, especially for new entrants. Walking hand in hand with innovation of financial services, these solutions will promote the use of similar solutions, such as machine learning, blockchain technology, and cloud computing, to reduce the costs and structure to gather which regulations are applicable, which requirements are in place and how to fulfil them.

Another potential direction for research will be to develop a taxonomy of regional approaches to regulating innovation in financial services, contributing to an assessment of the differences and commonalities across regions in the Globe.

²⁴ Presented at the FSUG meeting of 26 September 2017.

²⁵ This term became commonly referred following its usage in the UK, as seen in a 2015 report by the Government Office for Science called FinTech futures: the UK as a world leader in financial technologies. See <u>https://www.gov.uk/government/publications/FinTech-blackett-review</u>. It is also used by the FCA in its Project Innovate. See https://www.fca.org.uk/firms/fca-innovate

Finally, the digitalisation of financial services may bring with it an undesirable peril in the form of enhancing financial exclusion. On the back of the deep usage of data for profiling, financial services providers may turn away segments of consumers which are identified as less profitable or non-proficient in this new age of technology based services.

References

Aghion, P., Akcigit, U., and Howitt, P., 2013. What do we learn from Schumpeterian growth theory? *National Bureau of Economic Research*, No. w18824.

Apergis, N., Fafaliou, I., and Polemis, M. L., 2015. New evidence on assessing the level of competition in the European Union banking sector: A panel data approach. *International Business Review*, 25 (2016): 395-407.

Aveni, T., Qu, C., Hsu, K., Zhangs, A., Lei, X., and Hemrika, L., 2015. New Insights Into An Evolving P2P Lending Indu try: how shifts in roles and risk are shaping the industry. *positiveplanetchina.org*

Avgouleas, E. (2015). Regulating Financial Innovation: A Multifaceted Challenge to Financial Stability, Consumer Protection, and Growth. *The Oxford Handbook of Financial Regulation*, Oxford University Press, 22: 659-689.

Barrel, R., and Davis, E. P., 2008. The evolution of the financial crisis 2007-08. *National Institute Economic Review*, 206: 5-14.

Beck, T., Chen, T., Lin, C., and Song, F., 2016. Financial innovation: The bright and the dark sides. *Journal of Banking and Finance*, 72: 28-51.

Belleflamme, P., Lambert, T., and Schwienbacher, A., 2014. Crowdfunding: Tapping the crowd. *Journal of Business Venturing*, 29(5): 585-609.

Bos, J.W., Kolari, J.W., and Van Lamoen, R.C., 2013. Competition and innovation: evidence from financial services. *Journal of Banking & Finance*, 37(5): 1590-1601.

Brüntje, D., and Gajda, O. (Eds.). 2016. *Crowdfunding in Europe: State of the arte in theory and practice*. Switzerland: Springer.

Bruton, G., Khavul, S., Siegel, D., and Wright, M., 2015. New Financial Alternatives in Seeding Entrepreneurship: Microfinance, Crowdfunding, and Peer-to-Peer Innovations. *Entrepreneurship Theory and Practice*, 39(1): 9-26.

Bryman, A. (2006). Integrating quantitative and qualitative research: how is it done? *Qualitative research*, 6(1): 97-113.

Campbell, J., Jackson, H., Mandrian, B., and Tufano, P., 2011. Consumer Financial Protection. *Journal of Economic Perspectives*, 25(1): 91-114.

Campbell, J., 2016. Restoring rational choice: The challenge of consumer financial regulation. *The American Economic Review*, 106(5): 1-30.

Castellacci, F., Grodal, S., Mendonça, S., and Wide, M., 2005. Advantages and Challenges in Innovation Studies. *Journal of Economic Issues*, 39(1): 91-121.

Claessens, S., and Kodres, L., 2014. The Regulatory Responses to the Global Financial Crisis: Some Uncomfortable Questions. *IMF Working Paper*, WP/14/46.

Cohen, M. and Sundararajan, A., 2015. Self-regulation and innovation in the peer-topeer sharing economy. *The University of Chicago Law Review Dialogue*, 82: 116-133.

Creswell, J., 2009. *Research Design – Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications, Inc.

CrowdfundingHub, 2016. *Current state of Crowdfunding in Europe*. Report. Amsterdam: CrowdfundingHub.

Daskalakis, N., Jarvis, R., & Schizas, E. (2013). Financing practices and preferences for micro and small firms. *Journal of Small Business and Enterprise Development*, 20(1): 80-101.

Dushnitsky, G., Guerini, M., Piva, E., and Rossi-Lamastra, C., 2016. Crowdfunding in Europe. *California Management Review*, 58(2): 44-71.

European Commission, 2016. Commission staff working document - Crowdfunding in the EU Capital Markets Union. Brussels: European Commission.

European Commission, 2017. Consultation document - FinTech: a more competitive and innovative european financial sector. Brussels: European Commission.

European Banking Authority, 2015. *Opinion of the European Banking Authority on lending-based crowdfunding*. London: European Banking Authority.

Fagerberg, J., 2005. Innovation, A Guide to Literature. *The Oxford Handbook of Innovation*. Oxford University Press.

Financial Conduct Authority, 2016. FS16/13: Interim feedback to the Call for Input to the post-implementation review of the FCA's crowdfunding rules. London: Financial Conduct Authority.

Galloway, I. J., 2009. *Peer-to-Peer Lending and Community Development Finance*. Working paper 2009-06. Federal Reserve Bank San Francisco, San Francisco.

Gierczak, M. M., Bretschneider, U., Haas, P., Blohm, I., and Leimeister, J. M., 2016. Crowdfunding: Outlining the new era of fundraising. In Brüntje, D., and Gajda, O. (Eds.). 2016. *Crowdfunding in Europe: State of the arte in theory and practice*: 7-24. Switzerland: Springer.

Hippel, E.v., 2005. Democratizing Innovation. Cambridge, MA: The MIT Press.

Iyer, R., Pedró, J., Lopes, S., and Schoar, A., 2013. Interbank Liquidity Crunch and the Firm Credit Crunch: Evidence from the 2007–2009 Crisis. *The Review of Financial Studies*, 27(1): 347-372. Oxford University Press.

Jegelevičiūtė, S., and Valančienė, L., 2015. Comparative Analysis of the Ways Crowdfunding is Promoted. *Procedia-Social and Behavioral Sciences*, 213: 268-274.

Jingu, Takeshi, 2016. Chine set to step up regulation of Internet finance from 2016. *Nomura Research Institute, NRI Papers*, 2016 (235).

Johnson, S., and Kwak, J., 2012. Is financial innovation good for the Economy? *Innovation Policy and the Economy*, 12: 1-15. University of Chicago Press.

Lacasse, R.M., Lambert, B.A., Roy, N., Sylvain, J., and Nadeau, F., 2016. A Digital Tsunami: FinTech and Crowdfunding. *International Scientific Conference on Digital Intelligence*.

Larsen, K. S., Gilani, S., 2017. RegTech is the New Black – The Growth of RegTech Demand and Investment. *Journal of Financial Transformation*, 2017 (45): 22-29.

Lee, S.H., and Lee, D.W., 2016. A Study on FinTech Based on Actual Cases. *International Journal of u-and e-Service, Science and Technology*, 9(8): 439-448.

Lerner, J., and Tufano, P., 2011. The consequences of financial innovation: a counterfactual research agenda. *National Bureau of Economic Research*, No. w16780.

Lumpkin, S., 2010. Regulatory issues related to financial innovation. *OECD Journal: Financial Market Trends*, 2009(2): 1-31.

Marti, E., and Scherer, A.G., 2016. Financial regulation and social welfare: The critical contribution of management theory. *Academy of Management Review*, 41(2): 298-323.

Michalopoulos, S., Laeven, L., and Levine, R., 2009. Financial innovation and endogenous growth. *National Bureau of Economic Research*, No. w15356.

Mollick, E., and Robb, A. 2016. Democratizing Innovation and Capital Access: the role of crowdfunding. *California Management Review*, 58(2): 72-87.

Morgan, D., Gulati, S., Biddle, L., and Horsley, L., 2017. *The Future of RegTech for Regulators*. London: Transatlantic Policy Working Group – Innovate Finance.

Morse, A., 2015. Peer-to-peer crowdfunding: Information and the potential for disruption in consumer lending. *National Bureau of Economic Research*, No. w20899.

OECD, 2010, Policy Framework for Effective and Efficient Financial Regulation, General guidance and high-level checklist. Paris: OECD.

Schumpeter, J. A., 1934. *The Theory of Economic Development: An Inquiry Into Profits, Capital, Credit, Interest, and the Business Cycle*. New Brunswick, N.J.: Transaction Books.

Schwienbacher, A., and Larralde, B., 2010. Crowdfunding of small entrepreneurial ventures. *Handbook of entrepreneurial finance*, Oxford University Press, forthcoming.

Sharma, S.C., 2015. Keys to Digital Transformation–People, Mindset & Culture. *Research Journal of Science & IT Management*, 5(2): 39-46.

Spencer, A. and Kirchhoff, B., 2006. Schumpeter and new technology based firms: Towards a framework for how NTBFs cause creative destruction. *International Entrepreneurship and Management Journal*, 2: 145-156.

Thakor, A.V., 2012. Incentives to innovate and financial crises. *Journal of Financial Economics*, 103(1):130-148.

Venkatesh, V., Brown, S., and Bala, H., 2013. Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Quarterly*, 37(1): 21-54.

Vinay Pranjivan

Appendices

Appendix 1 - FSUG Survey "User's perceptions of Crowdfunding", 2015

P2P Lending Questionnaire Fields marked with * are mandatory.

Have you already lent money via one or more p2p lending platforms? YES NO

NO

Please name the platforms you have used so far: Platofrm's name:

1 2 3

4

5

How would you rate the following reasons for choosing (so far) not to lend via p2p? [For each option, record answer on a 1 to 5 scale -1 = no importance, 2 = low importance, 3 = some importance, 4b=high importance, 5 = very high importance]

12345

Not had the opportunity to lend via p2p (e.g. lack of funds or time) Concern about poor financial returns Lack of understanding about p2p lending Lack of trust about the reliability of investing in p2p lending Lack of regulation in p2p lending

How would you rate the following reasons for choosing to lend on these platforms rather than invest your money elsewhere? [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]

12345

Higher expected financial returns Interest/excitement/curiosity about specific companies or start-ups Disappointment/mistrust of traditional finance Taking advantage of a new form of investment (increased diversification)

```
How would you rate the following reasons for (possibly, in the future) choosing to lend on these platforms rather than elsewhere? [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]
```

. 12345

Higher expected financial returns Interest/excitement/curiosity about specific companies or start-ups Disappointment/mistrust of traditional finance Taking advantage of a new form of investment (increased diversification)

How would you rate the following risks (if any) associated with p2p lending? [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]

1 2 3 4 5 The borrower may prove to be fraudulent The platform may prove to be fraudulent Poor ongoing information about the borrower Poor returns or losses on the money lent

How much money have you lent using p2p (on any platform) in the past 12 months? (approx.)

What percentage of your total savings does this amount represent? (approx.)%

How many different P2P platforms have you used to invest this amount?

Into how many projects have you invested this amount?Only 12 - 10 projects10 and more (including using any auto-diversification tool)

So far, how is the money you have invested in P2P lending platforms performing (annual net return, after fees, taxes and bad debt)?

My whole capital has been already repaid and I have received more than 10% of annual net return

My whole capital has been already repaid and I have received 7-9% of annual net return My whole capital has been already repaid and I have received 4-6% of annual net return My whole capital has been already repaid and I have received 1-3% of annual net return I have negative returns (bad debt has significantly impacted the return I am making to push me below 0 % net return)

My investment is still ongoin; too early to say

Are you planning to lend money via p2p in the next 12 months? YES NO

How much money are you planning to lend via p2p in the next 12 months? (approx.)

What percentage of your total savings does this amount represent? (approx.)

Into how many projects would you invest this amount? Only 1 2 - 10 projects 10 and more (including using any auto-diversification tool) If you do/would invest, how would you expect your total ending portfolio to evolve over the year (12 months) after taxes or any potential bad debt?

Do you think you could earn lower interests than you anticipate? No, the returns are guaranteed Yes, I am taking this risk. I don't know; I hope not.

If you earned lower interest than you anticipate today, would you still reinvest in peer to peer lending?

Yes, I would reinvest again.

Yes, but I would probably invest either a lower amount or through a different platform. No.

Do you think you that you could lose part or all of the money invested? No, the capital is guaranteed. Yes, I am taking that risk. I don't know; I hope not. Which of the following information do you remember having read on the platform's website? Information on the platform governance/management (platform owners, main investors, directors, etc.) Risk warnings (e.g. regarding possible loss of investment, possible lack of liquidity, etc.) Terms and conditions (i.e. user definitions, rights and obligations per type of user, age and possible residence restrictions) Information regarding the procedures followed in all levels of financing and returns Direct contact information via telephone Fees (commissions, lump sum, e.g. for legal services, etc.) An existing FAQ section Repayment conditions Compensation policy How are the platforms that you use regulated? They are regulated by law The market is self-regulated (code of conduct) There is no regulation at all I do not know

Would regulation increase your trust in p2p lending? YES, but it would not change my decision on how much to invest YES, and it would encourage me to invest more than without regulation NO

Does this regulation increase your trust in p2p lending? YES, but it does not change my decision on how much to invest YES, and it encourages me to invest more than I would invest without this regulation NO

Does regulation restrict how much you can invest in p2p lending? YES NO I do not know

Do you think this restriction is useful? YES NO

What did you do previously with the money you currently invest through lending platforms? I kept this money on a bank checking account I kept this money on a bank savings account I invested this money in mutual funds before I invested this money in a life insurance before that had an investment element to it I invested this money elsewhere. Nothing. The money I invest comes from new savings I make.

Would you invest with the same confidence in projects in another EU Member State if they were offered by the platform(s) you use? YES, I already do invest in foreign projects YES, I would invest in foreign projects I would invest some money in foreign projects, but not as much as in domestic ones NO, I would not invest in foreign projects

Would you invest with the same confidence through platforms established in another EU Member State?

YES, I already do invest through platform(s) established in a country different from my country of residence.

YES, I would invest with the same confidence.

I would invest some money through foreign platforms, but not as much as through domestic ones.

NO, I would not invest through foreign platforms

Finally, please tell us a bit more about yourself as an investor. (All the information you provide stays anonymous)

What is your gender? Male Female

What is your country of residence?*

How old are you? 18-24 25-34 35-44 45-54 55-64 65+

What is your highest level of educational attainment? Secondary school Bachelor's degree Master's degree PhD Other

What is you annual income? Up to €15,000 €15,000-30,000 €30,000-45,000 €45,000-60,000 €60,000-75,000 Over €75,000

You live in A city (including suburbs) A town A village

Vinay Pranjivan

Would you describe yourself as an experienced investor (who regularly invests in their own right and should therefore have a clear understanding of the risks and rewards involved)? YES NO

Response data:

- 640 responses registered;
- Country distribution:



Respondents' distribution on invested or not

[T			T	- r	
MS	YES	NO	MS	YES	NO	MS	YES	NO
Austria	1		Germany	27		Other	8	
Belgium	2		Greece	1	2	Portugal	2	
Cyprus		1	Ireland	3		Romania		2
Czech Rep.	2		Italy	37	6	Slovakia	3	
Denmark	14	4	Latvia	2		Slovenia	1	
Estonia	22		Lithuania	2		Spain	4	
Finland	92	6	Luxembourg	2		Sweden	1	
France	4	2	Netherlands	4		UK	314	61

Vinay Pranjivan

Appendix 2 - Questionnaire and responses from the UK FCA and the ACPR

UKFCA

Respondent: Emmanuel Schizas

Position at the authority: Senior Associate

Department/Unit: Cross-Sectoral and Funds Policy Department / Strategy & Competition Division

Date of response: 2 June 2017

Questions:

1 – Which were the reasons that lead your authority to develop a regulatory regime on lending based crowdfunding?

Peer to peer (P2P) lending sector was already regulated in the UK by the Office of Fair Trading (OFT). In 2014, the FCA took up the regulation of consumer credit sector, so the P2P sector and its regulation came with it.

The UK Government intended to improve access to finance for businesses and consumers, and therefore put forward this regulatory regime.

2 - Which were the critical issues in the rationale behind the following aspects in the policy choices taken by your authority ²⁶:

a) Registration/Authorisation

The application of such requirements follows the same reasoning as for any other sector in the financial services. There were threshold conditions appropriate according to the business models.

The authorisation gateway looked different: until 1 April 2016, there were interim conditions for firms already operating; these firms were expected to apply for a full authoristion, having access to all activities. After 1 April 2016, only fully authorised firms were allowed. The process for full authorization took a very long time. If a firm was considered to be failing, it was given a chance to introduce changes to accommodate.

b) Money handling

The UK took a different approach comparing to other EU MS's regimes. This sector is doing investment sector business thus the CASS 7 was applied, which is a rigorous expensive and complex. Money segregation requirements were imposed, added of primary pooling event safeguards (this was criticised by firms). The amounts involved in P2P justified such application: 5 Bn GBP outstanding, 100 M GBP in client money.

²⁶ The list of items was selected from the items covered by the national regulation. These issues are relevant for the scope of the dissertation.

c) Minimum capital requirements for platforms

The requirements are mirroring up to a point requirements for investment firms; on top of this a 6^{th} element – a tabling relative element on a diminishing progression related to the amounts held. The intention was to make sure there are enough funds to resolve in an adequate way (buying time towards resolution).

d) Loan amounts

e) Maximum investment for lenders

The policy choice was not to introduce a cap as statistics of 2014 showed that people were not putting in big amounts and they were quite well-off, mostly comprised of prime borrowers (and no evidence of sub-prime borrowers).

The FCA was committed to review its regulation down the line (in 2016) and therefore decided on a light touch approach. This was in contrast with the approach taken for investment based crowdfunding.

f) Due diligence requirements

The FCA wanted to have a framework to allow the sector to explore different business models, not to limit in advance, staying away from strict detailed requirements. The policy choice set was to introduce high level requirements for firms to explain which due diligence actions were taken. The FCA had to be consistent setting a similar approach to the other sectors.

3 - What were the expected outcomes of the policy choices chosen, at the time of setting out the regulatory regime, for the same list above?

The high level expectations were that the industry could grow fast, eventually slowing down. A review of the sector was planned for 2016, anticipating that:

- there would be diverse business models;
- the investor population would remain sophisticated and high earning (would become concerned if it wasn't so); and not looking for deposits.

4 – Has the application of the regulatory regime been on-target or somehow off-target? If off-target, in which issues? (in other words, which are the visible effects, desired and/or undesired)

From the FCA interim feedback statement: "Some of the crowdfunding firms applying for authorisation have not yet demonstrated they meet the minimum standards set by the threshold conditions. Whilst we are actively working with firms to support them during the application process, and will continue to do so, it is ultimately the responsibility of firms to ensure they meet the threshold conditions and are ready, willing and organised to commence regulated business. We will refuse authorization to firms where they are not able to demonstrate they meet the required regulatory standards.

Some business models we have seen from crowdfunding applicants include aspects that are the same or similar to those in the investment management and banking sectors. We are therefore concerned about the significant risk of arbitrage in parts of the industry and expect crowdfunding firms applying for authorisation to ensure their activities fall within the scope of the permissions for which they have applied.

5 -Are there any specific areas in which the regulatory regime in place should act upon - risks left unaddressed; new risks arising; potential ways the regulation has been circumvented?

From the FCA interim feedback statement "In our view, aspects of the loan-based crowdfunding market currently pose some risks to our objectives. We perceive risk of regulatory arbitrage in the loan-based sector, and potential for investors to misunderstand the nature of the products offered. While investment-based crowdfunding is facilitated entirely by fully-authorised firms, most loan-based crowdfunding firms, including the largest ones, have so far operated under interim permissions. Where firms operating under interim permission fail to meet the standards for full authorisation, this presents risks to their existing borrowers and lenders which require careful management.

Certain features introduce risks to investors that are not adequately disclosed and may not be sufficiently understood by investors. For example, the use of provision funds may obscure the underlying risk to investors, which may result in investors believing that platforms are providing an implicit guarantee of the loans they facilitate.

• The plans some firms have for wind-down in the event of their failure are inadequate to successfully run-off loan books to maturity.

• We have challenged some firms to improve their client money handling standards."

6 - Does the national regulatory regime allow for cross-border activity? Please provide the rational for the policy choice of allowing/not allowing.

There's no ban on cross-border activity. The FCA recently authorised an Irish platform, Linked Finance. However, there is little activity mainly due to commercial reasons rather than to regulatory ones, as there are differences in the type of investors involved.

6.1 - If the regulatory regime does allow for cross-border activity:

a) do the platforms get a specific license for this occasion? The same authorisation is required.

b) are the platforms obligated to inform the regulators when they intend to provide services to foreigners? If yes, could you tell us which platforms do so?

7 – Did the national regulatory regime have an impact in the market of lending based crowdfunding? Please provide both qualitative and quantitative data evidence for this impact for the period 2014-2016.

Impacts of a qualitative nature:

- i. there was an exemption introduced by the Treasury; P2P cannot be collective investment schemes. This encouraged the sector to become fund like, and firms could provide fund like services without being an investment firm;
- ii. people are allowed to invest via P2P crowdfunding; there is a view that this is a retail based market (in the US it's more a wholesale market) [this might be shifting in the UK to become a wholesale market];
- iii. there are fiscal incentives by the Government with the creation of the IFISA (Innovative Finance Individual Savings Account), attracting investors, having a broader reach. As

only fully authorised firms are allowed to offer ISAs, in time this will change firms' attitude.

However, there is a risk that such tax incentives can be perceived as implicit endorsements. It makes it harder to take out of people's minds that there are risks and at the same time the Government labels it as ISA.

In addition, there seems to be a contradiction as P2P crowdfunding is not a deposit taking activity, promoting savings, but it now allows for a tax benefit in the form of a ISA;

- iv. corporate lending is not regulated in the UK but P2P lending is. On B2B lending, the requirements are on the investors side. This has introduced arbitrage opportunities.
- v. regulator's interventions has made the market grow as there is more trust for investors. There is an expectation gap of the meaning of being regulated by the FCA.

In 2015 institutional investors jumped in; in 2016 growth slowed down, still it's on 20%; lending based crowdfunidng is still representing 2% or 3% of the early stage investment market, less than in the investment based crowdfunidng.

8 – What was the impact of the introduction of the regulatory regime for:

a) platform users – lenders and borrowers?

Main advantage is that because of authorization requirements the FCA can have a one look on the firms requirements on business requirements and protection measures.

b) platform operators?

Business models had to be adequate; this was a long process, with a big learning curve to show the adequacy.

c) traditional financial providers – e.g. banks?

Banks are not seeing lending based crowdfunding platforms as big competition. This might change once the big platforms start selling IFISAs.

Banks are also looking at the advantages of crowdfunding platforms, and some partnerships are in the loop. In 2016, the Government introduced regulation to require (big) firms to refer pooled loan applicants to platforms (not necessarily crowdfunding) where alternative funding sources could come in. there are safeguards in place, however the quality of borrowers varies significantly between platforms – in some cases, due diligence requirements are more strict than in others.

Even smaller banks have incentives to offload their riskier businesses to a secondary market, which may be provided by crowdfunding platforms.

There is growing interest in property crowdfunding.

d) the potential for disintermediation of lending based crowdfunding?

There is not truly disintermediation as platforms are playing an intermediation role – this is more a rearranging of services. In the UK, research findings show that platforms have actually higher client acquisition costs, similar to those of new banks.

For now, on the business side there is no such impact. These firms are even carrying out new services such as brokerage. On the consumer side, there is growing reliance on comparison websites.

The Government policy might make it easier for this shift in funding.

ACPR

Respondent: Pierre Bienvenu Position at the authority: Expert Department/Unit: FinTech-Innovation unit Date of response: 14th June 2017

Questions:

1. Which were the reasons that lead your authority to develop a regulatory regime on lending based crowdfunding?

Not applicable. The French financial regulation is decided by the French Ministry of Finance. For the matter of interest, the French regulation on lending-based crowdfunding was introduced by the Ordinance of 30 May 2014. The ACPR remains the supervisory authority in charge of supervising the implementation of that regulation by registered lending-based crowdfunding platforms. It is worth noticing that in France, FinTech credit intermediation is allowed only for business-oriented purposes and for education-oriented purposes but not consumer-oriented purposes. Therefore the vast majority of FinTech lending is intended for business activities but the breakdown is not known.

2. Which were the critical issues in the rationale behind the following aspects in the policy choices taken by your authority:

a. Registration/Authorisation

Yes, but the registration is not made by the ACPR but by the ORIAS (French register of financial intermediaries) with the status of "*Intermédiaire en Financement participative*" (IFP). The registration process is achieved after the check of legal criteria needed to carry out IFP activities in France (fitness and propriety of the general manager, civil insurance protection must provide guarantees at least higher than EUR 250 k per incident and EUR 500 k per year). IFP must be located in France.

b. Money handling

Yes.

c. Minimum capital requirements for platforms

No. Because lending-based crowdfunding platforms do not take any credit risk and just aim at matching borrowers with lenders without any balance sheet intermediation (direct matching of fund-seeker and fund-provider through a web-platform). As a result, there is neither capital requirement nor liquidity requirement for them.

d. Loan amounts

Yes. The maximum amount of loan is capped at EUR 1 million.

e. Maximum investment for lenders

Yes. Only individuals and companies are allowed to lend directly to the borrowers but under certain conditions (maximum of EUR 2000 per project for an individual investor). It is worth noticing that the maximum investment amount for a retail investor has been raised from 1000 EUR to 2000 EUR in 2016 (for a remunerated loan, while for a non-remunerated loan the maximum investment amount set by the law is 4000 EUR)

f. Due diligence requirements

Yes. Platforms are required to inform investors about the project of the borrower, its potential return and associated risk.

3. What were the expected outcomes of the policy choices chosen, at the time of setting out the regulatory regime, for the same list above?

Not applicable (cf. answer to question 1).

4. Has the application of the regulatory regime been on-target or somehow off-target? If off-target, in which issues? (in other words, which are the visible effects, desired and/or undesired)

The French regulation promotes a proportionate approach for crowdfunding (direct matching of fund-seeker and fund-provider through a web-platform). This regime has been introduced in 2014 and subsequently revised in 2016 for adapting some rules after two years of concrete experience. According to publicly-available statistics, France counts around one hundred of crowdfunding platforms and is now the 2nd largest crowdfunding market in Europe²⁷.

In details, the French regulation has introduced two statuses for crowdfunding platforms: one for equity platforms that are supervised by the Autorité des Marchés Financiers (AMF), one for gift and lending platforms that are supervised by the ACPR with respect to consumer protection and AML-CFT obligations.

The regulatory regime for crowdlending platforms is proportionate to the scale of risks:

- Platforms must be registered with fit and proper requirements but there is no authorization process so that they can start their activity rapidly
- Platforms must contract liability insurance but there is no capital requirements because they never hold the credit risk on their balance sheet
- Platforms must publish adequate disclosures about the project to make the "crowd" aware of the risks associated with the lending activity. There are therefore transparency requirements regarding project selection, project assessment, default rates and annual reports but there is no advisory duty.
- Since there is no advisory duty, financing must be provided in the frame of a welldefined project. The amount that can be raised on a platform is also capped at EUR 1 million and the amount individuals can lend for a project is also capped at a low level (2000 euros).
- 5. Are there any specific areas in which the regulatory regime in place should act upon risks left unaddressed; new risks arising; potential ways the regulation has been circumvented?

The business model of crowdlending platforms is evolving rapidly. While the loans originated by strictly defined peer-to-peer lending platforms are directly purchased by retail investors, the business model of lending platforms are currently turning into marketplace lending platforms,

²⁷ Cambridge Center for Alternative Finance, University of Cambridge (2016) *"Sustaining Momentum: the second European alternative finance industry report"*

where loans can be purchased or financed both by retail and institutional investors. It would be worth monitoring that development.

6. Does the national regulatory regime allow for cross-border activity? Please provide the rational for the policy choice of allowing/not allowing.

No. It would require an initiative taken at the EU level.

Market shares of lending crowdfunding platforms are very limited so far (far less than 1%). Some French crowdlending platforms are expanding their activity to other EU countries to gain in volumes and to reach a profitable size. When doing so, French platforms have to comply with each national regulation. Some platforms that are registered or licensed in other countries are also seeking to expand their activity in France.

- 7. If the regulatory regime does allow for cross-border activity: Not applicable
 - a. do the platforms get a specific license for this occasion?
 - b. are the platforms obligated to inform the regulators when they intend to provide services to foreigners? If yes, could you tell us which platforms do so?
- 8. Did the national regulatory regime have an impact in the market of lending based crowdfunding? Please provide both qualitative and quantitative data evidence for this impact for the period 2014-2016.

Yes time series information of the number of CIP (FinTech equity and bond platforms) and IFP (FinTech loan platforms) are publicly available at the website of ORIAS, the French Register of Insurance, Banking and Finance intermediation. Time series of IFP shows that the number of platforms has been increasing following the introduction of the regulatory framework.



At the same time, the market shares of lending-based crowdfunding platforms remain very limited:

Market shares of lending-based crowdfunding platforms			
	In the total amount of new credits granted to non-financial firms up to EUR 1 million		
2013	0,002%		
2014	0,022%		
2015	0,052%		
Sources: Cambridge Center for Alternative Finance, Banque de France, ACPR			

9. What was the impact of the introduction of the regulatory regime for: a. platform users – lenders and borrowers?

The level of transparency should make retail investors able to assess independently the level of risk. This should include:

- Requirements regarding the prevention of conflicts of interests ;
- disclosure requirements on the usual risks raised by lending-based crowdfunding ;
- disclosure requirements regarding the project, its quality and its risks
- due diligence procedures for projects advertised on the platform ;
- the provision of an appropriate complaints-handling mechanism ;
- internal procedures, especially to address the platform default or failure for ensuring business continuity.

For borrowers, crowdfunding platform seek to answer to a credit request in a timely manner (i.e. more rapidly than banks) but the cost of credit may be higher.

b. platform operators?

Regulation has supported the level playing field between competitors. It has helped structuring the sector. Regulation is often used by crowdfunding platforms as a way to provide confidence to investors and clients.

c. traditional financial providers – e.g. banks?

Very marginal. Few of them have made partnerships with crowdfunding platforms to advice their retail clients to invest in crowdfunding platforms.

d. the potential for disintermediation of lending based crowdfunding?

Very little. Because of profitability constraints, the business model of crowdlending platforms is evolving rapidly (cf. answer to question 5). Fund-providers from the crowd (i.e. from retail investors) cannot replace the intermediation performed by banks or loan-originating funds (in terms of credit risk assessment, funding capacity, monitoring and recovery capacities).

Vinay Pranjivan

Appendix 3 - Questionnaire and responses from the ECN

Respondent: Oliver Gajda

Position at the association: Executive Director

Department/Unit:

Date of response: 11th May 2017

Questions:

1 -Is there a need for a national regulatory regime on lending based crowdfunding in the EU?

No

Yes

Rationale: For lack of EU regulation enabling lending based crowdfunding in a harmonised way, ie not including it in EU banking and securities regulation, platform operators are reliant on and national rules. National rules however differ from member state to member state, some enabling others not, combining banking rules, customer protection rules, payment rules etc.

2 - How do members of your association perceive the following aspects in the policy choices taken by some authorities in the EU:

g) Registration/Authorisation

positive, if burden of entry is kept realistically low, as it helps to safeguard the sector.

h) Money handling positive where regulated third parties exist a

positive where regulated third parties exist and offer reasonably priced solutions which reduce operational burden for platforms

- i) Minimum capital requirements for platforms positive as threshold for ensuring professional actors, must be adequate and not prohibitive for new competition.
- j) Loan amounts can be limiting with regard to scale (seen with regard to cost per transaction)
- k) Maximum investment for lenders must be linked to available assets and wealth of investor and not be generic
- 1) Due diligence requirements

positive for a minimum set of requirements that help improve minimising default rates, but also a cost factor when applied to small transactions (see also point d)

3 - Has the application of the national regulatory regimes been on-target or somehow off-target? If off-target, n which issues? (in other words, which are the visible effects, desired and/or undesired)

need for banking licence has limited growth in applicable markets;

Vinay Pranjivan

thresholds for retail investor has limited their capacity and thus also scalability (increased the cost of platforms)

4 -Are there any specific areas in which the national regulatory regimes in place should act upon - risks left unaddressed; new risks arising; potential ways the regulation has been circumvented?

customer protection in case of defaults (and platform bankruptcy) needs to be addressed with a market wide solution (in the UK done by the industry);

mix of institutional funds with retail funds needs to be either monitored by the regulators or made transparent (especially with regard to terms and conditions, valuations etc);

deal origination and due diligence need monitoring or transparency.

5 – Should national regulatory regimes allow for cross-border activity?

Yes \square No

5.1 -If they should allow for cross-border activity:

a) should the platforms get a specific license for this occasion? Solution No Explanation: serving cross border clients (capital inflows and deal sourcing) requires increased disclosure and safeguards, but has also impact on due diligence. Platforms opting this way must be able to proof relevant expertise. (Platform managers will argue that they should be allowed to do this without special licence - at least until they have scaled)

b) should the platforms be obligated to inform the regulators when they intend to provide services to foreigners? Yes 1 1 Explanation: Regulators in target markets deal with different customer protection issues which platforms likely would have to comply with (no matter where their license is granted) if the service is not harmonised at EU level. Involving regulators will create .

6 - Did the national regulatory regimes have an impact in the market of lending based crowdfunding?

Yes
No

No

Explanation and evidence - please provide both qualitative and quantitative data evidence for this impact for the period 2014-2016.

visible in UK vs France vs Germany (sorry, we don't have the data, AltFi should, the EC DG FISMA study done by Crowdsurfer should have too)

7 – What was the impact of the introduction of the regulatory regimes for:

e) platform users – lenders and borrowers?

increased inflexibility of service, partly perceived decrease in risk profilef) platform operators?

higher operational cost; somewhat better public image

- g) traditional financial providers e.g. banks?higher appetite for cooperation, yet still reluctant overall
- h) the potential for disintermediation of lending based crowdfunding? further disintermediation, i.e disintermediateing crowdfunding? Focus on app based multi platform access (still a long time away). disintermediation of FS through lending crowdfunding has been negated by increased institutional involvement (underwriting, asset allocations etc) squeezing out retail investors in a number of platforms.

Thank you for your collaboration.

Vinay Pranjivan

Appendix 4 - Questionnaire sent to platform associations Respondent:

Position at the association:

Department/Unit:

Date of response:

Questions:

1 – Was there a need for a national regulatory regime on lending based crowdfunding in your jurisdiction?

No

Rationale:

2 - How do members of your association perceive the following aspects in the policy choices taken by the authority in your jurisdiction:

- m) Registration/Authorisation
- n) Money handling
- o) Minimum capital requirements for platforms
- p) Loan amounts
- q) Maximum investment for lenders
- r) Due diligence requirements

3 - Has the application of the regulation been on-target or somehow off-target? If off-target, n which issues? (in other words, which are the visible effects, desired and/or undesired)

4 – Are there any specific areas in which the regulation in place should act upon - risks left unaddressed; new risks arising; potential ways the regulation has been circumvented?

5 – Does the national regulatory regime allow for cross-border activity?

Yes
No

5.1 - If the regulatory regime does allow for cross-border activity:

- c) do the platforms get a specific license for this occasion? Yes Explanation:
- d) are the platforms obligated to inform the regulators when they intend to provide services to foreigner Yes N

Explanation:

i. If yes, could you tell us which platforms do so?

6 – Did the national regulatory regime have an impact in the market of lending based crowdfunding?

Yes

No

Explanation and evidence - please provide both qualitative and quantitative data evidence for this impact for the period 2014-2016.

7 – What was the impact of the introduction of the regulatory regime for:

- i) platform users lenders and borrowers?
- j) platform operators?
- k) traditional financial providers e.g. banks?
- 1) the potential for disintermediation of lending based crowdfunding?

Thank you for your collaboration.

Vinay Pranjivan **Appendix 4.1 - Responses from FPF (France) Respondent: Florence de Mapeau** Position at the association: Coordinatrice Génerale Department/Unit: Date of response: 13th April 2017

To answer your questions :

1. Yes. In France, there is an exception : the bank monopoly. Thus, before the specific regulation create in October 2014 for crowdlending platforms (the status of "intermédiaire en financement participative" regulated by the ACPR), the individuals were not allowed to borrow to an enterprise (you needed to have a bank agreement). Thanks to the specific regime, we cause a breach in the bank monopoly, enabling individuals to lend to enterprises through crowdfunding platforms. The individuals were limited to $1000 \in$ per project for loan with interest and $4000 \in$ per project for loan without interest. Those threshold were raised in October 2016 to $2000 \in$ and $5000 \in$. The borrower can lend up to 1 million euros.

2. a. As said, crowdfunding sector did an opening in the existing bank monopoly which is quite a great victory, even if lenders are limited in the amount they can lend.

2. b. Crowdlending platforms have to work with a "payment services provider" which is a good thing to secure the transactions, check the investors, and deal with the reimbursements in case the platform go bankrupt.

2. c. No minimum capital requirement

2. d. Slowly we went from 1000€ to 2000€. Most of the platforms think that it's a good thing to have threshold in order that the lender diversify the risk in different projects. Moreover, it's still the beginning, we have to reach public and authorities confidence. In France, the authorities are very protectives for the savers, and individuals are not use to invest in enterprises and take risk (few financial education and promotion of safe saving product). Indeed, end of 2016, a new tool appears, the "minibon" which is quite similar to a simple loan, without limits and enable societies (and not just individuals) to lend to other enterprises. To propose "minibon" on its website, the platform has to ask for another status : conseiller en investissements participatifs. Regulated by the AMF, it's more difficult to have it and more strict : website with progressive access, due diligence, etc.

The 2 status (IFP & CIP) are national status.

As far as I know, 2 French platforms took the PSI (investment services provider) which is crossborder (but ask fo minimum capital requirements, more strict, more competences, more process...).

We have to go toward e European status, but it's complicate as each country has its own regulation and the sector is still new so we have to learn by progressing.

Vinay Pranjivan

Appendix 5 - Questionnaire sent to platforms Respondent:

Position:

Department/Unit:

Date of response:

Questions:

1 - Was there a need for a national regulatory regime on lending based crowdfunding in your jurisdiction?

Yes
No

Rationale:

2 - How does your firm perceive the following aspects in the policy choices taken by the authority in your jurisdiction:

- s) Registration/Authorisation
- t) Money handling
- u) Minimum capital requirements for platforms
- v) Loan amounts
- w) Maximum investment for lenders
- x) Due diligence requirements

3 - Has the application of the regulation been on-target or somehow off-target? If off-target, n which issues? (in other words, which are the visible effects, desired and/or undesired)

4 – Are there any specific areas in which the regulation in place should act upon - risks left unaddressed; new risks arising; potential ways the regulation has been circumvented?

5 – Does the national regulatory regime allow for cross-border activity?

Yes
No

5.1 – If the regulatory regime does allow for cross-border activity:

e) do the platforms get a specific license for this occasion? Yes Explanation:
f) are the platforms obligated to inform the regulators when they intend to provide services to foreigner Yes N

Explanation:

i. If yes, could you tell us if your platforms does so?

6 – Did the national regulatory regime have an impact in your platform's activity of lending based crowdfunding?

Yes

No

Explanation and evidence - please provide both qualitative and quantitative data evidence for this impact for the period 2014-2016.

7 – What was the impact of the introduction of the regulatory regime for:

- m) platform users lenders and borrowers?
- n) platform operators?
- o) traditional financial providers e.g. banks?
- p) the potential for disintermediation of lending based crowdfunding?

Thank you for your collaboration.

Appendix 6 – SPSS output for the Chi-Square analysis of association between the respondents' country of residence and their perception of risks

Case Processing Summary								
	Cases							
	Va	lid	Mis	sing	Total			
	N	Percent	N	Percent	N	Percent		
Residence * Borrower may be fraudulent	630	99,7%	2	0,3%	632	100,0%		
Residence * Platform may be fraudulent	631	99,8%	1	0,2%	632	100,0%		
Residence * Poor information about borrower	625	98,9%	7	1,1%	632	100,0%		
Residence * Poor return or loss of money lent	625	98,9%	7	1,1%	632	100,0%		

Case Processing Summary

Residence * Borrower may be fraudulent

-		Crosstal	b					-
			Borrower may be fraudulent					
	-	_	1,00	2,00	3,00	4,00	5,00	Total
Residence	Other EU MS	Count	4	43	61	87	56	251
		Expected Count	10,0	57,8	84,1	62,2	37,1	251,0
		% within Residence	1,6%	17,1%	24,3%	34,7%	22,3%	100,0%
		% within Borrower may be fraudulent	16,0%	29,7%	28,9%	55,8%	60,2%	39,8%
		Residual	-6,0	-14,8	-23,1	24,8	18,9	
	UK + FR	Count	21	102	150	69	37	379
		Expected Count	15,0	87,2	126,9	93,8	55,9	379,0
		% within Residence	5,5%	26,9%	39,6%	18,2%	9,8%	100,0%
		% within Borrower may be fraudulent	84,0%	70,3%	71,1%	44,2%	39,8%	60,2%
		Residual	6,0	14,8	23,1	-24,8	-18,9	
Total		Count	25	145	211	156	93	630
		Expected Count	25,0	145,0	211,0	156,0	93,0	630,0
		% within Residence	4,0%	23,0%	33,5%	24,8%	14,8%	100,0%
		% within Borrower may be fraudulent	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Chi-Square	Tests
on oquaro	10010

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	55,344 ^a	4	,000



a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 9,96.



Residence * Platform may be fraudulent

Crosstab

				Platform may be fraudulent				
			1,00	2,00	3,00	4,00	5,00	Total
Residence	Other EU MS	Count	39	109	61	31	11	251
		Expected Count	56,5	99,8	54,9	26,3	13,5	251,0
		% within Residence	15,5%	43,4%	24,3%	12,4%	4,4%	100,0%
		% within Platform may be fraudulent	27,5%	43,4%	44,2%	47,0%	32,4%	39,8%
		Residual	-17,5	9,2	6,1	4,7	-2,5	
	UK + FR	Count	103	142	77	35	23	380
		Expected Count	85,5	151,2	83,1	39,7	20,5	380,0

Vinay Pranjivan

	% within Residence	27,1%	37,4%	20,3%	9,2%	6,1%	100,0%
	% within Platform may be fraudulent	72,5%	56,6%	55,8%	53,0%	67,6%	60,2%
	Residual	17,5	-9,2	-6,1	-4,7	2,5	
Total	Count	142	251	138	66	34	631
	Expected Count	142,0	251,0	138,0	66,0	34,0	631,0
	% within Residence	22,5%	39,8%	21,9%	10,5%	5,4%	100,0%
	% within Platform may be fraudulent	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Chi-Square Tests

			Asymptotic
	Value	df	Significance (2-sided)
Pearson Chi-Square	13,717 ^a	4	,008
Likelihood Ratio	14,133	4	,007
N of Valid Cases	631		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 13,52.





Residence * Poor information about borrower

		Crosstab						
			Poor information about borrower					
			1,00	2,00	3,00	4,00	5,00	Total
Residence	Other EU MS	Count	9	46	89	78	27	249
		Expected Count	19,5	62,2	89,2	58,6	19,5	249, 0
		% within Residence	3,6%	18,5%	35,7%	31,3%	10,8%	100, 0%
		% within Poor information about borrower	18,4%	29,5%	39,7%	53,1%	55,1%	39,8 %
		Residual	-10,5	-16,2	-,2	19,4	7,5	

Vinay Pranjivan

	-		_	-				
	UK + FR	Count	40	110	135	69	22	376
		Expected Count	29,5	93,8	134,8	88,4	29,5	376, 0
		% within Residence	10,6%	29,3%	35,9%	18,4%	5,9%	100, 0%
		% within Poor information about borrower	81,6%	70,5%	60,3%	46,9%	44,9%	60,2 %
		Residual	10,5	16,2	,2	-19,4	-7,5	
Total		Count	49	156	224	147	49	625
		Expected Count	49,0	156,0	224,0	147,0	49,0	625, 0
		% within Residence	7,8%	25,0%	35,8%	23,5%	7,8%	100, 0%
		% within Poor information about borrower	100,0%	100,0%	100,0%	100,0%	100,0%	100, 0%

Chi-Square Tests

			Asymptotic
	Value	df	Significance (2-sided)
Pearson Chi-Square	31,887 ^a	4	,000
Likelihood Ratio	32,827	4	,000
N of Valid Cases	625		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 19,52.





Residence * Poor return or loss of money lent

		Crosstab						
-			F	oor return	or loss of	money len	t	
			1,00	2,00	3,00	4,00	5,00	Total
Residence	Other EU MS	Count	6	40	82	81	41	250
		Expected Count	18,4	62,0	76,0	61,6	32,0	250,0
		% within Residence	2,4%	16,0%	32,8%	32,4%	16,4%	100,0%
		% within Poor return or loss of money lent	13,0%	25,8%	43,2%	52,6%	51,3%	40,0%
		Residual	-12,4	-22,0	6,0	19,4	9,0	
	UK + FR	Count	40	115	108	73	39	375
		Expected Count	27,6	93,0	114,0	92,4	48,0	375,0
		% within Residence	10,7%	30,7%	28,8%	19,5%	10,4%	100,0%
		% within Poor return or loss of money lent	87,0%	74,2%	56,8%	47,4%	48,8%	60,0%
		Residual	12,4	22,0	-6,0	-19,4	-9,0	
Total		Count	46	155	190	154	80	625

Vinay Pranjivan

Expected Count	46,0	155,0	190,0	154,0	80,0	625,0
% within Residence	7,4%	24,8%	30,4%	24,6%	12,8%	100,0%
% within Poor return or loss of money lent	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Chi-Square Tests								
			Asymptotic					
	Value	df	Significance (2-sided)					
Pearson Chi-Square	42,129 ^a	4	,000					
Likelihood Ratio N of Valid Cases	44,870 625	4	,000					

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 18,40.



Bar Chart

Appendix 7 – SPSS output for the Chi-Square analysis of association between the respondents' investing experience and their awareness of regulation

On the basis of the responses to the FSUG survey – Appendix 1

Case Processing Summary

		Cases					
	Va	lid	Missing		Total		
						Per	
						cen	
	N	Percent	Ν	Percent	N	t	
Experienced investor * Perception of regulation	629	100,0%	0	0,0%	629	100 ,0%	

				Perception of regulation				
				The market is self-				
			I do not	regulated (code of	There is no	They are	Tota	
			know	conduct)	regulation at all	regulated by law	Ι	
Experienced	NO	Count	63	45	9	62	179	
investor		Expected Count	45,2	50,9	11,7	71,1	179, 0	
		% within Experienced investor	35,2%	25,1%	5,0%	34,6%	100, 0%	
		% within Perception of regulation	39,6%	25,1%	22,0%	24,8%	28,5 %	
		Residual	17,8	-5,9	-2,7	-9,1		
	YES	Count	96	134	32	188	450	
		Expected Count	113,8	128,1	29,3	178,9	450, 0	
		% within Experienced investor	21,3%	29,8%	7,1%	41,8%	100, 0%	
		% within Perception of regulation	60,4%	74,9%	78,0%	75,2%	71,5 %	
		Residual	-17,8	5,9	2,7	9,1		
Total		Count	159	179	41	250	629	

Experienced investor * Perception of regulation Crosstabulation

Vinay Pranjivan									
Expected Count	159,0	179,0	41,0	250,0	629, 0				
% within Experienced investor	25,3%	28,5%	6,5%	39,7%	100, 0%				
% within Perception of regulation	100,0%	100,0%	100,0%	100,0%	100, 0%				

Chi-Square Tests								
			Asymptotic					
	Value	df	Significance (2-sided)					
Pearson Chi-Square	13,199 ^ª	3	,004					
Likelihood Ratio	12,706	3	,005					
N of Valid Cases	629							

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 11,67.



Appendix 8 – SPSS output for the Chi-Square analysis of association between the respondents' country of residence and their awareness of regulation

On the basis of the responses to the FSUG survey – Appendix 1

Case Processing Summary									
		Cases							
	Valid		Missing		Total	_			
						Perc			
	N	Percent	N	Percent	N	ent			
Residence * P2P lending regulated or not	623	100,0%	0	0,0%	623	100, 0%			

			P2P lending r	egulated or not	
				Self	
			Don't know/No	regulated/Regulate	
			regulation	d by law	Total
Residence	Other EU MS	Count	99	150	249
		Expected Count	76,7	172,3	249,0
		% within Residence	39,8%	60,2%	100,0%
		% within P2P lending regulated or not	51,6%	34,8%	40,0%
		Residual	22,3	-22,3	
	UK + FR	Count	93	281	374
		Expected Count	115,3	258,7	374,0
		% within Residence	24,9%	75,1%	100,0%
		% within P2P lending regulated or not	48,4%	65,2%	60,0%
		Residual	-22,3	22,3	
Total		Count	192	431	623
		Expected Count	192,0	431,0	623,0
		% within Residence	30,8%	69,2%	100,0%
		% within P2P lending regulated or not	100,0%	100,0%	100,0%

Residence * P2P lending regulated or not Crosstabulation

Chi-Square Tests								
			Asymptotic Significance (2-					
	Value	df	sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)			
Pearson Chi-Square	15,550 ^ª	1	,000					
Continuity Correction ^b	14,859	1	,000					
Likelihood Ratio	15,390	1	,000					
Fisher's Exact Test				,000	,000			
N of Valid Cases	623							

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 76,74.

b. Computed only for a 2x2 table

