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CAN THE PEER TO PEER LENDING MARKET IN PORTUGAL ACHIEVE THE SUCCESS SIMILAR TO THAT OF THE US AND UK? A STUDY OF ALTERNATIVE FINANCE

Master's of Finance thesis within Faculty of Economics (FEP)

Author: Soban Ahmed

Supervisor: Ricardo MiguelValente

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Biographic Note

Soban Ahmed was born in Dhaka, the capital of Bangladesh on April 09, 1991. In 2010, he earned a BSc in Accounting from Oxford Brookes University, UK with a second class degree and is also a Part-Qualified Accountant under the Association of Chartered Certified Accountants, ACCA UK. Following the completion of his undergraduate degree, Ahmed moved to Portugal and had contributed to the family businesses since then where he had also earned his Portuguese nationality. Thereafter started his studies with the Faculty of Economics under University of Porto in order to complete his Masters degree in Finance. Currently Soban Ahmed is working full-time with PwC Mexico as an International Tax Consultant and wishes to undertake a PhD in Finance in the upcoming years.

Acknowledgements

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Abstract

Peer-to-peer lending (P2P) platform enable individual consumers and small businesses to borrow from, and lend money, to one another directly as a source of alternative financing method. This private loan market had achieved great success in the US and UK and had already started in many other European countries including Portugal. In this dissertation, we study the future of this market in Portugal and how well is it performing in this country compared to its peers.

We propose that direct lending as seen in the P2P platforms in the US and UK is almost impossible to happen or have a future in Portugal given the current regulation on "*Crowd Funding*" passed by the Portuguese government in the year 2016. From interviewing key players of this market in Portugal and through rigorous and thorough questionnaire sent out to investors/lenders and borrowers, we obtained 83 "investor" respondents and 101 "borrowers" respondents. Their responses allowed us to conclude that the Portuguese investors are still very traditional and prefers to use their money to invest in financial markets rather than lending to risky borrowers. They are also offering loans (*200 %+ above bank interest rates according to interviewee*) at rates so high to compensate this risk that the potential borrowers tend to shy away.

Our results show that majority of the lenders and borrowers in Portugal are male and middle aged and that there is an increasing demand from SMEs to obtain long-term loans (mainly for growth, working capital and refinancing their existing debt) as banks mainly offers them on a shorter term. Investors demand liquidity and therefore a creation of a secondary market for "re-selling" loans could attract more investors to lend through this platform. There is also lack of awareness of this market amongst borrowers and the general population which will hinder its growth, coupled with information asymmetry amongst the borrowers and lenders and other demographic factors. Since direct lending is almost impossible through regulation, Portuguese P2P platforms are "adapting" to create alternative ways to facilitate lending and allow this market to flourish.

Abstract (Portuguese Version)

Plataformas de empréstimos de pessoa para pessoa (Peer-to-peer lending P2P) permitem consumidores individuais e pequenos negócios a tomarem empréstimos e emprestarem uns aos outros diretamente, como uma forma alternativa de financiamento. Este mercado de crédito privado tem alcancado grande sucesso nos Estados Unidos e no Reino Unido e já teve início em muitos outros países europeus, incluindo Portugal. Nesta dissertação, estudamos o futuro deste mercado em Portugal e avaliamos a performance do mesmo no país comparada com seus pares.

Propomos que empréstimos diretos como os vistos nas plataformas P2P nos Estados Unidos e Reino Unido são quase impossíveis de acontecer ou ter um futuro em Portugal devido a atual regulação sobre ¨Crowd Funding¨ imposta pelo governo português no ano de 2016, a qual dá aos bancos locais o poder de monopólio para questões de crédito. A partir de entrevistas com importantes participantes deste mercado em Portugal e de rigosoros e detalhados questionários enviados a investidores, credores e tomadores de crédito, nós obtivemos respostas de 83 ¨investidores¨ e 101 ¨tomadores de créditos¨. Essas respectivas respostas dos questionários permitiu-nos concluir que investidores portugueses ainda são muito tradicionais e preferem usar seu próprio capital para investir no mercado financeiro ao invés de ceder crédito à tomadores de crédito de risco. Eles também ofereceriam taxas de juros muito altas em ordem a compensar o risco, que potenciais tomadores de crédito tenderiam a ser desestimulados.

Nossos resultados mostram que a maioria dos que cedem crédito e que tomam empréstimos em Portugal são homens e de média idade e há um aumento na demanda de SMEs a obterem empréstimos de longo prazo (principalmente para crescimento, capital de giro e refinanciamento de dívidas) dado que bancos normalmente os oferecem em pequenos prazos. Investidores precisam de liquidez e desta forma uma criacão de um mercado secundário para ¨revenda¨ de empréstimos poderia atrair mais investidores a cederem crédito por esta plataforma. Também há um certo desconhecimento deste mercado por parte dos tomadores de crédito e da população em geral o qual atrasaria o seu crescimento, juntamente com a assimetria de informação entre tomadores e credores e os fatores demográficos. Dado que emprestar é quase impossível devido a regulação, plataformas P2P portuguesas estão a ¨adaptar-se¨ a criar alternativas para facilitar emprestimos e permitir que este mercado prospere.

GLOSSARY

This section will provide the reader with the most basic definitions and important concepts that are used throughout the thesis. As much of the concepts will be used in various ways, this section will help the readers and the author interpret in a meaningful way while reading this thesis

- ***Borrower***– The party receiving the loan, typically an individual or a small business.
- ***Commercial banking*** – The traditional form of banking, in this thesis mainly used as a comparison to P2PL.
- ***Crowdfunding***– The practice of online project funding by raising money from many individuals.
- ***Investor*** – The party providing the funds for the loan by putting capital into the P2PL platform. Can also be seen as a type of lender.
    - ***Individual investor*** – A private person investing his/her own capital for a desired rate of return.
    - ***Institutional investor*** – An institution (such as a hedge fund, insurance company, commercial bank etc.) investing capital for a desired rate of return.
- ***Institutional involvement*** – The development in which financial institutions engage in the P2PL market e.g. by creating alliances with P2PL companies or by acting as institutional investors.
- ***Information asymmetry*** – A situation in which one party has more or better information than the other, which creates an imbalance of power.
    - ***Adverse selection*** – The market process in which negative consequences occur when the parties have asymmetric information, and the “bad” customers are more likely to pay for the service than the “good” customers.
    - ***Moral hazard*** – A risk that occurs when one party takes more risks because another party bears the burden of those risks.
    - ***Lemons problem*** – The situation in which the “bad” products drives out the “good” from the marketplace, caused by information asymmetry between the buyers and the sellers.

- ***Ownership investor*** – An individual or institutional investor making investments in the P2PL companies.
- ***Peer-to-peer lending (P2PL)*** – The concept of direct borrowing and lending in online platforms, with unsecured loans.

- ***P2PL platform*** – The online platform connecting the borrowers with the investors, making the loan possible.
  - ***Prosper*** – The first P2PL platform established in the U.S.
  - ***Lending Club*** – An American P2PL platform, currently the largest in the world.
  - ***Bondora***– A pan-European P2PL platform, which also provides a secondary market for individual investors.
  - ***Mosaic***– A PortugueseP2PL company established in 2015, currently in the process of finding investors to possibly collaborate with.

- ***P2PL Company*** – The Company providing the P2PL platform.
- ***Screening*** – The process in which potential borrowers – based on an evaluation of their creditworthiness – are allowed or disallowed to look for funding in the P2PL platform.
- ***Screening incentives*** – The drivers possibly affecting the fairness of the screening process, e.g. the intention to hold or to sell the loan to a third party.
- ***Secondary market*** – A financial market in which previously issued financial instruments – such as bonds and P2P loans – are bought and sold.

1.0 INTRODUCTION

The first chapter of this thesis starts with the introduction of interesting facts about alternative finance and the Peer-to-Peer lending platform to readers as well as contextualizing it. The purpose and motivation for the thesis is also defined accordingly together with the research questions which this paper aims to answer.

1.1 Born out of the crisis

> *"Peer-to-peer lending would not have flourished without the benign credit conditions of recent years"* - *Renaud Laplanche, Lending Club's founder*

One of the disastrous aftermaths of the collapse of the financial system in 2008 was shattered public confidence in the traditional intermediaries, mainly banks. Not only were the borrowers left with hefty debt burden, individuals and small businesses were unable to access any form of credit from the existing market. A simple blame on the banks did no good since the banks themselves suffered heavy losses, followed by increased regulatory oversight and capital requirements.

As such, the decrease in consumer confidence in the banks, a thirst for access to fresh credit and investors' appetite for higher yield on investments hadpaved the way for rapid growth in alternative finance worldwide with financially motivated and innovative ways for individuals and SME's in achieving credit. Under the aforementioned circumstances, it is of no doubt that the emergence of online peer to peer lending over the past couple of years had been the leading pioneer and alternative to mainstream banking and lending.

Consequently, banks and other financial intermediaries have three options to choose from: join the crowd, innovate or simply perish. The crisis had led to the demise of Lehman Brothers; therefore the latter is deemed by most of the banks as a possibility (baring legislative actions). In order to combat the onslaught, the most realistic option for banks is therefore to join the game in peer to peer lending thereby ditching the slogans and outcry for disintermediation of banks.

According to an article by Forbes "*The disappearance of Peer to Peer Lending*", the author persuasively mentioned the issue discussed above. The existing P2PL platform is infiltrated by institutions such as banks, hedge funds and venture capitalists as the largest investors in the sector[1].The influx of Wall Street money and that of the financial institutions into this platform should not come as a surprise, given the success of the market over the years. In the US, market place lending doubled since 2010 to $12 billion in 2015. Such lending could reach $150 billion to $490 billion globally by 2020[2].

The following graph shows an estimate by Morgan Stanley on the growth of market lending with p2p globally:

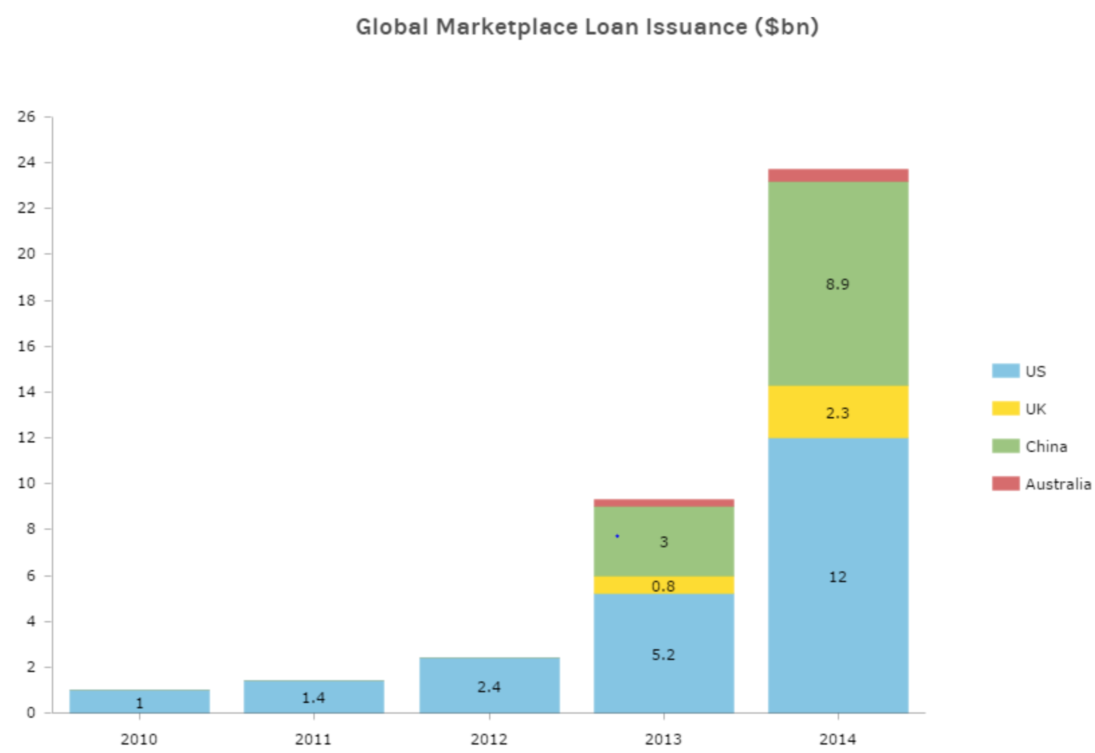

Figure 1: Global Marketplace Loan Issuance[3]

[1]Pozin, Ilya. "Looking to take your Business Online? 4 things you need to know," Forbes, Nov 5, 2015, accessed December 21, 2015 http://www.forbes.com/sites/ilyapozin/2015/11/05/looking-to-take-your-business-online-4-tools-you-need-to-know-about/

[2] "Can P2P Reinvent Banking?" Morgan Stanley, accessed September 02, 2015 http://www.morganstanley.com/ideas/p2p-marketplace-lending/

[3]http://www.morganstanley.com

The alternative finance market in the UK amounted to 1.74 billion pounds in 2014 with business and consumer peer to peer lending accounted for 1.3 billion pounds.

Continuous Growth

This phenomenon of growth can be explained by several factors. High yields for investors, coupled with favorable and feasibility of borrowing terms for potential borrowers are merely half of the story according to an article by The Economist, 2014 where the writer quotes the following, "*By offering both borrowers and lenders a better deal, websites that put the two together are challenging retail banks"*[4].

Another crucial growth factor of the P2PL market is the low rate of return on bank saving's account, thereby causing individual wealthy investors to start depositing their fund in the P2PL platforms as an alternative. In accordance to *AltFi Volume Index*, which is the market leading P2P Index in the UK, cumulative loans outstanding are£2.87 billion.

Moreover, from the *AltFi Return Index*, the average annual returns for P2P loans between the years 2006-2015 has been 5.04% in the UK market, much higher than what was being offered to investors had they saved their money on banks. In the US where The Orchard US Consumer Marketplace Lending Index exist, the balance outstanding was $4.28 billion.[5]

It is worth mentioning that the largest P2PL Company in the world "Lending Club" went public in the year 2014 when it launched its first IPO. This was a reminiscent of the Internet boom of the early 2000 and being the second biggest IPO in the US during 2014, it is of no doubt that the industry has grown successfully, driving attention towards the growth of alternative finance (Schubart, 2014; Quittner, 2014).

Also, according to Google Trends, which shows how often a particular search term is entered into the web, there is growing evidence that the interest for P2PL has increased over the years since its inception in the year 2006, signaling an increase in the public's interest of this phenomenon.

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[4] "Banking without Banks," The Economist, March 1, 2014, accessed July 1, 2015 http://www.economist.com/news/finance-and-economics/21597932-offering-both-borrowers-and-lenders-better-deal-websites-put-two

[5]Up-to-date data can be found on the websites of the Orchard and AltFi databases accordingly.

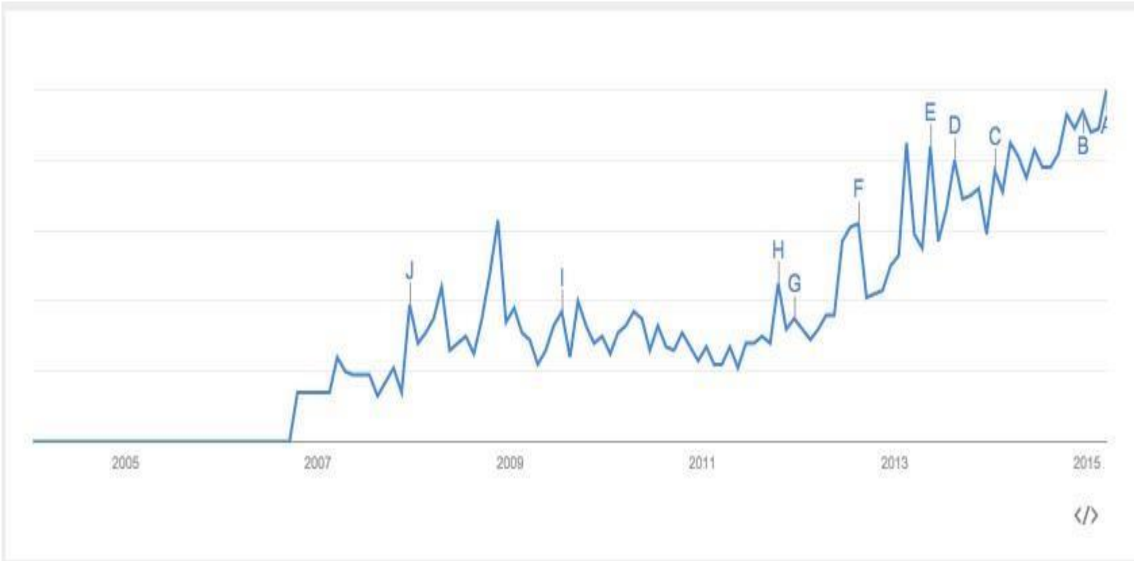

Figure 2: Interest Over Time[6]

1.2 Purpose of the research

The growing success of the peer to peer lending platform in the US and UK had attracted our attention in the field for research into the existing market. It would be interesting to know the contributors to the success of this platform (both micro and macroeconomic variables) and how likely it is to succeed in the Portuguese economy considering the main contributing factors and constraints. The study into alternative finance and "Peer to Peer Lending" is very recent, and this thesis will provide not only an overview of the existing literature, but will broaden this area for further research.

1.3 Research Questions

To be able to fulfill the purpose set for this paper, there are a few questions that need to be discussed and answered.

- Can Peer-to-Peer Lending market in Portugal achieve the success similar to that of the US and UK?

[6]Source: Google Trends, "Peer to Peer Lending

- If yes/no, then what are the micro and macroeconomic variables that will cause the success/failure of this industry?
- If not, then what are the major flaws and drawbacks that hinders the success of this market in Portugal?

- How is the Portuguese P2PL market growing in comparison to the US and UK? In what way can the introduction of legislative measures regarding alternative finance (crowd funding and peer to peer lending) in Portugal from August 2015 or the introduction of online platform by MOSAIC affect the marketif any?

1.4 Problem discussion and data collection

Given this industry is very new and with very limited research, it will be a challenge for us to correctly answer all the research questions. Data is also a major constraint due to the infancy of this platform and specifically in Portugal. As such, we will aim to focus mainly on the macroeconomic variables of the success in the US and UK and compare it to that of Portugal, thereby attempting to answer the research questions.

We plan to undertake qualitative approach by interviewing key players of P2PL in Portugal (MOSAIC's point of view), personal lenders/investors and sending out surveys to them.Giventhefactthattherearenoglobaldatabasescoveringthedevelopmentof P2Pmarkets,our taskwillbetocapture andcompiledataand each regulatory framework manually while using this data to compare the markets with one another.

As such, we had manually constructed questionnaires targeting the following samples: Borrowers (from MOSAIC's point of view), Lenders (Investor groups) and general population (students and ordinary Portuguese residents). The questionnaires prepared will aim at answering the research questions and ultimately come to the conclusion whether the P2P market in Portugal will succeed as of its peers.

1.5 Perspectives and Delimitations

We will always have the focus on the success factors of the P2PL market in the US and UK. Given the nonexistence of research on this subject in Portugal and the new laws to be introduced by the Portuguese Government in August 2015, we will have to look into a future market and the consequences this platform will have within the financial industry as it gains popularity in Portugal like the US and UK. In order to limit the scope of data collection research, we used the UK, US and Portuguese markets.

The success of the P2PL platform mainly lies in the US given its size and maturity, but it will also be interesting to look into the effects this platform has on the Portuguese market because it is still young and unexplored. Giventheinfancyofthismarket, there are several risks which will be considered as potential threats to the development and growth of this market in Portugal.

1.6 Research Design

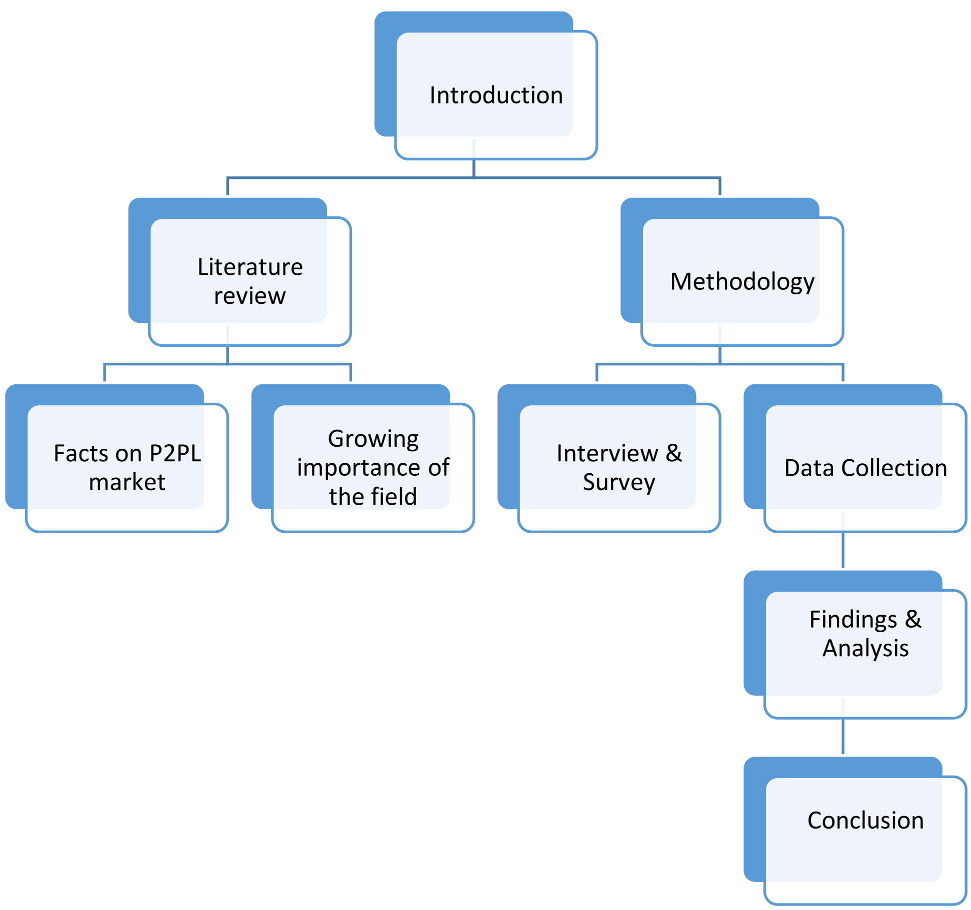

Figure 3: Research Design and Structure

1.7 Literature Review

The following consists of the literature involved with the market. It is important to capture all aspects of studies regarding P2PL in order for the readers to better understand the market and for the author to answer the appropriate research questions.

1.7.1 Theoretic Study

Information Asymmetry: This can be best described as a situation where one party has more or better information than the other, which may cause imbalance of power between the parties involved in the related transactions, thereby causing several problems (Akerlof, 1970; Jensen and Meckling, 1976). In the P2PL lending platform, since investors and borrowers cannot have direct communications with each other, this situation give rise to information asymmetry problems. The challenge therefore is to overcome the principal-agent problem.

Furthermore, most of the P2P network platform adopted unsecured loans, thereby contributing to huge credit risk which may in turn result in higher loan interests than that in traditional loans (Klafft, 2008). By integrating the credit systems in the community and getting access to borrower's reputation, personal credits, etc will result in selecting high quality borrowers (Robert and Benjamin, 2010). Such a method effectively reduces the probability of moral risk and adverse selection.

According to a study by Lin, 2009 which researched on the role of social networks in lending activities concluded that people possessing rich social network resources are more likely to get a lower interest rates and loan default rates are tend to be lower. Loan default rates will be lower especially in the situation where the lenders have connections with borrowers in real life like alumni and colleagues (Freedman, Jin and Everett, 2008).

Platforms:Zopa was established in Europe (UK) in the year 2005. Since then various forms of lending platforms followed (Frerichs& Schumann, 2008). Garman et al. (2008) identify 24 platforms existing worldwide, with twelve platforms in the U.S. alone while the weblog P2P-Banking.com names 33 different platforms worldwide in 2010.The first lending platform in the

United States was launched in February 2006 (prosper.com). Smava (smava.de), the first German P2P lending company, was founded in February 2007. As of today most of the existing platforms work on a national level, due to different legal requirements in different countries (Berger &Gleisner, 2009).

1.7.2 Empirical Study

- **Stakeholders:** ***Lenders, Borrowers and Communities***
  Online P2P lending is a two sided market that does not differ much from the traditional banking system with its typical challenges (Klafft, 2008). Lenders and borrowers are the main target groups of all platform activities. Therefore most of the research has focused on these stakeholders and also on the determinants that are essential for the success of the lending process (Freedman & G.Z. Jin, 2008; Iyer et al., 2009). According to Greiner & Wang (2009), while lenders seek opportunities to invest money as profitable as possible at a given level of risk, borrowers with different default risks look for sources of liquidity. P2P websites act as intermediaries and bring these groups together. They try to match the expectations of both parties. Lenders or borrowers sometimes engage in groups and form small communities to concentrate their interests (M. E. Greiner & Wang, 2009; Herrero-Lopez, 2009). There are no known researches on internal stakeholders like employees or management so far.

- **Financial Determinants**. Iyer et al. (2009) investigate in particular the influence of the borrower's credit rating on funding success. They raise the question, whether lenders are able to infer the creditworthiness of borrowers from other characteristics, besides the credit rating, as well. Klafft (2008) confirms that the rules that apply in P2P lending are very similar to those of the traditional banking system. His analysis of data retrieved from the Prosper platform show that the borrower's credit rating has the most impact on the interest rate of the loan, while the debt-to-income ratio of the borrower has a much smaller, but still significant influence. Additional information like a verified borrower's bank account or verified home ownership has almost no impact on interest-rates. The analysis shows however that the existence of a borrower's bank account is the most powerful determining variable when it comes to the successful funding of the loan. This is surprising, because the borrower's credit rating, which is only the second most influential variable in this category, is much more sophisticated and in fact includes the borrower's bank account information.

Klafft (2008) points out, that borrowers with weak credit-ratings, who cannot get funding in the traditional banking- system, are unlikely to do so via P2P lending. His analysis shows that borrowers with a credit-rating of HR make up 57.4 percent of all loan-listings on prosper.com. Only 5.5 percent of these listings get successfully funded compared to 54 percent of loan-listings by AA-borrowers. Freedman &Jin (2008) reveal in their study that the average funding rate on prosper.com rose from 8.51% in the time-period 11/2005 to 03/2007 to 10.14% between 06/2006 and 07/2008. They assume that the higher funding rate is a result of the improved information that prosper.com provides to its lenders (on February 12, 2007, prosper.com added more detailed financial information about the borrower and the possibility that borrowers report their current income, employment-status and occupation).

- **Demographic Characteristics:**

General

Research shows that discrimination based on demographic characteristics other than race have only little impact on the likelihood of funding and interest rates (Herzenstein et al., 2008; Pope & Sydnor, 2008; Ravina, 2007).

Ravina (2007) analyzes the role of similarity between lenders and borrowers. The results show that resemblance has a strong positive impact on the lenders' decision. Living in the same city as the lender, belonging to the same ethnicity or gender all increase the likelihood of getting a loan request funded.

Race

The borrower's race can be an important determinant in P2P lending. Pope&Sydnor (2008) show that the chances of African American loan listings to get fully funded are 25 to 34 percent smaller than those of whites with similar credit ratings. These findings are confirmed by Herzenstein et al. (2008) who present that African Americans have a smaller chance of getting funded than other races. They raise the question, if these differences are caused in part by the fact that African American borrowers, on average, set a lower maximum interest rate they are willing to receive funding for, than other races. Research shows, that smaller maximum interest rates reduce chances that lenders are bidding on the loan-listing (Herzenstein et al., 2008). Ravina (2007) contradicts these findings, by claiming that race, gender and age do not have a significant effect on the likelihood of getting a loan. She argues that racial discrimination is displayed mainly in the interest rates that borrowers have to pay in order to get a loan. African Americans have to pay between 1.39 and 1.46 percent higher interests than similar white borrowers according to her study. The findings of Pope &Sydnor (2008) show that interest rates of African American loan listings are 0.6 and 0.8 percent above those of white loan listings. However, the estimated net return of African American loan listings is significantly worse compared to those of whites.

Age

Pope & Sydnor (2008) analyze the effects of the borrowers' age on funding success. Compared to a base group of 35-60 year olds, there is a 40 to 90 basis points higher chance of getting funded for those who appear younger than 35. Those who appear to be 60 years and older are between 1.1 and 2.3 percentage points less likely to succeed in acquiring a loan.

Gender

Empirical research by Pope & Sydnor (2008) finds that single women pay 0.4 percent less interests than men even though the estimated return on loans to single women is approximately 2 percentage points less than for single men.

Barasinska (2009) investigates the question if the lenders' gender is relevant for ex-ante return and risk characteristics of the loan. To her surprise, she finds that female lenders are less risk-averse than male lenders. The probability that female lenders are funding a loan increases with lower interest rates and lower credit ratings of the borrower. Barasinska's interpretation of these results is that women are possibly driven by altruistic motives and are willing to lend money at lower interest rates than males.

Barasinska also outlines a new field of study, which she leaves to future research, concerning the question whether loans granted by female lenders perform differently than those granted by males. However, there are other researches that are on the contrary study from Ravina (2007) and Pope &Syndor (2008) such as the research by Herzenstein, Andrews, Dholakia and Lyandres (2008) where they concluded that characteristics such as race and gender has no significance influence on borrowing rate. Pope and Syndor (2008) had also discusses that extra interest cost (1.39% ~ 1.46% more than whites) the black pay does and cannot make up for the higher risk of default.

- **Group and Groups Intermediation:** At most P2P-Lending platforms members are allowed to form special communities. Groups might clear some information hurdles if the group is designed with the correct incentives (Freedman & G.Z. Jin, 2008). For example being member of trusted groups at Prosper doubles the probability of getting a loan request fully funded (Herrero-Lopez, 2009). The membership in a trusted group does not guarantee a fully funded loan, however. A reasonable offer is still needed. The sole endorsement of a group leader can increase the likelihood of being funded (Kumar, 2007), it will not affect the interest rate of the loan itself (Collier and Hampshire, 2010).
  Berger (2009) and Greiner & Wang (2009) found that the mere membership in a group significantly reduces the interest rate of the funded loan. Greiner & Wang (2009), with the support of Klein (2008) show that borrowers that are member of a group show slightly higher loan payments and smaller default rates than borrowers outside of a group. These findings are aligned with Greiner & Wang (2009), Herrero-Lopez (2009) and Freedman &Jin (2008) who claim that social loans are more likely to be funded than the listings that have no group affiliation or friend ties.

- **Recent Empirical Studies:**Guo (2011) collected 16766 transaction records since 25-08-2008 to 15-05-2010 from PPDAI and studied the P2P lending financing cost and financing availability. Six related conclusions are drawn: (a) financing cost is negatively related to credit scores and the amount of borrowing, (b) the cost of financing and the historical flow standard, total number of bid are closely relative to each other, (c) borrowing ways have no significant impact on the cost of borrowing, (d)the finance availability is positively correlated to the borrower credit rating, historical success amounts and the total number of bid, (e) availability of financing are negatively related to borrowing deadline and the amount of borrowing, (f) indication that the existence of the social capital can effectively enhance the availability of credit. There are also some conclusions draw by using questionnaires and case studies on the influence factors of the P2P lending practices: the borrower's borrowing information, authentication data has significant influence on borrowing rate, interest rates and borrowing amounts make sense but smaller, borrowing time limits almost means nothing to borrowing progress (Li, 2011). And there are researches on how to improve the yield of investors from the Angle of investment. By developing and combining information of investor behavior and the borrower credit information, Luo (2012) established a quantitative loan evaluation and investment decisionmaking model from three aspects: the investor's structure, the borrower credit risk analysis and comprehensive analysis of the information sources, which can help investors make investment decisions.

1.8 Critical Analysis of the Literature Review

Most of the studies mentioned above had been performed based on data from Prosper.com and PPDAI (Chinese P2PL platform). Little research exists for P2PL regarding offline markets which is very common in Portugal at the moment. Most of the theoretical research of P2P loans in foreign countries had mainly focused on the problem of information asymmetry on lending the role of the intermediary institution in lending activity and how to improve success rate of borrowing by forming borrowing groups.

This research will aim to draw a conclusion based on qualitative analysis and interviews on how well the current P2PL market in Portugal is performing and will it succeed like its peers in US and UK given the new legislations to be imposed from August of 2015 and MOSAIC to start the first online platform in Portugal. This paper will be one of its kind given no research on P2PL in Portugal exists so far.

2.0 ALTERNATIVE FINANCE AND PEER TO PEER LENDING MARKET

This section will aim to introduce a brief history of the origination and the first platforms of the P2P market and how the market actually works in the real world. This is to give the readers a comprehensive understanding of the functionality of the market and its key global players.

2.1 What is "Alternative Finance"?

From the inception of the global financial crisis of 2007, alternative finance which includes financial instruments and distribution channels other than the traditional forms of finance and financial system has emerged and thrived in the US, UK and continental Europe. According to the study conducted by University of Cambridge, there are no independent, systematic and reliable research to scientifically benchmark the European and the US alternative market and that very little is known about the size, growth and diversity of various online platform based alternative finance markets[7].

The obvious and most important fact about alternative finance is that of its innovation and the rapid growth of FinTech sector in terms of both business models and technological platforms. The main question therefore is the following, "Will the traditional financial system simply regard them as competitors – or will they adopt the innovations showcased by alternative finance to increase their own product offering"? The latter is a clear evidence of the emergence of Peer-to-peer lending and how it has been used by major financial institutions to increase their products and market share.

[7] "The European Alternative Finance Benchmarking Report", http://ec.europa.eu/finance/general-policy/docs/crowdfunding/150304-presentations-ecsf_en.pdf

2.1.1 Alternative Finance in Europe

According to the research conducted by the EU with collaboration between University of Cambridge and EY and as mentioned in the article "The European Alternative Finance Benchmarking report" and "Understanding Alternative Finance", the European alternative finance market grew by 144% in the year 2014 with peer-to-peer leading making its way to the top of the chart. In the UK for example, peer-to-peer lending had a market of approximately GBP 1.2 billion[8].

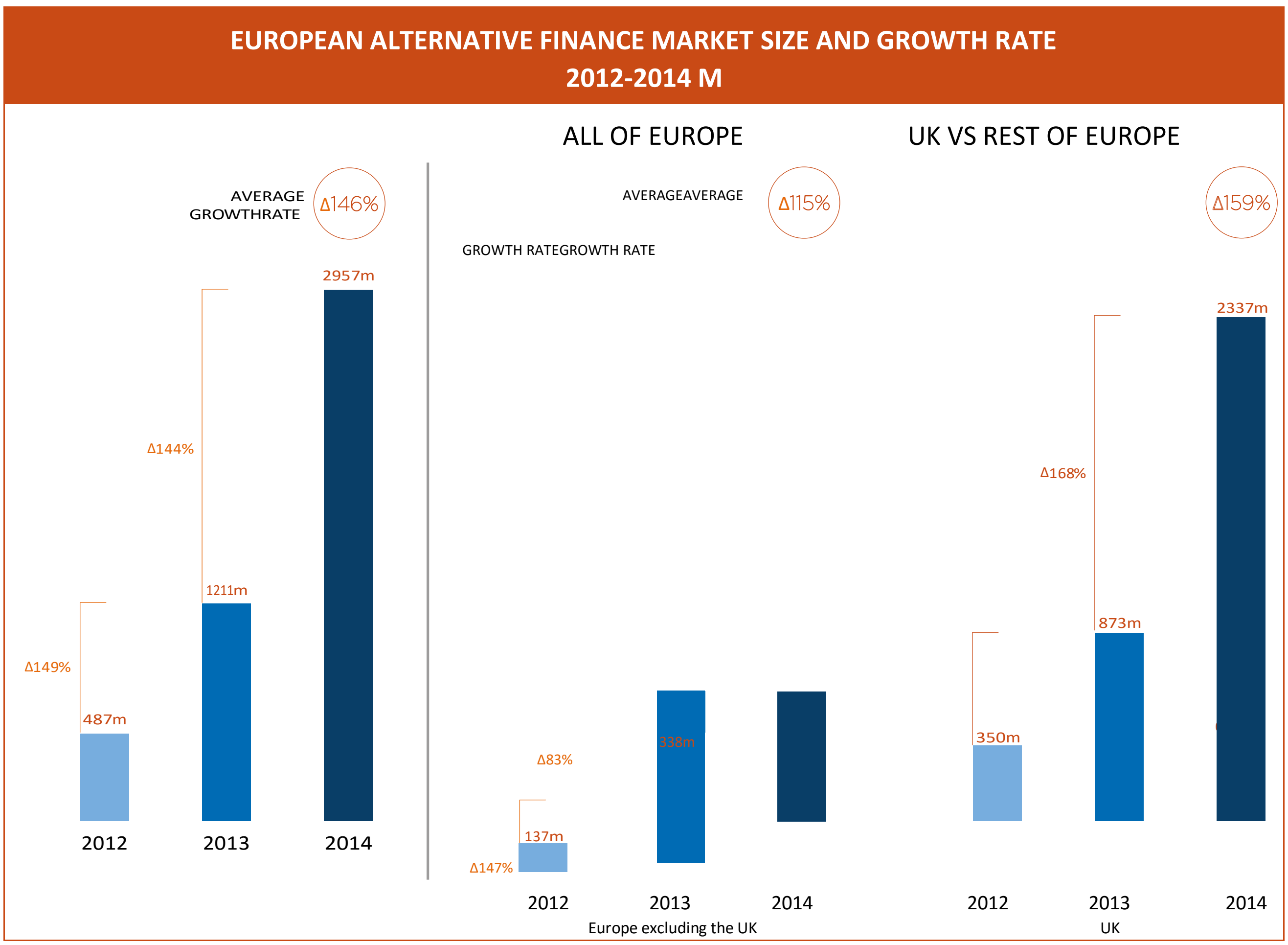

Figure 4: Alternative Finance Market Size and Growth in Europe[9]"

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[8]"Understanding Alternative Finance – The UK Alternative Finance Industry Report 2014", https://www.nesta.org.uk/sites/default/files/understanding-alternative-finance-2014.pdf

[9] " The European Alternative Finance Benchmarking Report", http://ec.europa.eu/finance/general-policy/docs/crowdfunding/150304-presentations-ecsf_en.pdf

2.1.2 Alternative Finance in the US

It is not surprising to mention that the US alternative finance market (perhaps the largest in the world) had surged accordingly, thereby generating $36.17 billion in funding in 2015, an increase of 213% from $11.56 billion in the previous year[10]. The largest increase and the maximum weight can be given to peer-to-peer consumer lending, which the author will discuss in the following section.

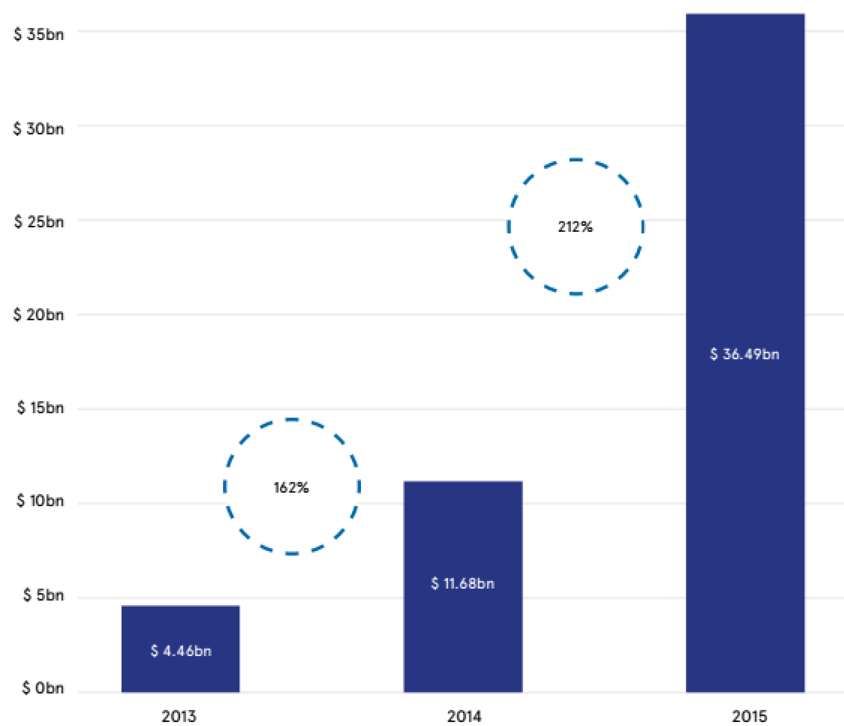

Figure 5: Growth of Alternative Finance in the US[11]

[10] "Americas Alternative Finance Benchmarking Report" - https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2016-americas-alternative-finance-benchmarking-report.pdf

[11] " The Americas Alternative Finance Benchmarking Report" https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2016-americas-alternative-finance-benchmarking-report.pdf

2.1.3 Tools of Alternative Finance

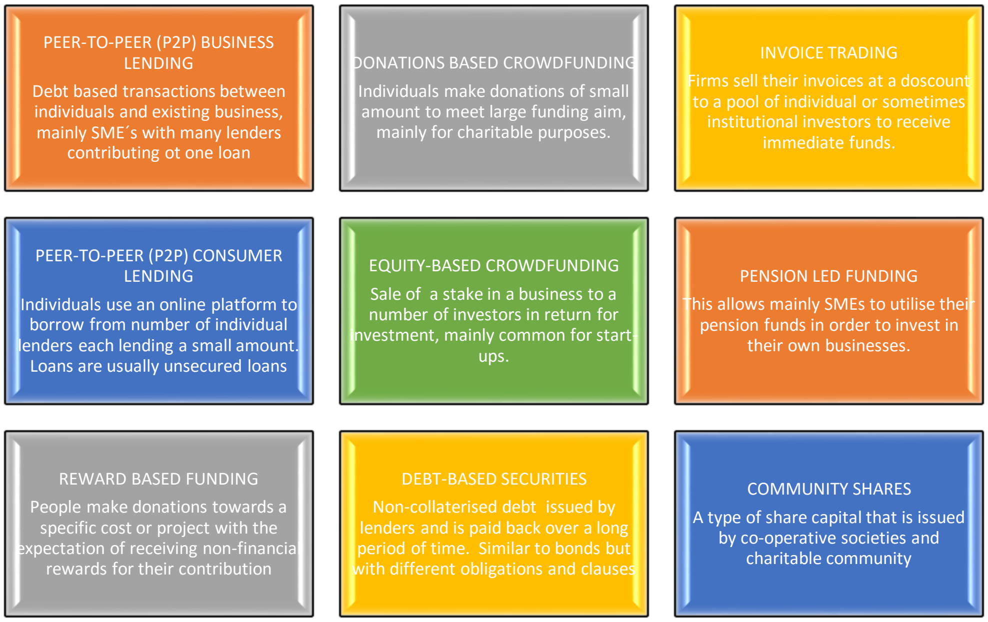

Figure 6: Types of Alternative Finance in Europe

For the purpose of this research, the author will particularly focus on Business and Consumer peer-to-peer lending.

2.2 What is peer-to-peer lending?

Simply put, this is an online platform where lenders (investors) can lend to SME´s and individuals, both short term and long term. The only two types of peer-to-peer lending (business and consumer) had been defined at the previous page on Figure 6. In this kind of lending model, the mediation of financial institution is not required (Herzentein et al., 2008; Galloway, 2009).

2.2.1 How does it work?

Considering P2P online platforms such as Prosper and Lending Club, any approved borrower can register and apply for a loan request without having the guarantee that the loan will be funded. However, borrowers are not allowed to disclose certain information such as name, address or any information that reveals the borrower´s race, religion, sex etc[12].

[12] “Borrower Registration Agreement,” Prosper Marketplace, accessed May 13, 2015, https://www.prosper.com/account/common/agreement_view.aspx?agreement_type_id=7

This is mainly to avoid bias on loan issue. There is also a section where the borrowers can explain the purpose as to why they need the loan or provide information about themselves such as their source of income, occupation and business plan. Lenders afterwards browse all the loans listed on the website and based on the assigned risk and interest rates persistent to these loans they plan to invest.

Using the loan listings from the platforms from borrowers, lenders can create their own portfolio of loans by lending in one or several borrowers, thereby diversifying their investments. There is one significant and potential risk to lenders; which are loansthat are unsecured and in times of default, the lenders lose all of their investment and collection agencies are unable to recuperate the payments[13].

This is the only reason why investors invest small amount of money across multiple loan listings in order to minimize their risk of facing losses through a default, with amount often as low as $30 (USD). Recently, investors (institutional and individual) have adopted an automated investing technique that analyses loan performance data and select and fund loans automatically with the obvious aim of maximizing returns according to the lenders´ preferences. This allows potential loan listings to be funded immediately, often within seconds[14].

2.2.2 So, who are the P2P Platforms?

In the US, the most famous online platforms that provides P2P services are Prosper.com and Lending Club. For UK and most part of Europe, the greater presence of existing platforms for P2P lending areSeedrs and Zopa. For Portugal, the existing platforms are MOSAIC, Raiz and Seedrs. The platforms themselves benefit by raising fees for successful realized transactions (Galloway, 2009). With the emergence of the very first online P2P Platform "Zopa" this new form of lending raised attention for the first time in 2006 (Hulme& Wright, 2006). As of now,

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[13]Cohan, William D. "Bypassing the Bankers." The Atlantic, Sept. 2014. Web. 21 June 2016, http://www.theatlantic.com/magazine/archive/2014/09/bypassing-the-bankers/375068/

[14] Newberry, Jorge. "P2P Lending is Not Dead," Huffington Post, April 9, 2015, accessed June 21, 2016, http://www.huffingtonpost.com/jorge-newbery/p2p-lending-is-not-dead_b_7028292.html

most of the existing platforms work on national level due to different legal requirements in different countries (Berger &Glesiner, 2008).

2.2.3 How are the loan listings being assessed by potential investors?

Almost all of the P2P lending platforms provides an overview of the financial characteristics of the borrower to the lender for a better picture of the borrower´s creditworthiness. Financial determinants include credit ratings, detailed information and monthly income and expenses, property ownership, debt to income ratio, number of enquiries on the credit bureau and loan payment performance on prior loans listed on Prosper for example[15]. However, Lending Club on the other hand computes an internally generated score computed from an "internally developed algorithm" that analyses the performance of borrowers and also takes into account the FICO score, credit attributes etc.[16]

It is worth mentioning that borrowers complete an online application platform on the lending platforms and provide information about themselves. The peer lending company usually obtains a credit report on the applicant once an application is approved. All these data are used to assign a loan grade using scoring systems such as "Prosper Rating" or LendingClub´s "Model Rank".

Often, the loan grade is also determined using the lending platform´s historical loan performance and payment history in order to determine how a particular loan is likely to perform[17]. There is a positive correlation between loan grades and interest rates. This implies that a loan on lending Club with grade A (the highest score) has an average of 7.64% interest rate compared to a loan with grades F & G (the lowest score) have an average of 23.81% interest rate[18].

[15]"Prosper Score," Prosper Marketplace, accessed June 21, 2016, https://www.prosper.com/help/topics/general-prosper_score

[16]"Rates& Fees," LendingClub Corporation, accessed June 21, 2016, https://www.lendingclub.com/public/rates-and-fees.action

[17]Renton, Peter. "How Lending Club and Prosper Set Interest Rates." Lend Academy, November 7, 2011 accessed June 21, 2016,
http://www.lendacademy.com/how-lending-club-and-prosper-set-interest-rates/

[18] "Lending Club Statistics," LendingClub Corporation, accessed June 22, 2016, https://www.lendingclub.com/info/demand-and-credit-profile.action

2.2.4 Who are the borrowers in peer-to-peer lending?

For consumer loans, loan data from Lending Club indicates that most of the borrowers under this category are indebted, middle-high income individuals who are consolidating credit cards and other debts[19]. It is worth mentioning that P2P Lending companies had very few borrowing restrictions on the early years which often resulted in high default rates[20]. Nowadays, Prosper and Lending Club focus on prime and near-prime borrowers with satisfactory debt-to-income ratios, a credit history longer than 36 months with limited credit inquiries during the last 6 months[21].

While the initial focus had been based on consumer credit, the models of P2P lending platforms had been adopted for other “asset” classes such as mortgages, student loans, small business loans, car loans.

The following lists are an example of the P2P platforms offering services to both these borrowers and investors:

- Consumer Loans: Lending Club, Prosper, Zopa, Lendico, RateSetter, Trustbuddy
- Small business loans: FundingCircle, On Deck Capital, Kabbage, Lending Club
- Student Loans: SoFi, CommonBond
- Mortgages: LendInvest, RealtyMogul

2.2.5 Who are the investors/lenders – What drives the growth of these platforms?

It is apparent that most of the lenders of the bigger platforms had been backed by large institutional investors and well known VCs. In 2014 alone, 65% of loans on Prosper and

[19]Morse, Adair. "Peer-to-Peer Crowdfunding: Information and the Potential for Disruption in Consumer Lending." *SSRN* (n.d.): 4. Print.

[20] Feldman, Amy and Beth Pinkser. “P2P Lending Pulls Big Investors – Should You Bite?” Reuters, August 27, 2013, accessed June 23, 2016
http://www.reuters.com/article/us-debt-loans-p2p-idUSBRE95O0M220130625

[21]Cox, Jeff. “A shadow banking sector has gotten 65 times larger,” CNBC, March 15, 2015, accessed June 23, 2016, http://www.cnbc.com/2015/03/15/a-shadow-banking-sector-has-gotten-65-times-larger.html

Lending Club worth a whooping value of $3 billion were funded by institutional investors[22]. The following is an example of big lenders into these platforms[23]:

- Lending Club: Google, Foundation Capital, Canaan Partners, Norwest Venture
- Prosper: BlackRock, Sequoia Partners
- MOSAIC: Institutional Investors (Insurance companies) and individual investors.

The entry of these institutional investors has made one important thing possible: loan securitization. This meant large loans can be used as securitized bonds and later sold to other investors[24]. The affluent individuals should not be forgotten, however. They contribute to the system where banks and large institutional investors tend to fail. For these lenders, getting paid back quickly is part of the game and an attraction to the borrowers and often looks at projects that banks might struggle with. Loans made by these rich and wealthy individuals are to small businesses younger than two years. Theymake a substantial return given high interest rates are charged and borrowers get the money they wouldn't otherwise[25].

2.2.6 Lending Process

There are few platforms that connects lenders and borrowers directly, and there are few others that connect them through a third party (such as banks). Sites like Prosper.com use an auction process (Galloway, 2009) where borrowers are allowed to set a maximum interest rate they are willing to pay and lenders place their bids accordingly. The bidding process ends after the loan

[22]"Wall Street Is Hogging the Peer-to-Peer Lending Market." Quartz, March 4, 2015, accessed June 23, 2016, http://qz.com/355848/wall-street-is-hogging-the-peer-to-peer-lending-market/

[23] Light, Joe. "Would you Lend Money to These People?" Wall Street Journal, April 14, 2012, accessed June 23, 2016 http://www.wsj.com/articles/SB10001424052702304587704577333801201736034

[24]Eavis, Peter. "A Step Toward ´Peer to Peer´ Lending Securitization," The New York Times, October 1, 2013, accessed June 23, 2016 http://dealbook.nytimes.com/2013/10/01/a-step-toward-peer-to-peer-lending-securitization/?_r=0

[25]Matters, Wealth. "Borrowing Directly from the Wealthy Can be a Lifeline for Some," The New York Times, April 8, 2016, accessed June 23, 2016, http://www.nytimes.com/2016/04/09/your-money/borrowing-directly-from-the-wealthy-can-be-a-lifeline-for-some.html

has been fully funded since further bids will not have effect on the interest rates (Collier & R. Hampshire, 2010).

2.2.7So, where are the banks?

It is important to understand the role of banks and the threat of competition it faces from these P2P platforms. On the contrary, it is also important to observe why banks have ignored this field of financing for so long. Both businesses and consumers have lost their trust and faith in banks over the last decade as banks are more focused on larger transactions with large companies. This is logical given the fact that banks nowadays are faced with increased regulation and risk aversion.

The operating ratios of banks serving a loan portfolio is between 5% and 7%, while it is below 2% for Lending Club and Prosper. This is a major obstacle that banks are faced to deal with. According to a study by Mckinsey, they concluded that Lending Club has 425 basis point advantage over traditional banks, notably driven by operating leverage. This is the main reason why Lending Club can offer better rates to both investors ad borrowers[26].

2.3 Regulation

WhileitiswellknownthatP2PL is commonly described as a system bypassing the banks, they are usually bound by regulations from Bank of Portugal. P2P companies such as MOSAIC are not originators of loans themselves, nor do registered lenders invest directly in loans. Borrowers pay interest through monthly automated bank transfers to lenders and lending companies such as MOSAIC, PROSPER & LENDING CLUB make a profit by charging range of fees to both borrowers and lenders. Borrowers pay closing fees on loans as well as late payment fees and lenders are charged annual servicing fees.

[26]Munck, Yvan De. "The Rapid Ascent of Peer-to-Peer and Online Direct Lending Models: The Impact on Banking." *The Capco Institute Journal of Financial Transformation* (2014): 35-45. Web. 17 Sept. 2015.

2.3.1 Global Regulation

The legislation often depends on the model of crowdfunding, as there can be different regulations for different types of crowdfunding in the same country. For the purpose of this thesis, the author will focus on regulations for P2P platforms.

Kirby and Worner (2014) summarized the regulations of lending crowdfunding with five regulatory regimes:

1. **Unregulated**. This apply for countries that do not have a peer-to-peer lending market and of those that consider it too small to regulate (E.g. Tunisia).
2. **Regulated as an intermediary**. The platforms have to be registered as financial intermediaries or brokers if they are classified as such (E.g. Australia).
3. **Regulated as a bank**. In several jurisdictions, the platforms are classified as banks due to its credit intermediation function and are, therefore, regulated as banks. In this type of jurisdictions, this industry is relatively small (E.g. Germany and France).
4. **The American model**. This is a two tier system. On a Federal level, each platform and each loan should be registered with the SEC. Each platform is also treated as a public company, having to reveal its finances, practices and loan origins. On a State level, the platform should apply for a license to conduct business on a State by State basis.
5. **Prohibited**. Some jurisdictions prohibit the practice of peer-to-peer lending (E.g. Israel and Japan).

One additional approach to the regulation of crowdfunding would be to designate the markets as exempt, or to lighten the regulations around the issuance of shares through equity crowdfunding, in order to promote SME growth.

However, there is no cross-jurisdictional harmonization in the regulation of these industries, and so the regulatory regimes are dependent of the jurisdictional choices of each individual country. In the next chapters we are going to address the laws on crowdfunding of some key countries.

2.3.2 Portugal

In Portugal, the only crowdfunding law was approved by the Parliament on the 24th of August 2015. It was termed as "collaborative funding" (in Portuguese: "financiamentocolaborativo") and defined as the raising of investment tranches by individual investors using a crowdfunding platform. According to the Portuguese law, crowdfunding can take the form of one of the following models:

a) Donation, with or without non-money compensators.

b) Reward, compensated by the product or service financed.

c) Capital, compensated by shares of the invested company.

d) Loan, compensated by interest payments.

The law, published on "Diário da República" (August 2015), forbid the owners of the crowdfunding platforms to issue investment recommendations and forces them to implement measures to prevent conflicts of interest. Additionally, they are obliged to disclose some information depending on the different forms of models:

a) Donation and b) Reward – the owners of these platforms have to communicate the initiation of their activities to the "DirecçãoGeral do Consumidor".

c) Capital and d) Loan – the owners of these platforms have to register at "Comissão de Mercado de ValoresMobiliários" (CMVM), the entity which is responsible for their supervision. CMVM was instructed to determine their own regulations, namely concerning the registration procedure, the upper limit of funding and annual investment (by investor in relation to each offer and by investor in relation to the total subscriptions).

This law took action on the 1st of October 2015, except for the capital and loan model that have to wait for CMVM regulations which will only be published on the 7th of December 2015 (CMVM, 2015).

CMVM's project for regulation proposes that each investor may not invest more than 3 thousand euros per campaign/project and not more than 10 thousand euros per year, on the capital and loan models of lending. Nevertheless, there is an exception for the private investors with an annual income over 100 thousand euros.

There are also limits for the total amount of funding on campaigns/projects. They cannot be superior to 1 million euros, unless if financed only by individuals with annual income above 100 thousand euros. This way the limit can be increased from 1 million to 5 million euros.

There are also additional regulations for the crowdfunding platforms. Besides having to be registered on CMVM, they are now also obliged to have a minimum share capital of 50 thousand euros or, alternatively, a civil responsibility insurance of the same amount.

This project from CMVM is open to public consultation, as comments and suggestions can be made until the 21st of January 2016.

2.4 Secondary Market

A secondary market is a platform where investors can purchase previous issued financial instruments from other investors rather than from the originator of that loan.

As for P2PL market, it works in a similar fashion to the regular secondary market. This provides extra liquidity for investors in the P2PL market since investors or lenders can sell off potentially poor performing loans to other interested investors while generating funds at the same time. Until the maturity of the loan, the ownership of the loan can change several times (Acharya & Richardson, 2009).

3.0 METHODOLOGY

This section will aim to explainthemethodologyusedtofulfil the purpose of this thesis. The main purpose of this section was to analyse the origination and current development, trend and situation of the P2P business lending platform in Portugal based on questionnaires and several surveys.

After having to set up the purposes for this thesis, we decided that the best way of conducting empirical studies is through qualitative research. This was done by conducting in-depth interviews with one of the major participants of the P2P market in Portugal which is MOSAIC (*the Managing Director being Joao Cerejeira*) and sending out carefully and technically assessed questionnaires to various investors in this field in Portugal and to the general public as well.

This will allow the thesis to highlight the problems and possibilities from different perspectives of the market. Given the fact that these market participants are Portuguese, their expertise, professionalism and knowledge of the market as a whole will emphatically provide the empirical studies with insights similar to that of the US and UK.

3.1 Qualitative Research: Pre- interview

Prior to the interviews with MOSAIC and sending out the questionnaires, we have had a correspondence with Rui Vasco Ramos, a student of Masters in Finance at FEP and also an intern at MOSIAC in order to get a better understanding of the market and the regulatory framework in Portugal.

3.1.2 Interview & Survey

In order to carry out the survey, we followed a similar survey structure conducted by authors Baeck.P, Collins. L and Zhang.B of University of Cambridge with the partnership of PwC – UK and ACCA in November 2014; where they studied the UK Alternative Finance 2014. For the questionnaires, we followed the Master's thesis conducted by Swedish students of Jonkoping

University Gustav Claesson and Marcus Tengvall in 2015; where they studied Peer-Peer lending in the Swedish economy. The links to these papers are at the *References* section accordingly.

Sample & Data:

The samples of the interviews are group of individuals who in many ways are affected by or can have effects on the future growth of P2P market in Portugal. The questions used during the interviews are purely based upon the research questions. As seen in the *Appendices 7.1* several different questions have been asked and discussed in order to reach the broader research questions. All these different issues are summarised in the *Research, Findings and Analysis* section below. By providing the reader with testimonies from the following market participants, the idea is that an unbiased picture of the developments within the P2PL market can be presented.

INVESTORS:

We sent out surveys *(Appendices 7.2*) through email to institutions listed in the CMVM website, consisting of 142 financial institutions and we mentioned in the email to pass on the survey to investors and also through posting survey links on "Facebook" pages of MOSAIC, SEEDRS, RAIZ, and all relevant companies listed in the CMVM websites having "Facebook" or any other "Social Media" pages online such as LinkedIN. Out of these emails sent and posts on social media, and also through sending out emails to 20 individual investors from a list provided by Joao Cerejeira, the Managing Director of MOSAIC, there were ***83 respondents*** from the *"**Investors**"* survey with **age group, gender, profession** and their **status as investors** ranging from individual, institutional, angel and P2P investors as show in ***Figure 7,8,9,*** *and* ***10*** below.

It was very important to analyse their response as this sample of people were very crucial for answering the research questions. Their adaptability to this market, their willingness to lend and determining interest rates and understanding their age group and other demographic factors such as race and religion will give a broader perspective into the future of the P2P market in Portugal.

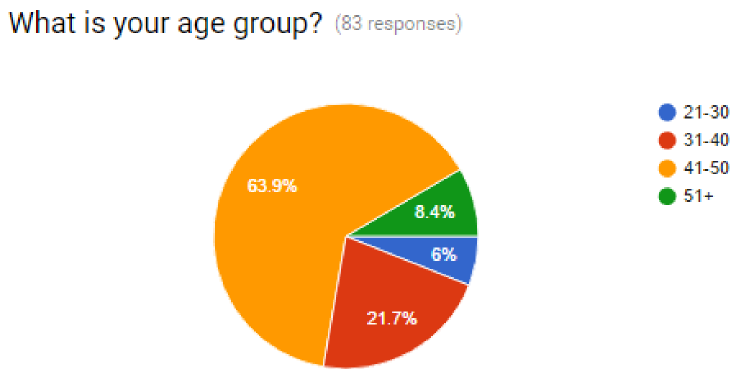


Figure 7: Investors Age Group

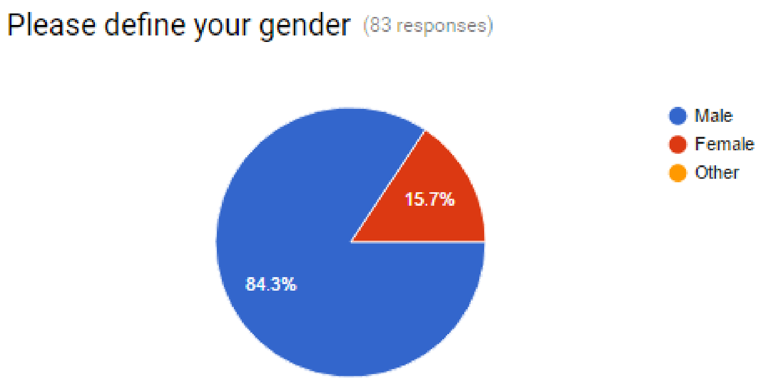


Figure 8: Investors Gender Group

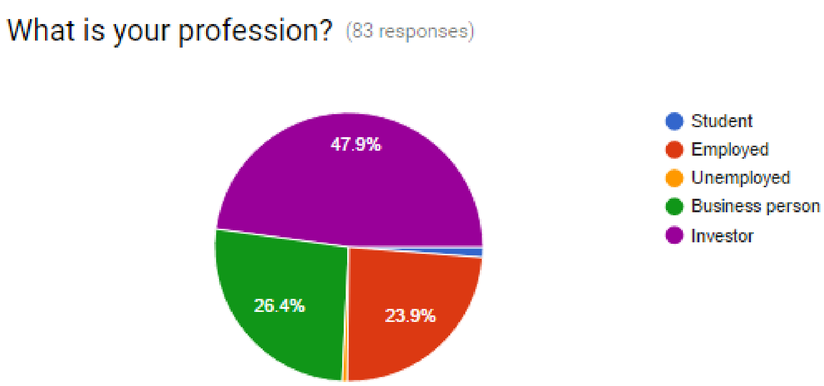


Figure 9: Investors Profession Sample

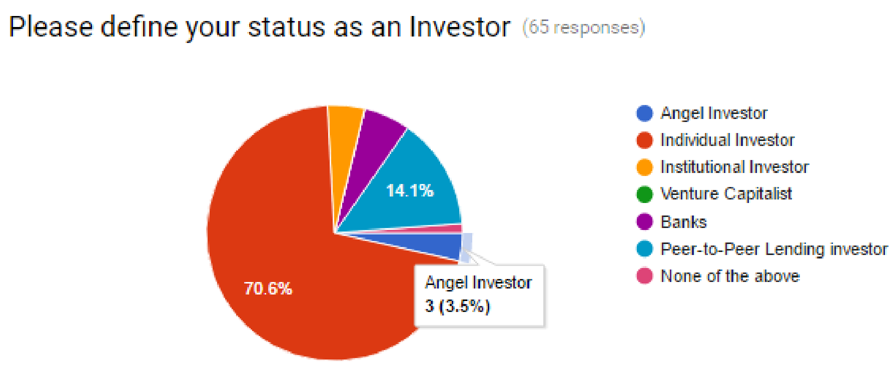


Figure 10: Investors "Status" Group[27]

BORROWERS:

We interviewed the Managing Director and co-founder of MOSAIC – JoãoCerejeira as well as an intern who worked for MOSAIC – Rui Vasco Ramos. These interviews have also been accompanied by continuous correspondence via e-mail and on the telephone with these actors. All interviews will be recorded and summarized in text. We have also interviewed Ana Margarida Bras, Branch Manager in BPI Commercial Bank and part of the BPI Investments and Credit division to get a broader perspective of the banks and their perceptions on P2P Lending market in Portugal

The main reason for choosing MOSAIC for empirical studies for this thesis is mainly because of its strategic position in which they are working at the Portuguese markets with potential SMEs (borrowers) and also private and institutional investors. This interview undoubtedly will provide insights to how they think the market is functioning today and how will it function in the near future. The main objective of this interview with MOSAIC is to understand their screening process and how much they are actually copying from the US and UK respectively for clarity and comparison purposes. Furthermore, the interview will provide the study with information regarding the information asymmetry problems that exist in the market and what they are doing in order to minimize the adverse selection problems.

[27]Banks and Financial Institutions represented 10.6% of respondents.

We had also put into focus the way in which P2PL companies are affected by the complexity of working in the Portuguese market given its current demographics and poor economic and financial situation. Another goal with this interview will be to get an idea of what MOSAIC thinks about the current regulatory framework and if there are any potential regulations in the future they are concerned about. As such, we created a survey for borrowers and potential borrowers in Portugal to understand their involvement and contribution to the P2PL platform in Portugal. The questions are in the *Appendices 7.2* accordingly.

For Borrowers, we combined our sample of general public with the borrower's sample. This is solely to understand the current awareness of this P2P market in Portugal and whether they will consider borrowing from this market of alternative financing the future and what are their views and perspectives. This will be a strong determinant of the future success of this market in Portugal. The survey links were posted on social media websites of institutions, personal social media pages such as Facebook and LinkedIN, emails sent to students and alumni of FEP, University of Porto, emails sent out to 150 SMEs in Portugal from various industries and contacts provided by Joao Cerejeira, we gathered ***101 respondents*** from the ***"Borrowers"*** and ***"General Public"*** survey. Following***Figures 11, 12, 13 and 14*** represents data with respect to AGE, GENDER, PROFESSION and ANNUAL INCOME of borrower respondents accordingly.

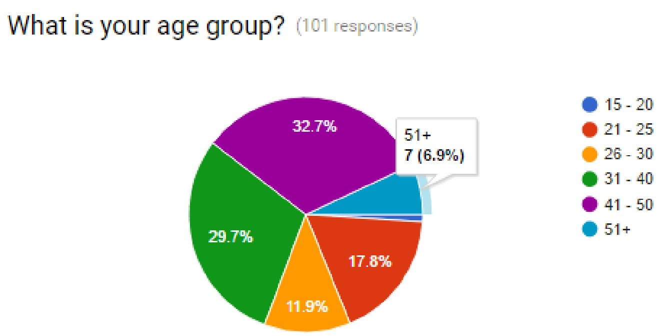


Figure 11: Borrowers "Age" Group

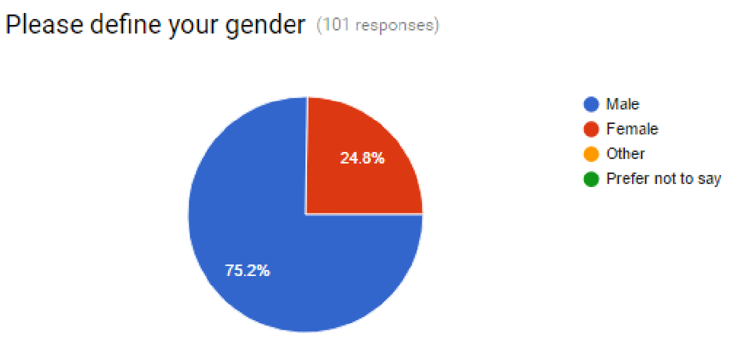


Figure 12: Borrowers "Gender" Group

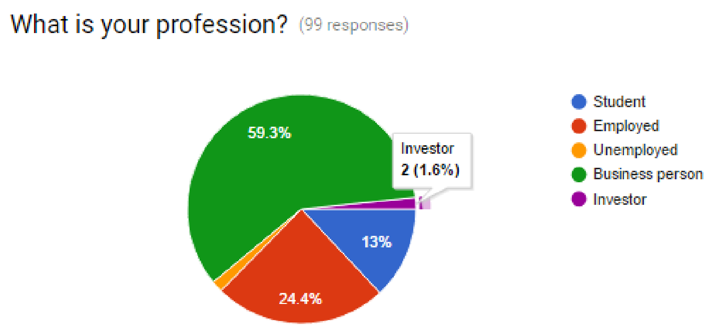


Figure 13: Borrowers Profession Sample

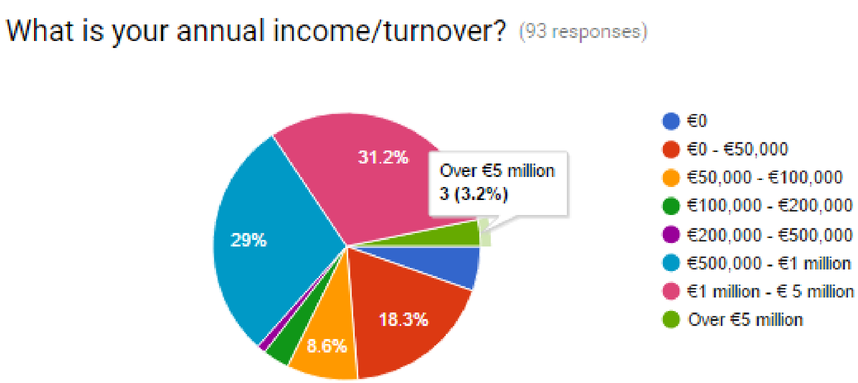


Figure 14: Borrowers "Annual Turnover" Sample

4.0 RESEARCH, FINDINGS & ANALYSIS

The fourth section will provide the reader with summaries of the empirical studies for each topic covered in the research questions. This involves summary and analysis from surveys, questionnaires and interviews held with relevant parties in the P2PL platform in Portugal.

The following is a comprehensive summary of what was discussed with Joao Cerejeira of MOSAIC – the Co-founder and Managing Director of MOSAIC, interview held with BPI Investments, telephone conversation with Raiz and surveys sent out to Investors/lenders, borrowers and the general Portuguese population.

4.1 The Origination of the Market In Portugal

When discussing the reason for entering into the P2PL business in Portugal, João explained that he saw an uncovered part of the market with an immense growth potential in which MOSAIC could establish their business and start growing. The main reason for entering this market was mainly to satisfy the needs of borrowers, while keeping in mind the notion and benefits this platform offers to investors: higher interest.

4.1.1 Demographic Analysis

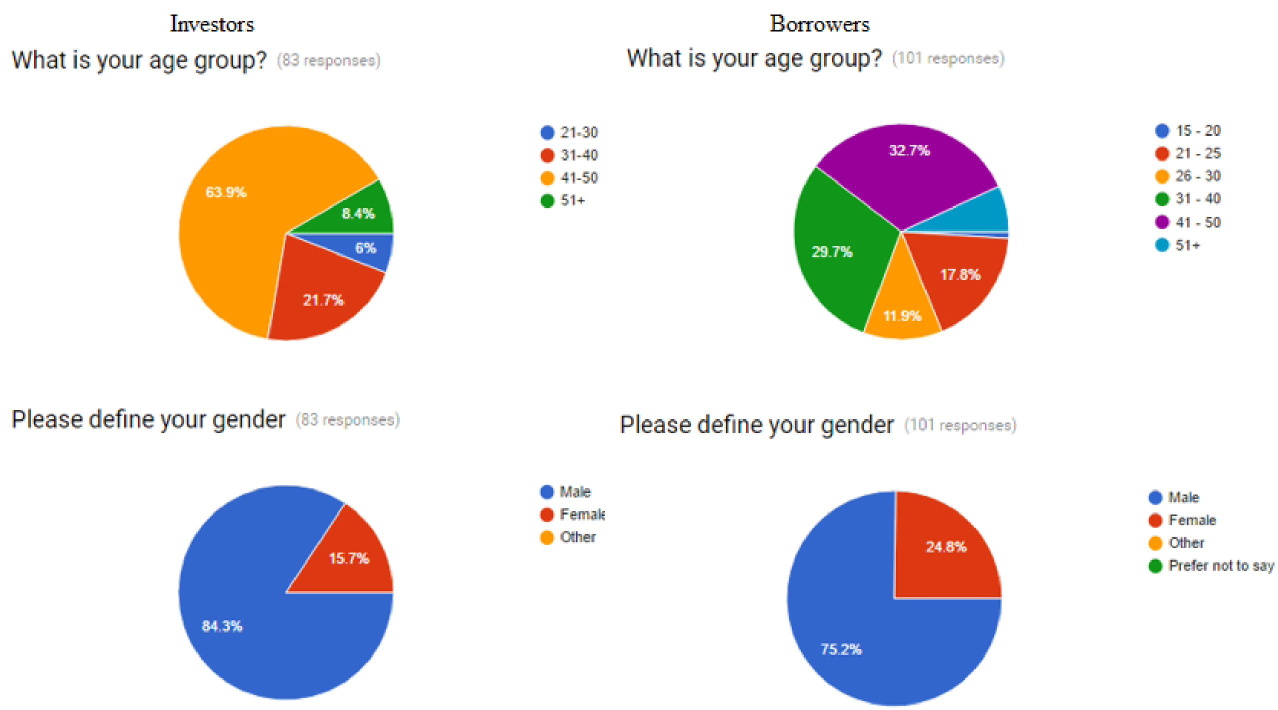


Figure 15: Demographic Analysis in Portugal

Lenders and Borrowers tend to be male and middle-aged using money set aside for savings or investment

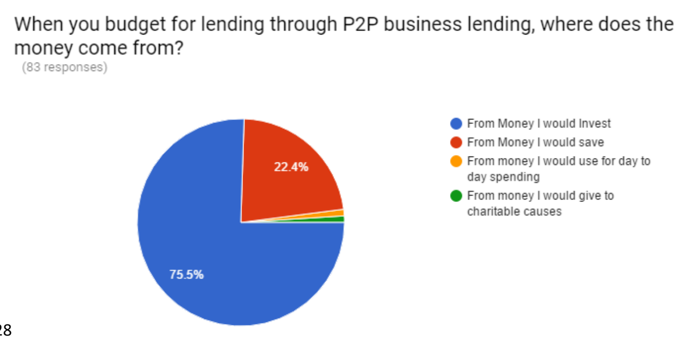
P2P business lending in Portugal is primarily used by men who are 31-41 years of age (21.7% of respondents) and from 41-50 (63.9% of respondents). Together they represent an astonishing 85.6% of the population in the survey. This is contrary to that of the UK where men who acted as investors aged on an average of 51 or more (only 8.4% of respondents in Portugal). Eighty-four percent of surveyed lenders and seventy-five percent of surveyed borrowers were men. Through the survey carried out, it also clear that the money primarily comes from lenders' investment budget (75.5%) or their savings (22.4%). Very few people (about 1%) have intentions of lending money they would otherwise use for day-to-day spending[28].

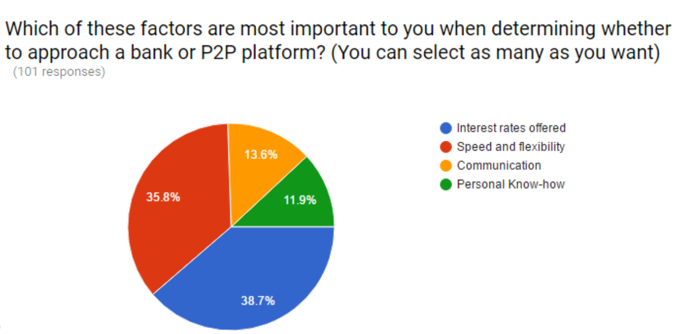
The average age for a borrower is 42 (29.7% of respondents are aged from 31- 40 and 32.7% of respondents are aged from 41-50) and approximately seventy-five percent are male. Also, it could be said that borrowers are highly motivated by the interest rates offered (38.7% of respondents) and speed and flexibility (35.8% of respondents) from P2PL platforms in Portugal[29].

4.1.2 MOSAIC – Getting a broader perspective from the key players in Portugal

Joãoexplains the following, “In the UK, the market developed because of a need/increase in business loans. In the US, the market initiated because of a need to refinance consumer debt. In Portugal, the main reason for the origination of P2PL was the following:

1. In Portugal, banks are more willing to provide short-term loans. Most SMEs (with revenues from €500,000 - €5 million)[30] in Portugal (which corresponded to 60.2% of

28 

29 

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respondents over Annual Income from surveys) that MOSAIC worked with were seeking for longer term loans with favorable interest rates. Now given the rates on these long term loans could be higher than those offered by retail banks; these SMEs were still thriving and willing to pay this higher rate as long as the loans provided were long term and not short term. (Please refer to Figure 15 below).

As banks are resilient, there are certain group of individuals that are willing to exploit this market by providing loans with longer term. According to Figure 16 below, it is apparent that 50% respondents from 101 responses had agreed that they prefer to seek Long-term loans with favorable interest than 10.3% responding to preferring Short-term loans with favorable interest.

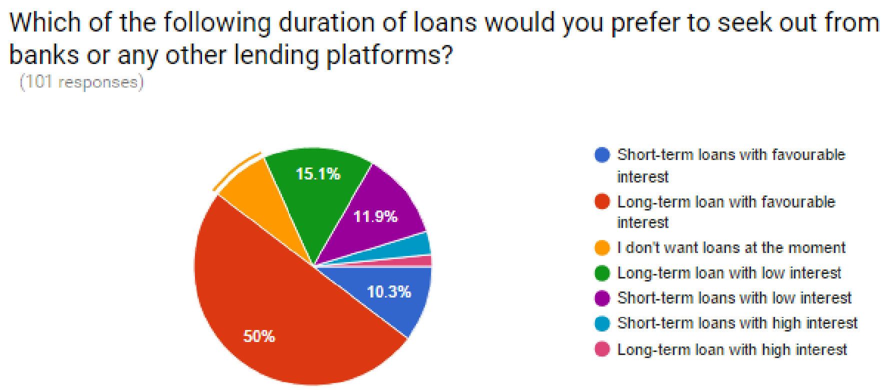
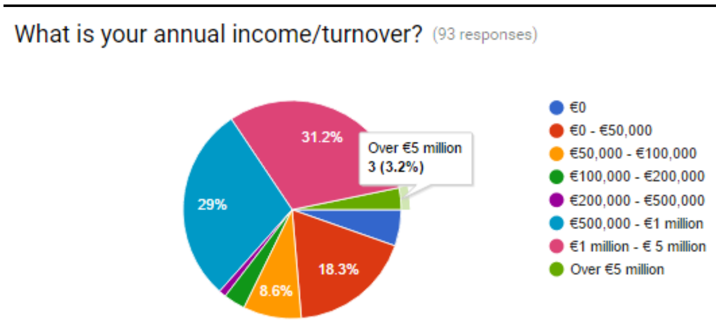


Figure 16: Borrowers "Loan Duration" Preference



€100,000 - €200,000 – 3.2%
€200,000 - €500,000 – 1.1%

2. Personal guarantee from shareholders. In Portugal, if a company or SME defaults on bank loans, the shareholders are the victims since they are liable for almost all of their personal wealth. MOSAIC does not accept any personal guarantee and recommends securing some of shareholder´s assets as collateral".

There are few clients which understandably the commercial banks do not want to engage in loan agreements with, and therefore the part of the lending market that the banks do not primarily want to do business in. According to João, commercial banks will not be able to enter this part of the market even if they wanted to. "***They won´t, because of competitive purposes, tighter capital requirements under BASEL III framework and EU banking regulations and because of the current economic situation of Portugal."***

"Let´s be clear on one thing. Banks will never be able to offer a similar service as we do and definitely not with the same price".

(João Cerejeira – MOSAIC, 2016)

However, João strongly believes that due to the regulations passed by the Portuguese government confirmed in February 2016 regarding crowd funding, the law favors the banksbecause all notes and bonds to be raised by SMEs has to go through a financial intermediaries and P2PL platforms such as MOSAIC or RAIZ cannot be the facilitator and banks have the ultimate power. When investors and borrowers were asked in the survey about what they consider to be the main barriers/problems to lend to individuals and SMEs, 28.8% of the respondents had considered a weak economy as a factor while 24.4% of respondents believed regulations were a major barrier[31].

Commercial banks dominate the Portuguese economy when it comes to both business and consumer lending, and the new regulation on crowdfunding just made them key players yet again! Borrowers share a special relationship with banks – both good and bad.

MOSAIC, RAIZ, and Seedrs have met with commercial banks such as BPI and Millenium BCP among others for open discussion about the position and in which segments of the market they engage in, with possible collaborations given the fact that the Portuguese law on crowd funding give banks (financial intermediaries) ultimate power to deal with corporate notes and bonds.

After analyzing the situation in great details, João had difficulties foreseeing where the P2P loans would find their share of the market in large volumes given the commercial banks in Portugal already holds several loan portfolios with existing clients/borrowers in the P2P platforms.

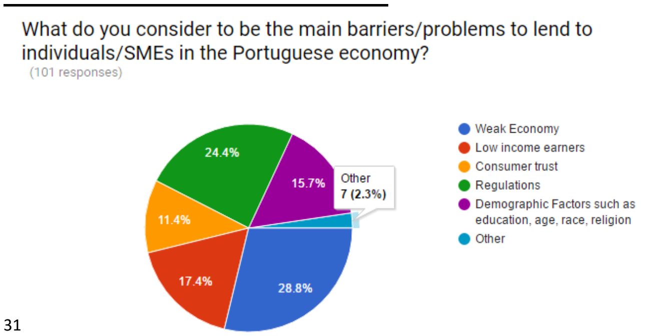
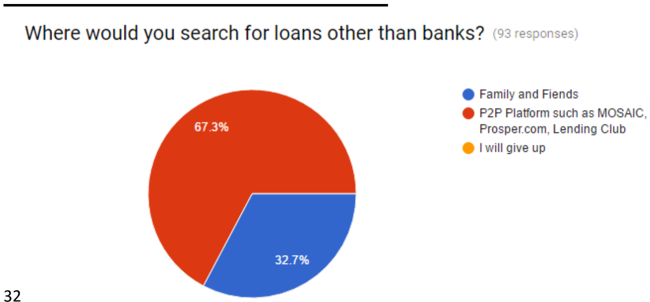
31 

Figure 17: Borrowers "Debt Nature and Status"

According to Figure 17 above, it is quite apparent that 70.3% respondents from 101 responses had indicated that they have existing debt from trading during the last 12 months with 59.5% of respondents claiming to have “Business debts” while 17.1% had claimed to have “Consumer debt” such as credit card debt, house loan, etc.

MOSAIC and others have not seen a direct competition between the P2PL platforms and commercial banks; rather João explained it is a potential partner or compliment to their own product offerings and loan project initiations. According to the interview with Ana Margarida Bras of BPI (Investments), she does not see P2P platforms as competitors since they are acting in different markets in terms of risks. According to her, P2P platforms and its investors are not willing to finance consumer debt such as car and housing loans, debt consolidation, etc because investors perceive it to be too risky.

During the survey, when respondents were asked the question of where would they search for loans other than banks, overwhelmingly 67.3% (from 93 responses) responded approaching P2P platforms while 32.7% of respondents will ask their family[32].



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“We have limited our finances to consumer debt, but this market is still a monopoly for banks. However, we are hesitant in providing long term loans which many of ourcustomers want[33]and we see it as too risky and also lending to start-ups. These are the only areas where P2P platforms can enjoy greater success (if true at all) than banks.”

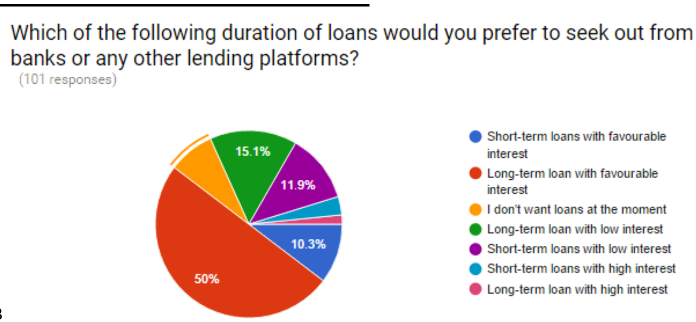
(Ana Margarida Bras – BPI, 2016)

João further explained the different market rules P2P platforms and commercial banks have, mainly regarding to business lending; in which the platform can raise capital for start-ups. The commercial banks do not invest in this “risky” capital funding and also not lending long term loans. He sees the short historical experiences within the P2P platform as a problem and quotes the following,

“In order to evaluate the risks associated with loans with maturity over 5 years or more, the industry must have been active for at least 20-30 years. These experiences involve volume over time as well as default rates and risk. Given the market for P2P loans is just in its initial phase, there are many uncertainties and speculations in terms of risk for long-term P2P loans amongst investors. Thus they end up demanding higher interest rates which borrowers are unable to comply.”

(JoãoCerejeira – MOSAIC, 2016)

Interestingly, Seedrs – a UK based P2PL platform where one of the Co-founder is Portuguese; has presence in the Portuguese economy. They are different to MOSAIC and RAIZ given the fact that they are able to provide loans and funding to Portuguese companies following

33 

British regulations where the terms and conditions for P2PL platforms are much more favorable than in Portugal.

However, it will be interesting to see how their presence in Portugal will grow in the future given Brexit has started to cause havoc and chaos in EU markets and worldwide.

4.1.4 Further Analysis

Borrowers seek loans for business purposes, but are open to ask the P2P market once it develops and given P2PL platform investors actually agree on financing this debt.

According to the circumstances mentioned earlier, it is apparent that neither the commercial banks nor the platforms in Portugal see the market for P2P loans as a lost customer base for banks. This is because it is clear that it is a market where banks will never engage in, but is open to other institutional investors such as insurance companies, hedge funds, etc. Banks dominate in the consumer loan sector (with a great demand for this market in Portugal), which the P2P market and its investors are unwilling to invest in; whereas P2P platforms and its investors are willing to provide long term loans to SMEs given the right interest rates are accepted.

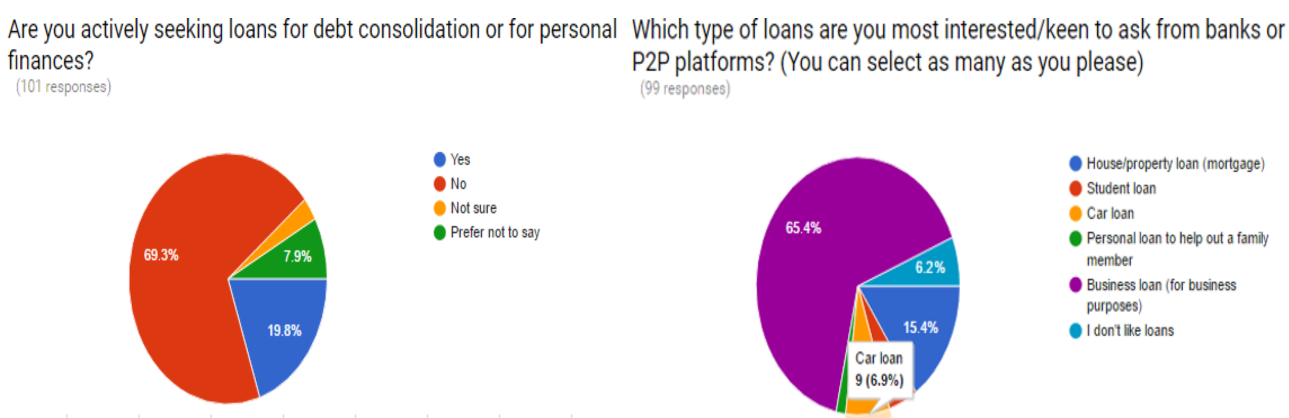


Figure 18: Borrowers "Survey" Responses

From Figure 18 above, it is quite apparent that 69.3% respondents from the "Borrowers Survey" do not currently require loans for personal debt consolidation; whereas 65.4% of respondents require business loans. This is clear evidence that Portuguese SMEs are seeking for loans in the Alternative Finance Market actively, with 94.3% of respondents (75.7% as "Likely" and 18.6% as “Very Likely”)[34] are willing to use “Alternative Financing” methodsto raise finance in the future

Given the interest from borrower’s survey showing their interest in seeking house property loan (E.g. mortgage) from banks and/or P2PL platforms, there is clear evidence that there is a certain demand in this sector (15.4% seeking “House loans” and 6.9% seeking “Car Loans” from Figure 17 above) respectively. However as mentioned earlier, Investors in Portugal are not keen to invest in this area as they deem this sector as too risky to be involved with inside the P2PL platform.

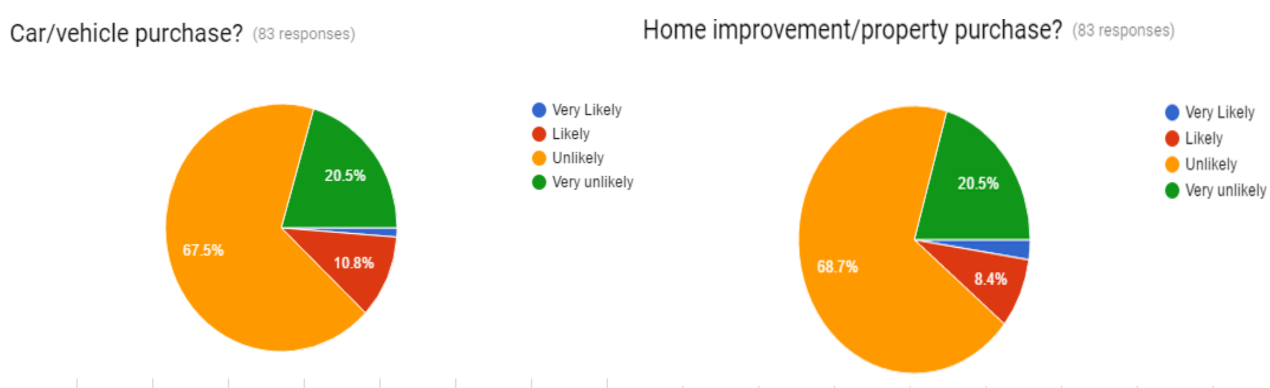


Figure 19: “Would you invest in the above consumer lending platform other than lending to businesses?”

From Figure 19, it is apparent that 88% of respondents from 83 responses of Investors (67.5% being “Unlikely” and 20.5% being “Very Unlikely”) had emphatically mentioned they are not interested in lending car loans against 10.8% of respondents who are willing to invest in this platform. Similarly, 89.2% of respondents from 83 responses of Investors (68.7% being “Unlikely” and 20.5% as “Very Unlikely) had agreed not to show “Willingness” to lend in the House Loan market through P2PL platforms either. There was also strong resilient from

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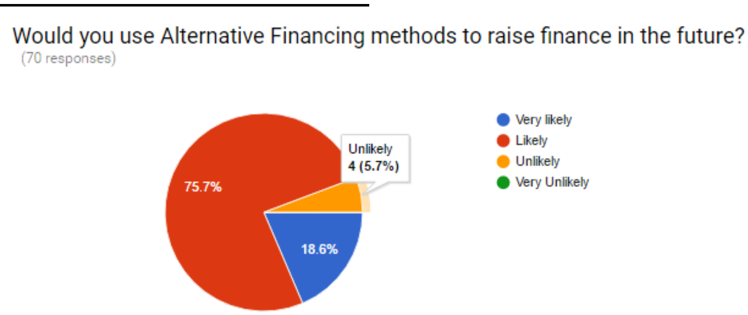

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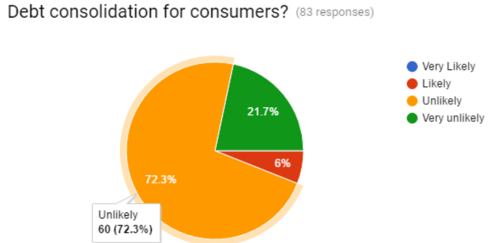
Portuguese investors not to invest in "Debt Consolidation Loans" such as providing debts to settle credit card debts for example[35].

4.2 Market Development of P2P within Portugal:

The Portuguese market for P2P loans is significantly immature and in its beginning phase. There are high volume of borrowers, but the problems are getting investors to agree upon long-term interest rates that favors borrowers and most importantly are regulations set by the Portuguese government.

According to Joao, this market is very unlikely to develop given the regulations put forward by the Portuguese government, which makes it difficult for P2P platforms such as MOSAIC to help SMEs in issuing notes or bonds and raise finance from private individuals and institutional investors.

35 

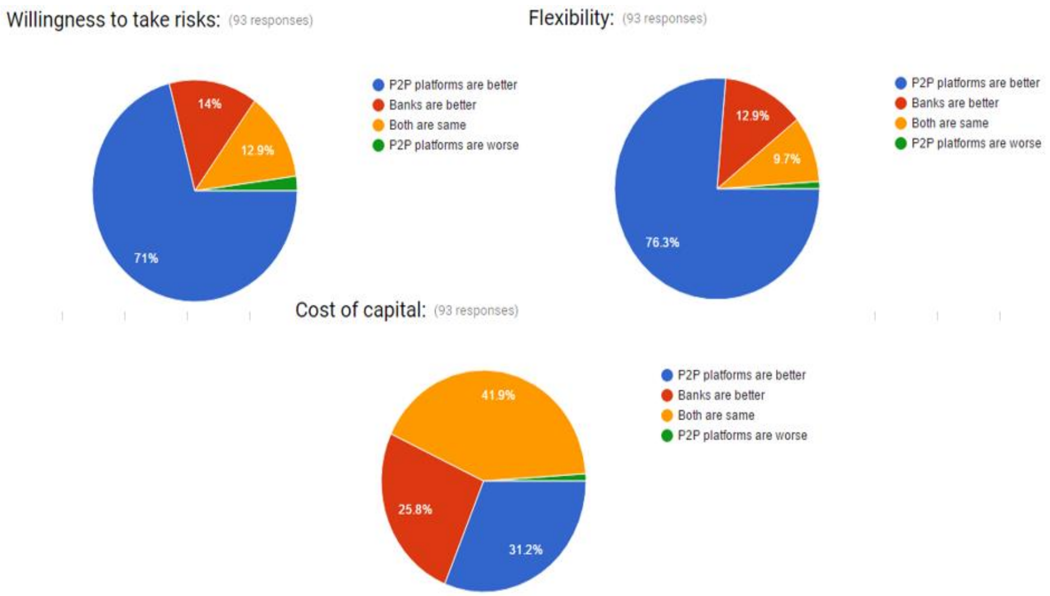


Figure 20: Portuguese alternative finance providers compared to the finance providers the SMEs have worked with so far

According to Figure 20 above, when asked in the "Borrowers survey" about SMEs perceptions of alternative finance platforms in comparison to that of traditional funders, alternative finance platforms were perceived to be better than traditional providers when it came to their willingness to take risks (71% of respondents), flexibility (76.3% of respondents) and cost of capital (31.2% of respondents although 41.9% of respondents believe traditional providers and P2P platforms both are same in terms of optimal cost of capital) as shown above.

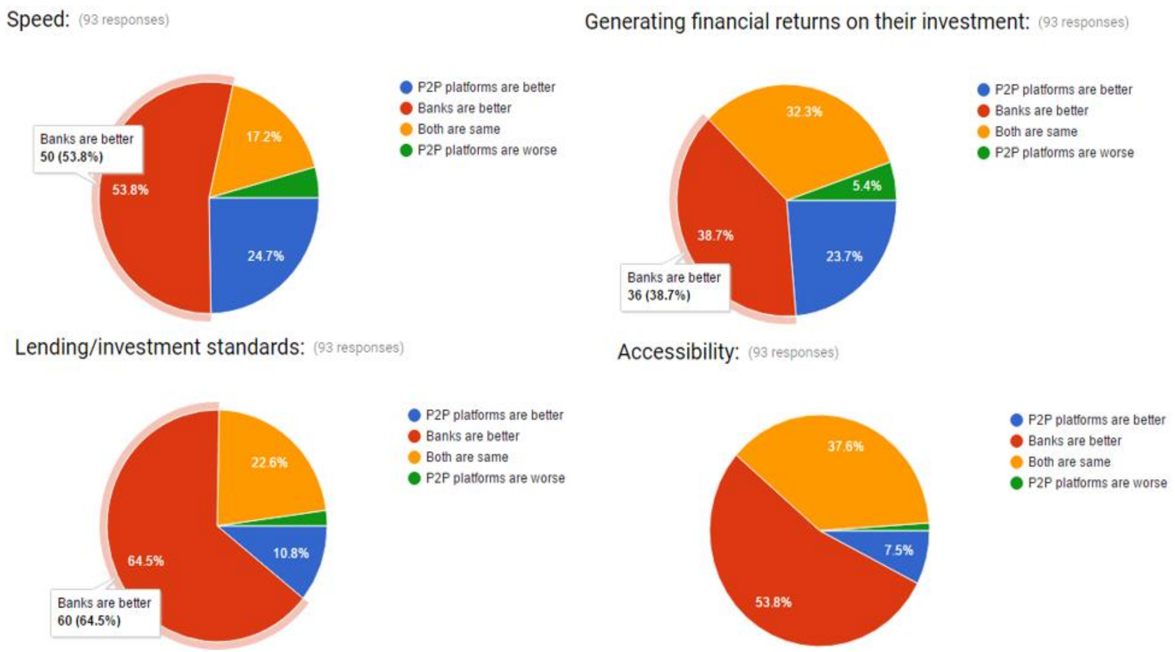
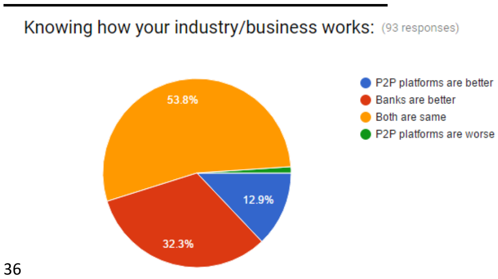


Figure 21: Portuguese alternative finance providers compared to the finance providers the SMEs have worked with so far

According to Figure 21 above, P2P platforms fared worse and banks were perceived to be better however when it came to speed (53.8% of respondents), generating financial return on investments (38.7% of respondents, but close to 32.3% respondents believing both are similar), lending/investment standards (64.5% of respondents) and accessibility (53.8% of respondents). Moreover. 53.8% of respondents believe both banks and P2P platforms very well understands how their industry/business work[36].

36 

4.2.1 Investors in Portugal are traditional investors and are moderate risk takers

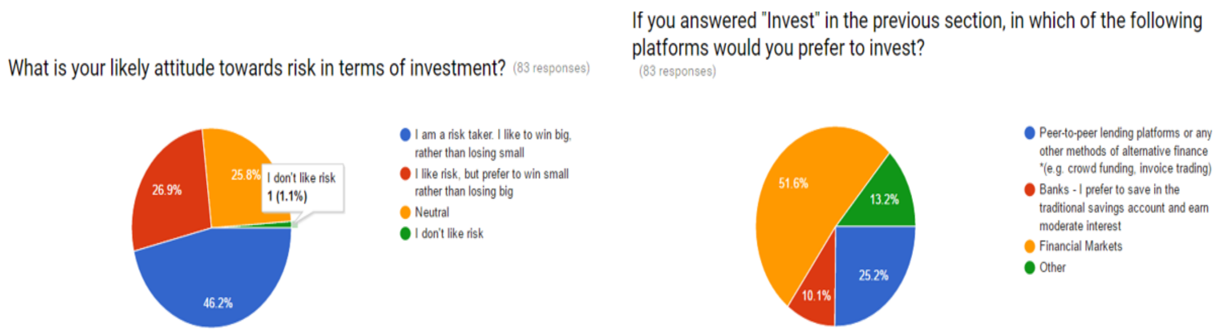


Figure 22: Investors "Risk Appetite" in Portugal

From Figure 22 below, it is quite apparent that Portuguese Investors carried out in the survey of 83 respondents had mentioned they are willing to take risks with the ideology of "winning big rather than losing small" (46.2% of respondents) but require certain compensation for it. By this ideology, the author meant that this certain class of investors are high risk takers. This is perhaps the most important reason why investors in P2PL lending platform in Portugal demand such high interest rates which are often unacceptable for Borrowers. According to Joao, this could well be 100% - 300% above the interest rates offered by retail banks in Portugal.

26.9% of respondents said they like risk but "like to win small rather than losing big" implying that these are moderate risk takers. Risk neutral respondents (25.8%) shared the ideology that they neither like risk nor dislikes it. From a broader perspective however, when one combines these two results from the survey, 52.7% of respondents out of 83 responses it indicates that investors in Portugal in general have a conservative attitude towards risk.

The Figure 22 is somewhat surprising as well given the fact that Portuguese investors tend to avoid risky investments into financing "Consumer Debt" through the P2PL platform as shown in Figure 18 page 41of this paper and prefers to invest in financial markets (51.6% of respondents) rather than investing in riskier platform such as P2P Platform (25.2% of respondents)

"Portuguese Investors are still very traditional. They prefer to invest in traditional methods of finance[37] (E.g. investing in "Financial Markets") than P2PL platforms but willing to compromise their decision in investment given their risk attitude and willingness to invest in risky projects with interest rates that favors their risk appetite."

(Joao Cerejeira – MOSAIC, 2016)

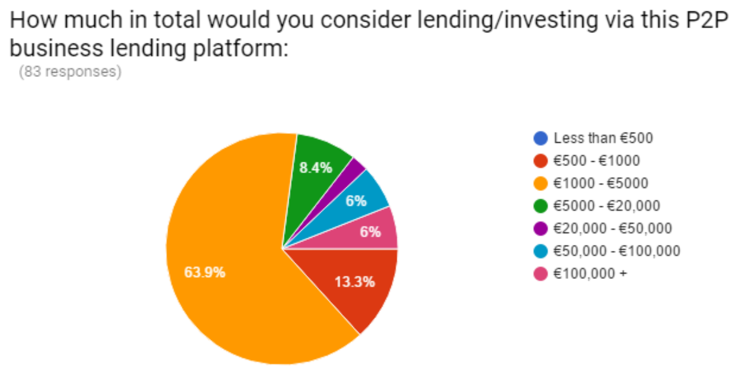


Figure 23: Amount investors are willing to Lend in Portugal

€20,000 - €50,000 – 2.4%

From Figure 23 above, when asked through the survey on how much are the investors willing to lend through the P2PL business lending platform in Portugal, 63.9% of respondents from 83 responses had mentioned that they will invest between €1,000 - €5,000; 13.3% will invest between €500 - €1,000; 8.4% will invest between €5,000 - €20,000 respectively as shown in Figure 20 below. Willingness of investors to lend/invest in P2Pl platform in Portugal of about €50,000 - €100,000 and €100,000+ accounted to 6% each from respondents.

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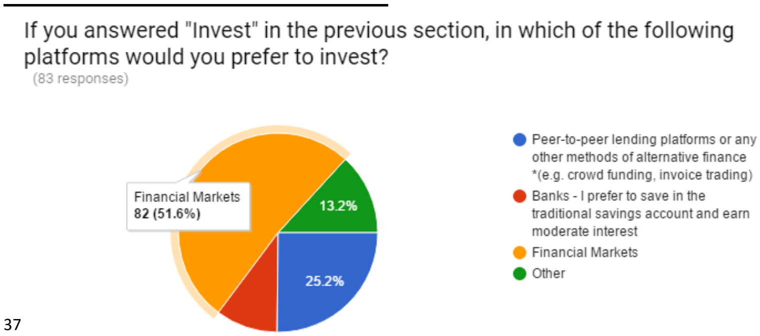
37 

This often aligns with the fact that the main aim for investors to invest in P2PL platforms is to invest little in each projects in order to diversify their portfolio and reduce default risk respectively. Investors had also mentioned in the survey that when they budget for lending through P2P business lending platform, 75.5% of their money comes from the money they put aside for "Investment" purposes only against 22.4% of respondents from a total of 83 responses who had mentioned that the money comes from "Money set aside" for their savings purposes[38]. This is somehow a reflection of the risk investors get themselves involved with given 23.9% of investors are "Employed and are also Investors" and 26.4% are "Business person and are also Investors" from the survey carried out respectively[39].

4.2.2 Borrowers seeking growth or working capital and value speed of service

From Figure 24 below, it is apparent that businesses seeking to borrow via P2P business lending most commonly seek a loan for working capital (32.1% of respondents), expansion and/growth (31.1% of respondents) and for asset purchases (17.1% of respondents).

From Figure 25 below, it is apparent that SMEs often choose P2P business lending because of the combination of speed and ease, rated important (52.7%) or very important (37.6%) for speed. 88 percent of borrowers highlight how they see P2P business lending as an easier way to

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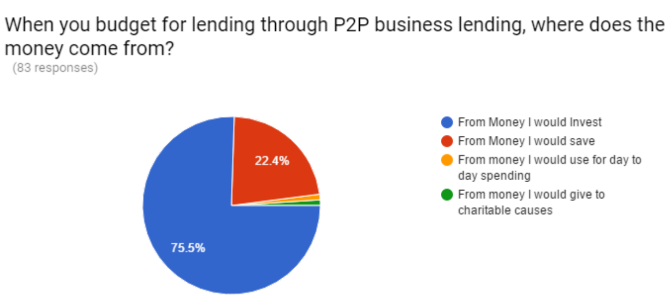
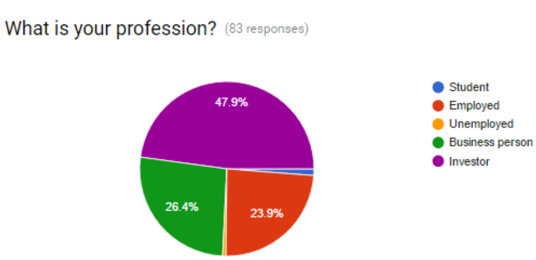
38 

39 

get funded than traditional channels (E.g. bank) as a key factor in their decision to choose this lending model or not.

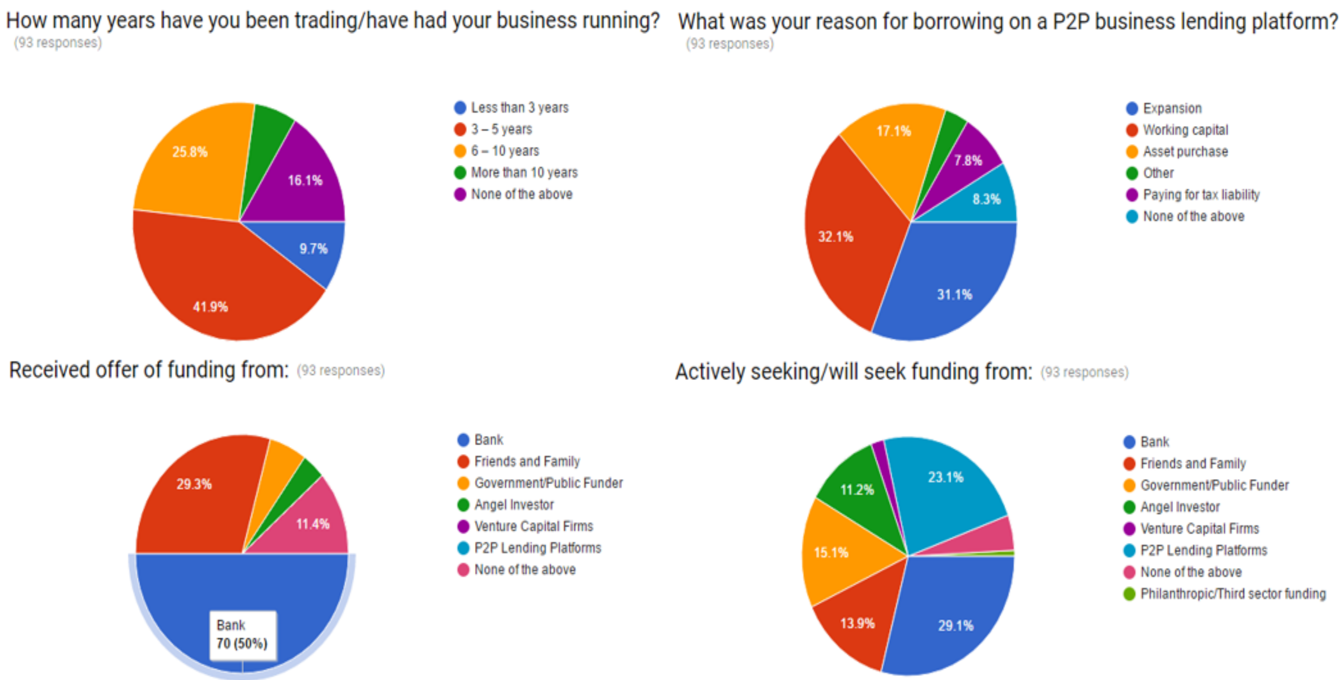


Figure 24: Borrowers "Market Activity"

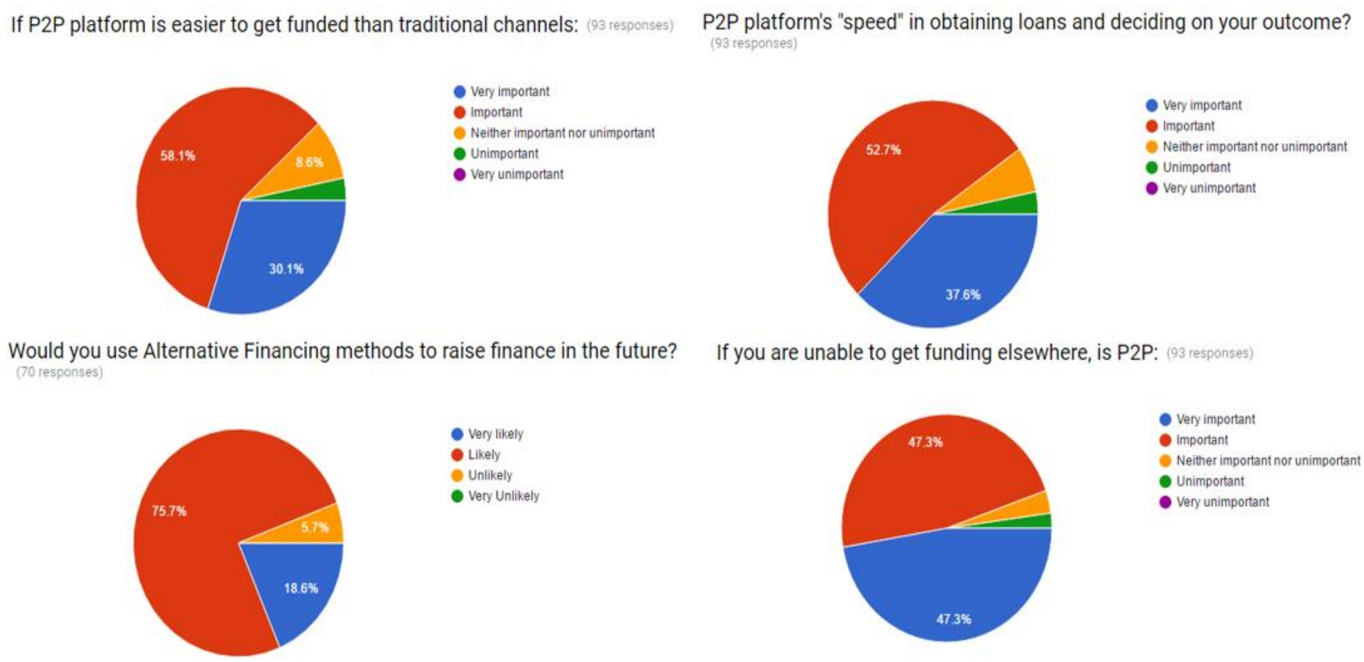


Figure 25: Borrowers "Survey" Extracts

4.2.3 P2P business lending will be funding borrowers in Portugal who would otherwise struggle

From Figure 25 above, another conclusion which could be drawn is that 47.3% thought it to be important or very important to have this platform if the borrowers are unable to get funding elsewhere. Also, from Figure 24 above, it was noticed that 41.9% of SMEs respondents have been trading from 3-5 years and 25.8% from 6-10 years. 75.7% had responded to using alternative financing methods in the future.

Interestingly, from Figure 24, it could be seen that borrowers who are primarily SMEs in Portugal had already sought out debt or already indebted with 50% of respondents had already secured loans from banks and 29.3% from family and friends. It is however not so surprising to note that 29.1% of respondents will further seek out loans from banks (even if banks are unwilling) and 23.1% will reach out to P2P lending platforms to obtain funds previously rejected by banks. 15.1% had responded to be seeking loan from the government, which might explain the Portuguese government funding program popularly known as "PORTUGAL 2020".

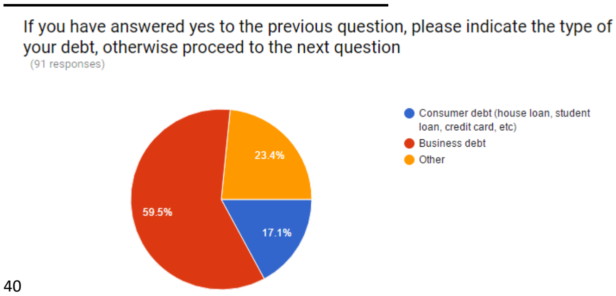
"One of the major problems MOSAIC faced in risk grading or doing the screening process for SMEs (qualitative and quantitative) is that these SMEs are already in so much debt[40] that they require more to refinance their existing debts, alongside seeking funding for working capital, expansion and/or asset purchase. It is also difficult to properly screen and Portuguese SMEs given the lack of information they provide us. We had an overall of 30 projects from €500,000 - €5 million, but they were all unsuccessful unfortunately."

(Joao Cereijeira – MOSAIC, 2016)

4.2.2 Investors

Investors demand more liquidity, thereby opting to provide short-term loans similar to commercial banks in Portugal, but are willing to make exceptions. They are planning to lend less in P2P platform in the next 12 months.

It is clear why investors prefer short-term loans with favorable interests than long-term loan with favorable interests – because of liquidity, as shown in Figure 26 below:

40 

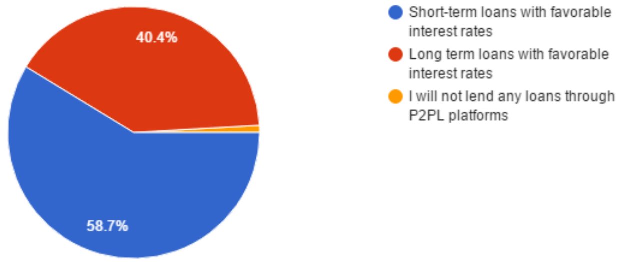
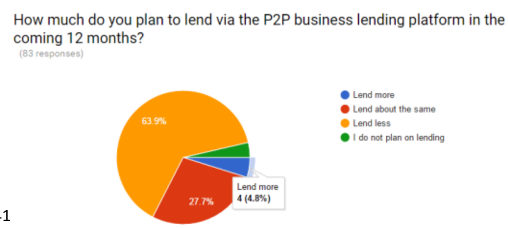


Figure 26: "Which type of the following loans are you willing/prefer to provide to SMEs in Portugal through the P2P lending platform?"

The only reason that will allow the investors to compromise this would be to charge premium interest rates for loans offered for longer term, according to Joao. But the problem is that Portuguese investors/lenders are more likely to chargehigher interest rates in the P2P platform regardless of duration of loan.

This is because 96.4% of respondents who were investors find lending or investing in start-ups new companies through P2PL platform to be more risky. Lending to individuals was also rated more risky by 95.2% of respondents as could be observed. Lending to SMEs were considered less risky by 57.8% of respondents given SMEs have credit record and trading activities. 68.7% of respondents as shown below on Figure 27 believe that it is equal risky to invest in financial markets because of the uncertainty this form of investment entails. Also, 63.9% of investors plan to lend "less" in the next 12 months, 27.7% will lend about the same and only 4.8% will lend more with 3.6% not willing to lend at all[41].

41 

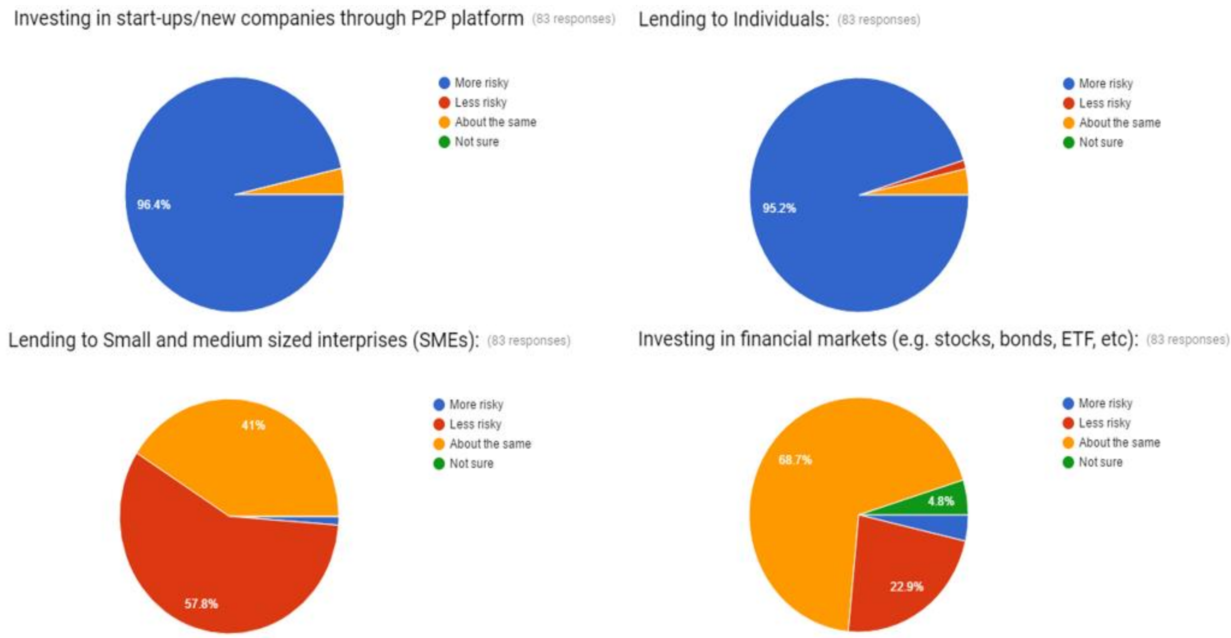


Figure 27: "How risky do you find peer-to-peer lending/investing in terms of the following"

4.3 Current Awareness of This Market In Portugal and Future Growth Prospective

4.3.1 Secondary Market and its possibilities.

The possibility of a secondary market will act as a tool that will help investors managing their loan portfolios as it increases their liquidity by selling off some of their loans to other investors. But this is far from reality and carries risks.

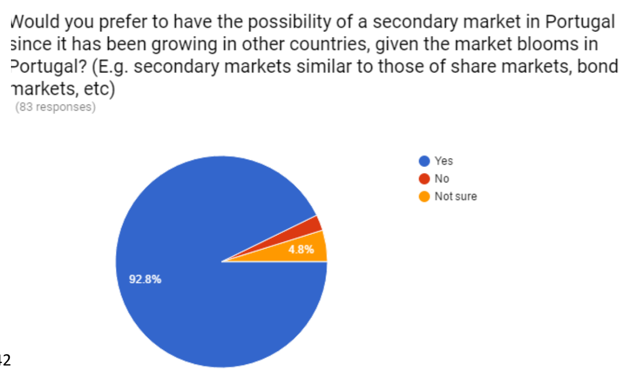
"Having a secondary market for the P2P platform is vital for both its origination and development. This is because investors are very traditional and prefers Bloomberg for investing other than going through us. If the option for a secondary market was possible, then investors will have more interest to get involved in this market. I knowthis because I discussed this matter with several investors[42]. But the regulation enacted just killed it!"

(Joao Cerejeira – MOSAIC, 2016)

It is equally important to mention that even if a secondary market for P2P loans possible and given a start, there are certain risks involved with this market, e.g. sub-prime. Joao explained that the risk with securitization as a whole is that there are financial engineers or innovators that are making transactions after transactions and when an end-consumer is looking at the security it becomes difficult to understand what it is and what it consists of (keeping in mind that P2P loans are highly risky instruments by nature that enters the financial industry).

It is known through various literature and from the last financial crisis that there are high risks involved with securitization of assets and that a P2PL market potentially can have major economic consequences if the market grows. For securitization of P2P loans through a secondary market, there is a high risk of ambiguity since lack of transparency and the frequent number of transactions make it complicated for the end consumer to understand. Abraham & Lang (2009) had mentioned that information asymmetry arises when loans are repackaged in complicated process.

Empirically it had been proved that more loans will be funded once a secondary market exists, implying that more risky loans will enter the market. This is an evidence of how secondary market can affect quality of loans, which is agreeable to the study conducted by Brendt& Gupta (2009) about loans sold in the open market.

42 

4.3.2 Borrower’s Awareness

Portuguese population and Borrowers (SMEs) are not completely aware of the P2P lending market and the success it had in the US and UK, but they surely would like to learn and use it in the future.

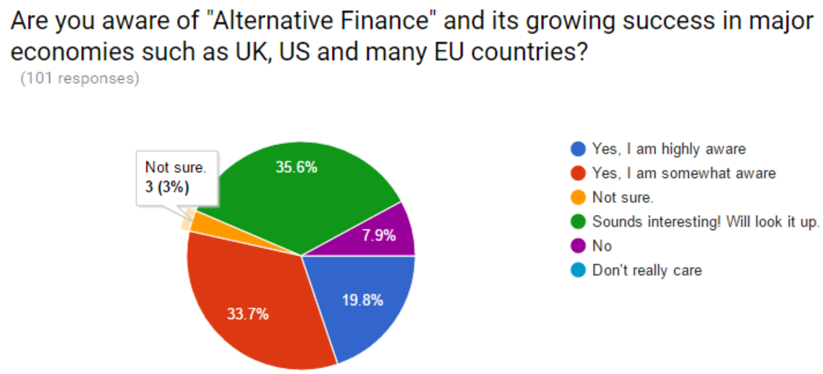


Figure 28: P2P awareness amongst Borrowers

From Figure 28 above, it is apparent that 33.7% of respondents are somewhat aware but never used it, compared with only 19.8% of respondents who were “highly aware” about this phenomenon. The conclusion that can be drawn from this analysis is that 35.6% of respondents are curious to learn about this market with 7.9% are absolutely unaware. Lack of awareness can be summed up to 47.5% of respondents as such.

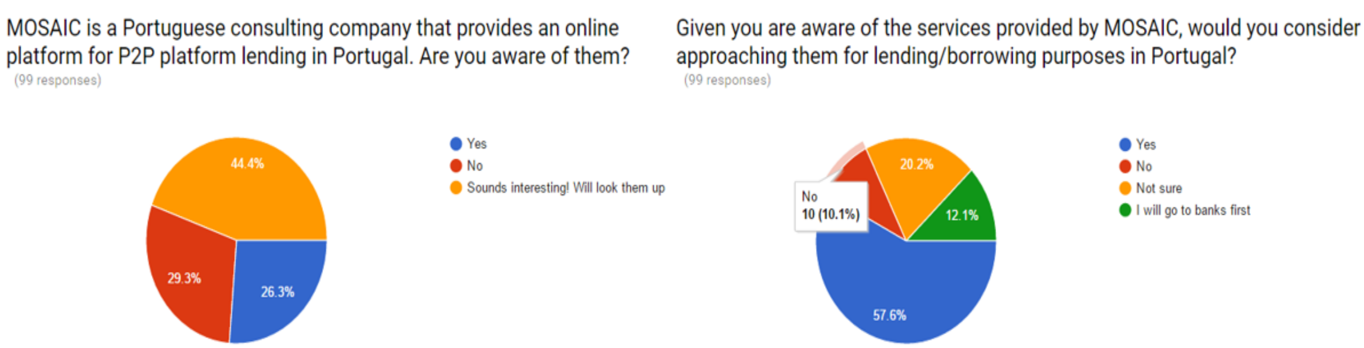


Figure 29: Borrowers "Awareness" about MOSAIC

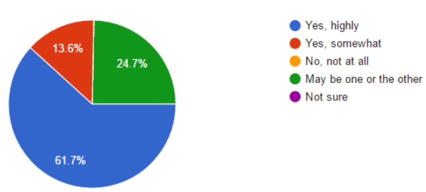
From Figure 29 above, it could be seen that 44.4% of respondents have a “willingness” to learn more about MOSAIC and its activities in the P2PL market with 29.3% agreeing they are unware about their services offered. This combines to give a lack of awareness about MOSAIC up to 73.7% of the respondents from 99 responses respectively. Also, the survey asked the audience about their willingness to use MOSAIC’s services once they are aware, and the responses were overwhelming. 57.6% of respondents agreed that they will use their P2PL lending and borrowing services against 10.1% approving not to do so. 20.2% of respondents were “unsure” respectively.

Investors in Portugal are quite aware about the existence of this market and they believe demographic factors such as nationality, age, religion, gender and race affect their lending decision[43]. 61.7% of respondents believe it is highly important against 24.7% agreeing that it could be one or the other.

4.3.3 Investors and Borrowers perspective in opting other form of alternative financing methods

Both Portuguese Investors and Borrowers are highly unwilling to adopt other forms of alternative financing such as invoice trading and debt-based securities

43 Do you personally believe demographic factors such as nationality, age, gender, race and religion affects your lending decision?
(81 responses)



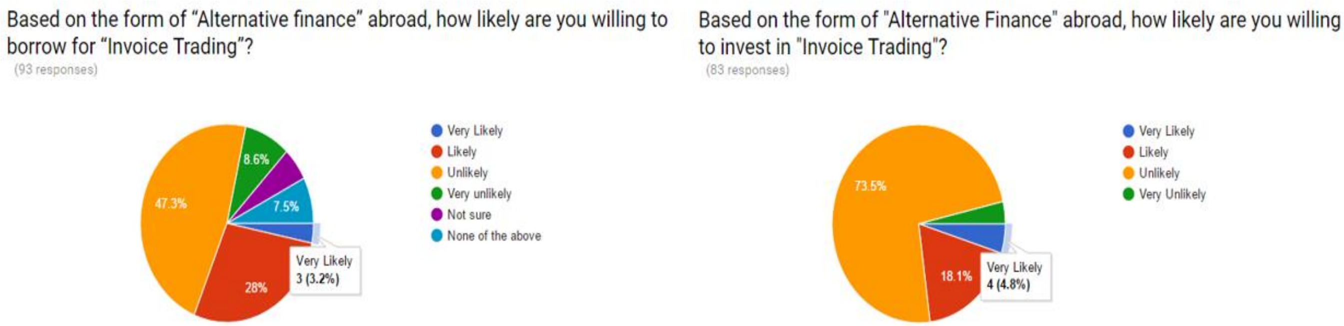


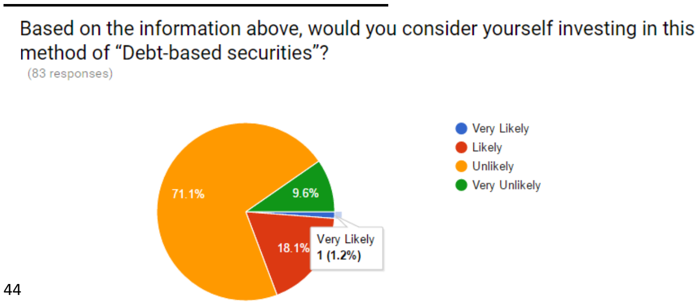
Figure 30: Investors and Borrowers Preference over "Alternative Finance"

From Figure 30 above, it is apparent that borrowers are unlikely (47.3% of respondents) or very unlikely (8.6% of respondents) to borrow money using "Invoice Trading", while 28% of respondents are likely or very likely (3.2% of respondents) to use it in the future. As for investors however, they are also unlikely (73.5% of respondents) or very unlikely (3.6% of respondents) to invest or lend for "Invoice Trading" against 18.1% of respondents showing a likeliness to lend in the future. As for debt-based securities, 71.1% of respondents were unlikely or very unlikely (9.6%) to invest in this form of "Alternative Finance" against 18.1% of respondents showing interest to lend[44].

4.3.4 Factors influencing the decision of investors before lending to businesses in the P2P platform in Portugal

Making a financial return, interest rates to be earned, risk rating/credit score of borrowers, terms of loan/maturity and loan bidding history are all important determinants for investors before lending. Location of the business asking for loan and social impact of the business that the investor is lending money to seemed to be unimportant for investors' decision to lend.

44



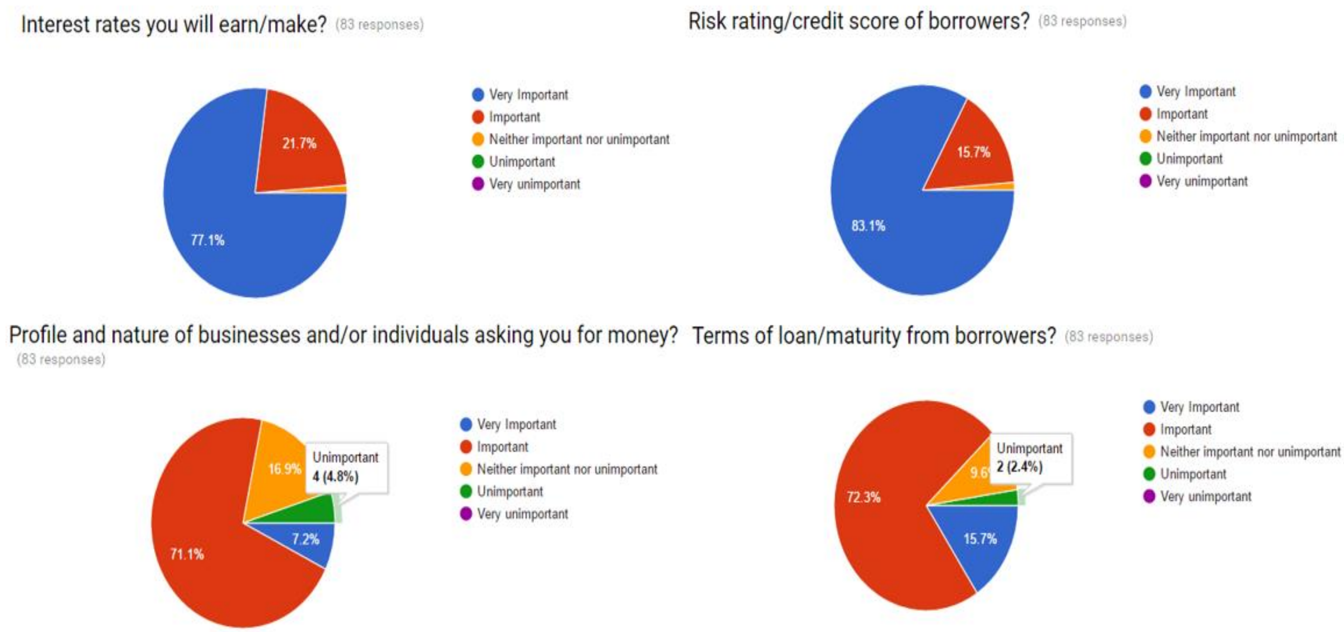
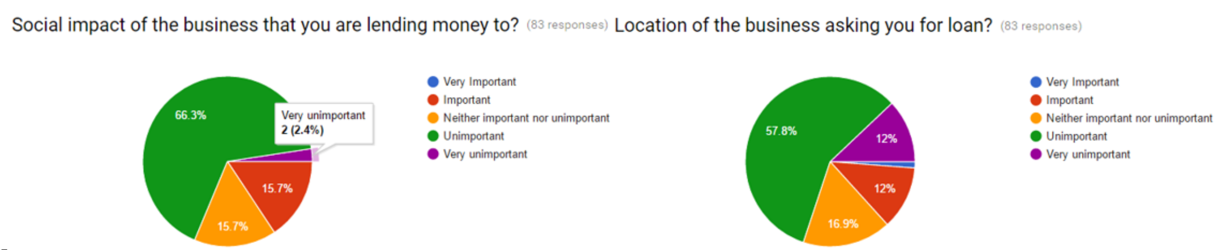


Figure 31: Determinants for lending in the P2P Platform in Portugal

From Figure 31 above, it is apparent that an average of 70% or more investors surveyed believe all these determinants affect their lending decision in a significant way. However, location of the business and the social impact of the business that investors lend to were insignificant determinants[45].

4.3.5 Success in 5 years?

Both investors and borrowers believe that P2PL lending and borrowing platform in Portugal will not succeed at least within the next 5 years. Regulations, information asymmetry, unfavorable interest rates, commercial banks in Portugal and investors risk attitude were considered to be the reasons for failure.

45 

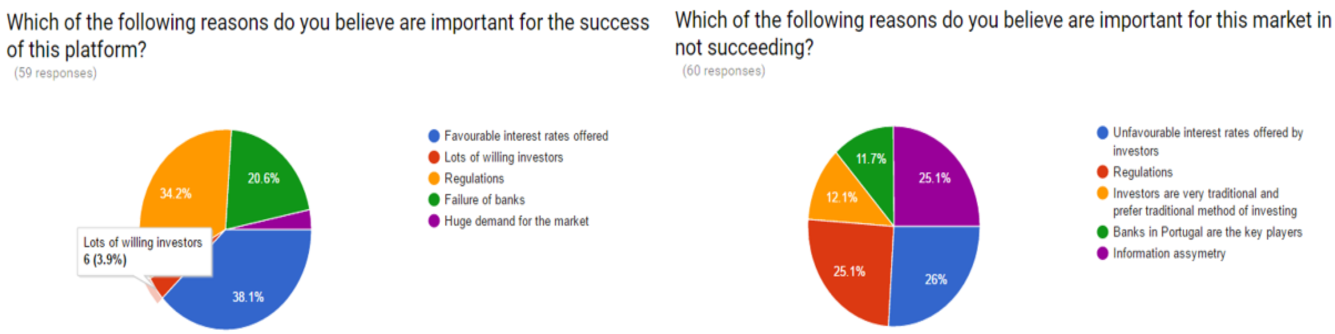


Figure 32: Success factors for P2P market in Portugal

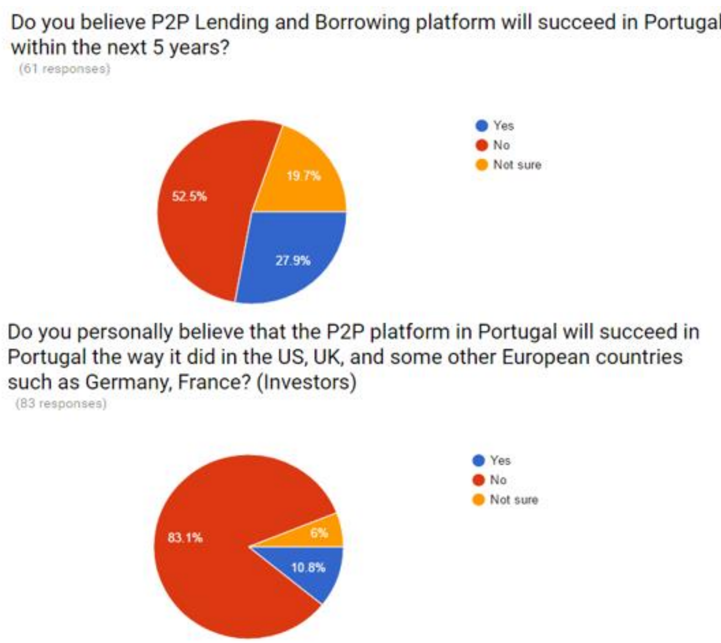


Figure 33: Overall perception of success on P2P lending market in Portugal

5.0 CONCLUSION

This final section concludes the entire thesis by answering the research questions stated in the first section. This is followed by a Discussion section, which includes the limitations of this research and also provides the authors' own thoughts about the future and challenges of the P2PL market in Portugal and scope for further research in this area.

This research had reaffirmed the need to understand how the distinctive funding types in the market work and could be a possible alternative source of finance. One other purpose was for readers to understand the functionality of the P2P lending platform in Portugal and will it achieve success in the Portuguese market similar to the way it did in the US and British economy recently. By narrowing this down to two separate purposes as "Investors and Borrowers" involvement and perspective of this market and the market's functionality in Portugal, it had helped us in fulfilling the broader purpose.

5.1 The Origination and Development of the Market

How is the Portuguese P2PL market growing in comparison to that of the US and UK?

Given the P2PL market in Portugal is just in its initial stage and that there is a need from SMEs to obtain alternative finance for expansion, working capital and asset purchase purposes, there is a great demand for obtaining long-term loans and Portuguese commercial banks are unwilling to provide this to their clients. Given there is a demand, P2PL platforms such as MOSAIC are trying to fill this gap by approaching potential companies, evaluating their credit worthiness (both qualitatively and quantitatively) and issue notes on their behalf to obtain these funds from private or institutional investors.

As good as it seems, it is apparent that the financial industry is one of the most heavily regulated markets which is an explanation as to why a new market like the P2PL market cannot be easily created. The problem in Portugal was that the regulation passed on March 2016 on "Crowd Finding" prohibits any institutions other than financial institutions to issue "loan notes" and every issuance had to pass through a financial intermediary (banks) and not anything else. This regulation killed any plans to develop the P2P market in Portugal as banks are the biggest competitors of MOSAIC and now it seems they have to partner with their rivals such as banks or other financial institutions (brokers, investment companies) in order to profit. This is highly unlikely to happen, but MOSAIC had been adopting. They have been approaching Portuguese financial intermediaries in order to make a deal which is in line with the regulations being passed. The most likely thing to happen is that direct lending through P2PL platform is almost impossible at the moment and it has to go through a financial intermediary to finance SMEs. A possible collaboration with financial intermediaries are likely. Also, the P2P markets in the US and UK have already experienced great institutional involvement and the laws related to crowdfunding are more relaxed.

The most significant risks for P2PL companies such as MOSAIC in Portugal are regulatory risks and project risks – the risk of failing to obtain loans for SMEs and also getting institutional investors as they are more willing to lend than individual investors in Portugal.

Looking at the socio-economic impact, it was interesting to observe the different lending/investing perceptions of Portuguese individual and institutional investors and that of the SMEs (borrowers) and their willingness to obtain alternative source of finance. Interestingly, Portuguese investors are least concerned about the social impact of the business that they are lending to nor about social benefits or supporting a social cause for lending money. They are mostly focused on earning higher returns if they were ever to invest in P2P platforms. Could there be an existence of a secret society for lending such as “black market?”

Furthermore by examining the level of awareness and usage by SMEs in national context, it can be concluded that there is still significant potential for the alternative finance market in Portugal to grow, given individual and other institutional investors approach consumer lending. More importantly, it should be noted that in order for this market to grow in Portugal, new regulations should be passed, the industry needs to continue innovating and educating both users and the general public by addressing the various concerns SMEs have about alternative finance.

The study from survey can conclude that alterative finance is required and used by middle-aged men from high income groups. This indicates an opportunity for alternative finance to expand to other demographics and parts of society and engage more women, younger people, institutional and older investors and those from lower income groups who are most of the time unable to obtain finance from traditional institutions. In the UK, the market is dominated by older male with age 51 and more.

The fact that there is a need for a secondary market for the development of P2P lending in Portugal, it should be noted that the lending model P2P platforms follow are very similar to the sub-prime mortgage lending which led to the financial crisis of 2008 (as shown in *Appendices 7.2).* Although P2PL market's size is nowhere near the size of the mortgage market, there are still relevant concerns if the P2P market continue to grow with high significance. In the case that this market grows large, there is a potential threat of similar consequences a in the sub-prime mortgage crisis due to the fact that too many poor credit can get funding without being able to pay back their loans. According to Joao, creation of the secondary market was possible, by approaching to Euronext, but yet again this is not possible given the market is very small in Portugal.

5.2 Success in Portuguese economy – Is it a possibility?

Can Peer-to-Peer lending in Portugal achieve the success similar to that of the US and UK?

The market could have succeeded in Portugal given favorable rates were offered by investors, involvement and willingness of lots of individual and institutional investors to lend to both consumers and SMEs, ease of regulations by the Portuguese government on "crowdfunding" and the failure of banks in extending or providing longer term credit to SMEs.

However, given the Portuguese investor's intention of preferring traditional investment method to invest in financial markets, avoid risky investments in consumer lending and largely motivated with high returns by charging very high interest rates to borrowers (SMEs), and the law on "crowdfunding" which highly favors commercial banks, it is unlikely the investors will be attracted by large volumes to invest in the P2P market. Information asymmetry between borrowers and lenders will further deter the growth of this market in the near future.

The market had succeeded in the US because of a need to lend and borrow in the consumer debt market. In the UK, the market succeeded because of need of alternative financing methods mainly by SMEs with better regulations and older aged wealthy male investors and their risk appetite unlike in Portugal. The Portuguese economy is very different from that of the UK and US both in terms of demographics and size of economy.

5.3 Discussion, Limitations and Scope for further research

According to the article published by Yvan de Munck, he mentioned that the funds US banks had available to lend to businesses and households increased to a record high of $2.3 trillion in 2013 from $95.8 billion last year, but the bank is not lending this money rather putting it back to where it came from, the Federal Reserve. This perfectly explains the rise of the P2P Platform in the US due to the continuation of weak bank lending in the US.

In the UK according to the research carried out by University of Cambridge, alternative finance market had a growth rate of 75.1% over the last 5 years and contributed to GBP 1.74 billion in personal, business and charitable financing to the UK economy in 2013 alone. For Portugal, these are far from reality! So what can and must be done by the established players (banks) if possible at all? The answer is simply joining the club and accepting innovation and change. Two community banks in the US had agreed to team up with Lending Club in order to source new loans. This is something the commercial banks in Portugal can adapt in the near future with MOSAIC and other P2P platforms signaling "old meeting new".

By looking at the origination and development of the market in Portugal, the author have concluded that there were no clear drivers that drove a great demand of the P2P loans, unlike that of the UK and US and the regulations were not in their favor. This had forced the Portuguese P2PL companies such as MOSAIC to look for alternative investors, mainly institutional investors for lending to SMEs and to collaborate with other financial intermediaries' as an alternative to direct lending prohibited by law. **This is what we define as the first challenge for the P2PL market.**Given the current project "Portugal 2020", the government will provide up to 50% of funding for start-ups but the other 50% need to come from alternative finance as banks are unwilling to fund start-ups which are deemed too risky. So where will this money come from?**Conceptually, there is a much need for regulators in Portugal to be supportive of the development of this sector as it will be beneficial for both consumers and SMEs.**

Given that the Portuguese P2PL companies are only focused on raising finance for SMEs that are already in debt and getting involved at a segment of high risk business, one could ask if these risky businesses really should get funding at all and the consequences to the society as a whole**. Attracting investors in volumes and assessing correct credit ratings for borrowers are the next challenge for the P2PL market. Technology also has a vital role to play in this part as loan applications need to be reviewed and scaling should be done as quickly and efficiently as possible – yet another challenge.**

Given the fact that having a secondary market is a key determinant in attracting large volumes of investors, it should be noted that the securitization of P2P loans enables the originator to "hide" the risk of the loan when bundling it with other loans. By hiding this risk, the originator in fact could create more high-risk loans for future securitization purposes. **This is the third challenge to the P2PL market**. The author and investors equally believe that P2PL companies should have greater responsibility when rating loans, especially if they were to be securitized. As these P2PL companies do not carry any risk of default or are liable for incorrect rating, they are not concerned about the performance of loans and that trust and reputation is extremely important in this business, which is yet another challenge for behavioral finance studies.

Another vital thing that could go wrong with this market is that it generated from the crisis of 2008 and its functionality is pretty similar to the sub-prime mortgage market leading to the financial crisis of 2008. So this is a product of financial innovation generating from the last crisis, which may as well lead to a future crisis. Is financial innovation bad for high-risk markets of lending? Also this market is a form of "shadow banking", implying that it is not a new business per se but more or a regeneration of an existing core activity of banks.

One of the main limitations of this study was that there are almost no data on the Portuguese P2PL market, and therefore the author was unable to perform a quantitative analysis to study the future of this market in Portugal. Given the market will grow and more public data are available, both qualitative and quantitative analysis could be performed to undermine the success/failure of the market in Portugal.

Another fact worth mentioning that it was a dilemma for the author as to why Portuguese investors have high risk attitude when surveyed, but prefer to invest in financial markets other than in P2PL lending to consumers and SMEs. This could be a potential area of future research as to understand the risk attitude of Portuguese investors in order to determine the success of the Portuguese P2P market in the future. Interestingly, both investors and borrowers age group were middle-aged men from 30-50 years old, while most of them were a mix of working professionals with established business or working professional who are also investors.

Also, very little is known on how best to design the funding partnership between institutional and non-institutional investors to ensure both investor types, and those being funded, all benefit.The author would like to see more experiments and research in this area.

Future research could also possibly include why younger rich professionals and investors are unwilling to lend to high risky projects in Portugal given the borrowers or the people asking for loans are of similar age group. This could be an interesting study of behavioral finance and behavioral aspects. Also, another prospect of future research could be as to how important demographics in Portugal will determine the success of the P2PL market.

There is also a need to study why alternative finance is not very popular in Portugal, and is not preferred by both investors and borrowers. Is it because both the investors and borrowers are very traditional and unwilling to accept innovation and change in Portugal? Is financial innovation good for the society and economy at all?

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http://www.huffingtonpost.com/

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http://www.reuters.com/

http://www.wsj.com/

Maters Thesis from Jonkoping University:
http://hj.diva-portal.org/smash/get/diva2:812631/FULLTEXT01.pdf

UK Alternative Finance Benchmarking report 2014:
https://www.nesta.org.uk/sites/default/files/understanding-alternative-finance-2014.pdf

6.3 Survey Links

6.3.1 Borrowers

http://goo.gl/forms/QjWYlC8I1UX8BcIj2

https://docs.google.com/forms/u/0/d/18LPeQ9TvcWOM0G0-6XEEm6bM0jUAnLACWf_cSztFqG0/edit#responses

6.3.2Investor

http://goo.gl/forms/agGKiYS6PaSfEADk2

https://docs.google.com/forms/u/0/d/1fQPXh6a4aM3EEtb17Ov4iv-ZMMSBVcbgVV04DpBpF0I/edit#responses

Correspondence

Joao Cerejeira (Managing Director and Co-founder of MOSAIC)

Email:joao.cerejeira@mosaic.pt

Ana Margarida Bras (Branch Manager, BPI Investments and Commercial Banking)

Email: ana.margarida.bras@bancobpi.pt

7.0 Appendices

7.1 Questionnaires

Pre-Interview

- Under which regulatory framework does the P2PL market adhere?
- How the market is regulated and which is are the requirements for the P2PL companies?
- Which additional regulatory requirements will most certainly arise in the near future?

Research Question 1:*Can the P2PL market in Portugal achieve success similar to that of the UK and US?*

How big is the Portuguese P2PL market?

- How much are you “copying” from the U.S. & the UK market? (MOSAIC)
- Do you have institutional investors on your platform? (MOSAIC)
- What do you think about the development of the P2PL business in Portugal?
- What do you think about the possibility of a secondary market in Portugal, since it has been growing in other countries? (Investors & MOSIAC)
- What are the risks/challenges with the fast pace growing market? (Investors & MOSAIC)
- What are your thoughts about the P2PL market 5 years from now? (Investors & MOSAIC)
- What major difficulties could exist in the Portuguese P2PL market?(Investors & MOSAIC)
- Why did the market grow so fast in the U.K. & U.S.? (Investors & MOSAIC)
- Do you have plans to collaborate with banks and let them originate the loans as the case has been in the U.S.? (MOSAIC)
- How would you categorize the P2PL companies? (Investors)
- Are there any competitors or potential investment opportunities? (Investors)
- Why did the market for P2P loans emerge in Portugal? (Investors & MOSAIC)
- Was it an uncovered part of the market? What is missing in this market now in Portugal?
- Are the current P2PL clients lost customers of the commercial banks?
- What can you offer that the banks cannot?
- Why have not the banks already taken this market segment of high-risk borrowers?
- Can it be seen as a market failure from the commercial banks perspective?
- Would you be open for collaborations?
- How would such collaborations look like? (Investors & MOSAIC)
- Why are you not funding short-term loans? (Investors & Banks?)
- How are you affected by the P2PL business? (Banks?)
- Can the banks offer the same types of P2P loans? (MOSAIC)
- Why are the banks not offering loans to the customers that the P2PL companies have?

- Why did you start the P2PL business? (MOSAIC)
- Can the P2PL market be forced to adhere to similar capital requirements as the commercial banks? (Investors & MOSAIC)

Research Question 2 *How is the Portuguese P2PL market growing in comparison to the ones in the U.S. and the UK?*

Can you explain the screening process for the P2PL market? (Investors & MOSAIC)

- How is a P2P loan originated (MOSAIC)
- What are your thoughts about the possibilities for moral hazard behavior for the P2PL companies? (Investors)
- In what way can you as a borrower appear trustworthy? (MOSAIC)
- What liabilities do you have in the screening/rating of borrowers? (MOSAIC)
- What are your thoughts about your responsibility? Does it end once the loan is originated or when it is paid back? (MOSAIC)
- How is your screening process in comparison with other P2PL companies? (MOSAIC)
- Is the screening the same for loans you hold and loans you sell? (Banks?)
- What is the major risk with the fact that the P2PL companies never carry any responsibility for assessing a correct rating of borrower? (Investors)
- How can you differentiates the screening by the commercial banks and the P2PL companies? (Investors)
- How would your screening be affected in case you had a secondary market for individuals on your platform? (MOSAIC)
- Are you having any thoughts about implementing a deposit guarantee? (MOSAIC)
- What are your main concerns regarding the fact the P2PL companies do not carry any risk for the loans? (Investors)
- What are your comments to the fact that you never carry any risks? (MOSAIC)
- What are the economic risks associated when “wrong” individuals are getting loans? (Investors)
- What are the major risks associated with a secondary market for P2P loans? (Investors & MOSAIC)
- Are you affected by a loan that is not paid back? (MOSAIC)
- Are you revenues dependent on the risk of the P2P loans? (MOSAIC)
- How do you handle the problem with the misaligned interest that exist between different stakeholders? (MOSAIC)
- What could you benefit from having a secondary market for individual loans on your platform? (MOSAIC)

7.2 Similarity Table

SIMILARITIES BETWEEN P2PL & THE SUB-PRIME CRISIS		
EVENT	**P2PL MARKET**	**SUB-PRIME MARKET**
Borrowers	Poor credit with high risk of defaulting	Poor credit with high risk of defaulting
Originators	Originates loans to high risk borrowers without carrying the risk of borrower defaulting	Originated loans to high risk borrowers without carrying the risk of borrower defaulting
Rating Agencies	No liability if their rating of the borrowers proves to be wrong. Threat of not acting as indipendent authorities	No liability if their rating of the securities proved wrong. Did not act as indipendent authorities
Capital Markets	Combines highly risky P2P loans together with other loans and securitizes the assets for secondary markets	Combined highly risky mortgages together with other loans and securitized the assets for secondary markets
Regulations	There are no regulatory restraints that give the originators possibility to originate more loans	There were no regulatory restraints that gave the originators possibility to pump out loans
Quality of Loans	P2PL market is facing a threat of decrease in quality in order to increase the volume	Did not care about the quality of the mortgage, but instead maximized the volume to get a fee from it
Profits	The platform's revenues are based upon the volume of loans originated, and not the repayment of the loans	The mortgage firms were compensated for the volume of loans originated, and not the repayment of the loan
Agency Problem	Threat of misaligned interests between the platforms (originators) and the investors (lenders)	Misaligned interests between the mortgages brokers and the borrowers

7.3 Survey Questionnaires

Question set for Investors and Borrowers: