Project Dissertation Report

On

PEER TO PEER LENDING - AN EMERGING INDUSTRY ACROSS THE GLOBE

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DECLARATION

I **Anshu Garg**, student of MBA 2016-18 of Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 declare that Dissertation Project Report on **Peer to peer lending – An emerging industry across the globe** submitted in partial fulfillment of Degree of Masters of Business Administration is the original work conducted by me.

The information and data given in the report is authentic to the best of my knowledge.

This Report is not being submitted to any other University for award of any other Degree, Diploma and Fellowship.

Anshu Garg

Place:

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CERTIFICATE FROM THE INSTITUTE

This is to certify that the Dissertation Project Report titled **Peer to peer lending – An emerging industry across the globe**, is a bonafide work carried out by **Ms. Anshu Garg** of MBA 2016-18 and submitted to Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 in partial fulfillment of the requirement for the award of the Degree of Masters of Business Administration.

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EXECUTIVE SUMMARY

Lending has existed for thousands of years and lately it has been integrated with technology to create one of the most innovative financial products of recent times, a technology driven marketplace-lending platform, online peer to peer ("P2P") lending. It is a platform of financial transactions that bypasses conventional intermediaries by directly connecting borrowers and lenders. It has seen tremendous growth since 2010. USA, UK and China occupy a major portion of this industry but now it is taking off in many other jurisdictions across the world.

The primary benefit of peer to peer lending to entrepreneurs is the ability to raise capital. P2P lending spreads risk as the funding requests is filled in much smaller incremental amounts. Another benefit is the lower cost of capital and higher returns to investors as peer to peer lending provides a low cost alternative to channelling savings to the real economy, usually at rates lower than those attainable through traditional funding avenues as it provide an affordable option for raising capital. It can help in economic recovery by financing small and medium enterprises (SMEs) which are a key engine of economic growth and can contribute to job creation and economic recovery.

There are various risks associated with peer to peer lending such as risk of default which is estimated around 50% according to IOSCO research department. Risk of platform closure is the major risk which investors bear compared to other types of investments. Despite the short life of P2P lending, there have already been cases of peer-to-peer lending platform closing leaving no data on contracts behind and resulting in 100% investment loss. Risk of fraud is also one of the major risks which cannot be ignored. Online nature of P2P lending also makes it vulnerable cyber-attack posing great threat.

This paper has been completed in three stages which are summarized below:

i. **Stage-1:** Finding and comparing models of P2P lending prevailing in different countries and suggesting a model for India. Peer to peer lending has three main business models: the client segregated account model, the notary model and the guaranteed return model. The major difference between the client segregated account model and the notary model is that in the latter a bank originates the loan unlike the former where the platform originates the loan. In guaranteed return model intermediary platform guarantees a set rate of return. Some Chinese platforms work on guaranteed return model. Most P2P platforms in U.K works on client segregated account model and in U.S. notary model is followed by majority of platforms.

ii. **Stage-2:** Finding and comparing regulatory practices followed in different regimes. The regulatory regimes are dependent on jurisdictional choices in regulation. Currently there is no cross-jurisdictional harmonisation in the regulation of these industries. Peer to peer lending is regulated in five different ways which are:

a) Exempt/ unregulated through lack of definition
b) Platforms regulated as an intermediary
c) Platforms regulated as a bank
d) The US model: there are two levels of regulation, Federal regulation through the Securities and Exchange Commission (SEC) and state level, where platforms have to apply on a state-by-state basis
e) Prohibited

iii. **Stage-3:** Detailed analysis of loan amount funded via P2P platforms in countries like USA, UK, China and India. According P2PFA, the cumulative lending through P2P platforms globally, at the end of Q4 of 2015, has reached 4.4 billion GBP. Lending through P2P has grown dramatically from 2.2 million GBP in 2012 to 4.4 billion GBP in 2015. According to business insider US is the largest P2P lending market in the world by loan volume. In majority of countries like India, Spain, Denmark this market innovation has yet to develop substantially.

The high growth rate in P2P lending means the industry could become a more mainstream investment opportunity but its interconnectedness could expose more of risks to the wider economy. Although this industry does not currently constitute a systemic concern, but if allowed to grow without proper management, then there is a possibility of it becoming an important issue, in a systemic context, in the future.

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1. INTRODUCTION

Lending has been one of the oldest professions in the world. With a rise in the demand of quick borrowing and the possibilities of better returns, P2P technology has emerged as the world's fastest growing lending platform and can be termed as one of the most innovative financial products of recent times.

The financial sector is not immune from the growth of online industry and its potential impact. For this reason, it is capturing attention of analysts, investors, customers, businesses and regulators in majority. Peer-to-Peer (P2P) lending is one such business model that has gathered momentum globally and is currently growing in India.

1.1 Evolution of Peer to Peer lending

Modern peer-to-peer lending industry is comparatively young; it was started in UK in 2006, spread to US in 2007 and took off in China in 2009. It is still small but is gaining momentum rapidly. There are two main factors contributing to the rapid growth peer to peer industry:

i. Technological innovation;
ii. Financial crisis of 2008.

(i) Technological advancement makes peer to peer lending viable

The technological advances of the early 2000s opened opportunities for many industries. The sharing economy began to develop, social media was born and the concept of FinTech came up, challenging traditional financial institutions. Peer to peer lending platforms started growing in 2006 in the UK after the technological innovation of Web 2.0 applications on the internet made it feasible. Web 2.0 refers to a change in technology that allowed users of the internet to participate in the creation of content hosted on stable websites. It emphasises the "wisdom of the crowds" in website design and the development of software to enable participation. Two examples of this type of technology are Wikipedia and eBay, both of which allow multiple individuals to contribute to the overall architecture of the website (Kirby et al, 2014). This technological advancement provided the opportunity to create peer-to-peer lending and equity crowd-funding websites making Peer to Peer lending viable by reducing the cost of transactions associated in providing these services. This type of website architecture encourages user participation by allowing borrowers to set up a profile; include pictures and describe how they will use the loan or investment. This provides the online platforms with a social-networking aspect, with borrower/issuers voluntarily providing information to potential investor/lenders. The online aspect reduced cost and is feasible for both the borrower/issuer and lender/investor, in addition to increasing the potential reach of this form of investment opportunity or capital raising facilities.

(ii) Financial crisis and reduced business lending by banks have left a gap in funding

Prior to financial crisis many banks had a monopoly on lending money to businesses and individuals. This created a funding gap for new and emerging businesses. Small to Medium sized enterprise business (SME) owners were unsuccessful in their attempts to borrow money from large financial institutions. The rejection for lending money by bank was common and if a bank chooses to lend money to an SME it was mostly at very high interest rate. This hindered the growth of the start-ups and of growing businesses trying to compete with established ones that had comparatively easy access to finance. It also made it very challenging for individuals to borrow money from their bank even if loans were backed by fixed assets such as an individual's property.

The 2008 financial crisis made the situation for getting loans sanctioned from financial institutions even worse as it resulted in a number of bank failures and, simultaneously, the implementation of new capital adequacy regulations for banks, like Basel III. As a consequence, credit providers became increasingly constrained in their ability to lend money to the real economy. It can be seen from figure 1.1 that amount of bank loans funded in Western Europe and the USA significantly dropped at the beginning of the crisis. While there have been some signals of recovery in the US (although the growth rate is still lower than pre-crisis levels), in Western Europe the growth rate in loans to the non-financial corporate sector has been negative, especially to SMEs in the EU.

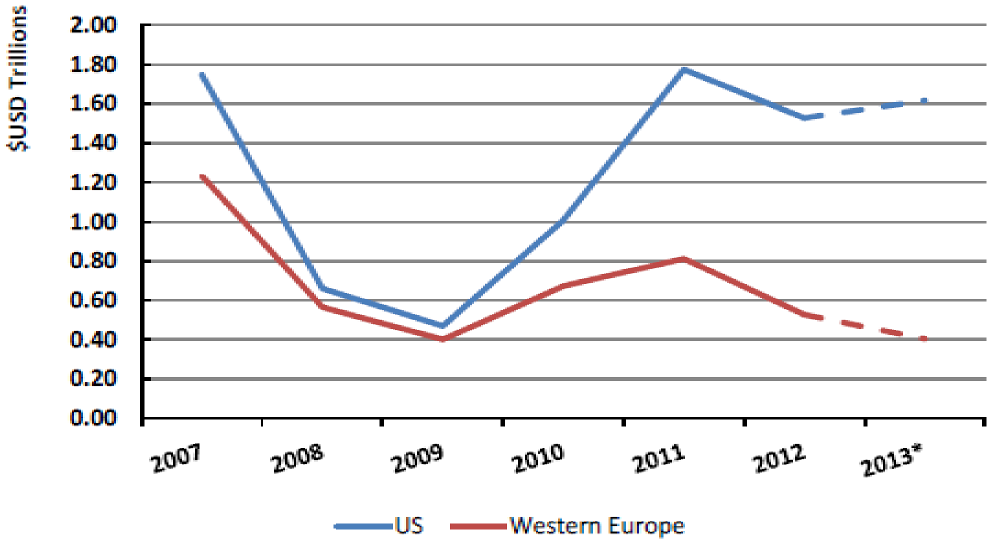

Figure 1.1: Total annual bank loans

(Source: IOSCO research department)

In this funding gap, peer-to-peer lending was gaining popularity as bank liquidity was reduced and also new regulatory requirements make obtaining loans for small and medium enterprises and individuals challenging. Lending to SMEs, as well as the financing of personal loans fell during the crisis, leaving a gap in the market.

In this climate, peer-to-peer lending has developed as a vehicle for borrowers to obtain a loan at a lower interest rate than through using traditional avenues of credit provision such as banks. Additionally, peer-to-peer lending offers a higher rate of return than through traditional investments, such as a savings account or government bonds. Further, many savers have inflation adjusted deposit rates that are often negative, impelling them to search for better returns on their savings.

Consequently, growth in the peer-to-peer lending market has been exponential, particularly after 2010 when the industry self-imposed restrictions on borrower creditworthiness in order to tackle high default rates, e.g. when Prosper saw default rates of 30% in 2009.

1.2 What is Peer to Peer lending?

1.2.1 Crowd funding

Crowd-funding is an umbrella term describing the use of small amounts of money, obtained from a large number of individuals or organisations, to fund a project, a business or personal loan, and other needs through an online web-based platform. Peer-to-peer lending is a form of crowd-funding used to fund loans which are paid back with interest. Equity crowd-funding is the raising of capital through the issuance of stock to a number of individual investors using the same method as crowd-funding. (Kirby et al, 2014)

1.2.2 Types of crowd funding

Crowd-funding can be divided into four categories as shown in figure 1.2:

- ✓ Social lending/donation crowd-funding
- ✓ Reward crowd-funding
- ✓ Peer-to-peer lending
- ✓ Equity crowd-funding

Social lending/donation crowd-funding and reward crowd-funding are a way of fundraising for charitable causes, for example through angel investors, or pre-paying for a product from a business, for example NakedWines.com. These two categories of crowd-funding can be collectively referred to as "community crowd-funding".

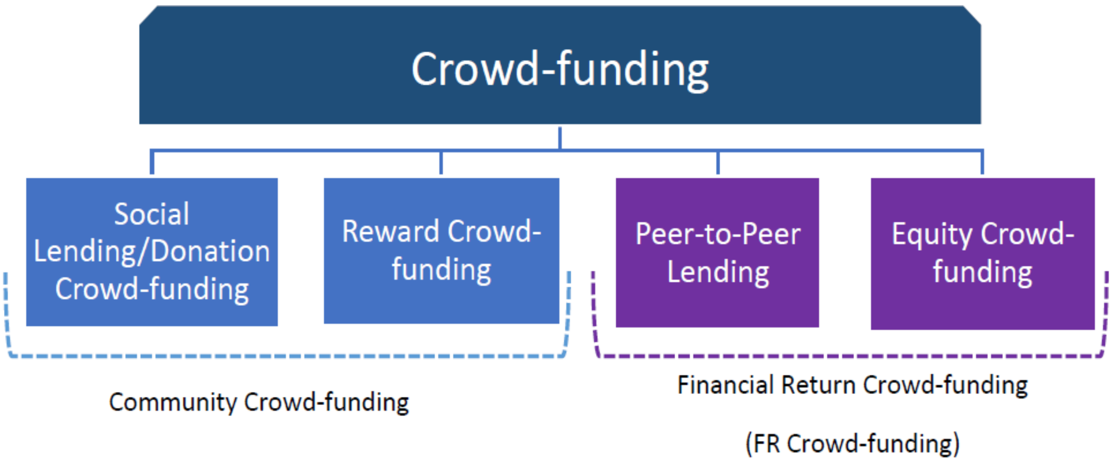

Figure 1.2: Types of crowd funding

(Source: IOSCO research department)

Consequently, peer-to-peer lending and equity crowd-funding can be referred to collectively as “financial return crowd-funding” or “FR crowd-funding”. Both types of FR crowd-funding are internet based.

1.2.3 Peer to peer lending

Peer-to-peer (P2P) lending is a new platform of financial transactions that bypasses conventional intermediaries by directly connecting borrowers and lenders. (yum et al, 2012). It is a method of debt financing by which lenders and borrowers can enter into a transaction without any official financial intermediary institution, thus removing any middlemen from the process. It is also known as social lending, crowd lending, person to person lending, peer to peer investing and is abbreviated as P2P lending.

It is the practice of lending money to unrelated individuals, or "peers", without going through a traditional financial intermediary such as a bank or other traditional financial institution (S.Fotios, 2013).

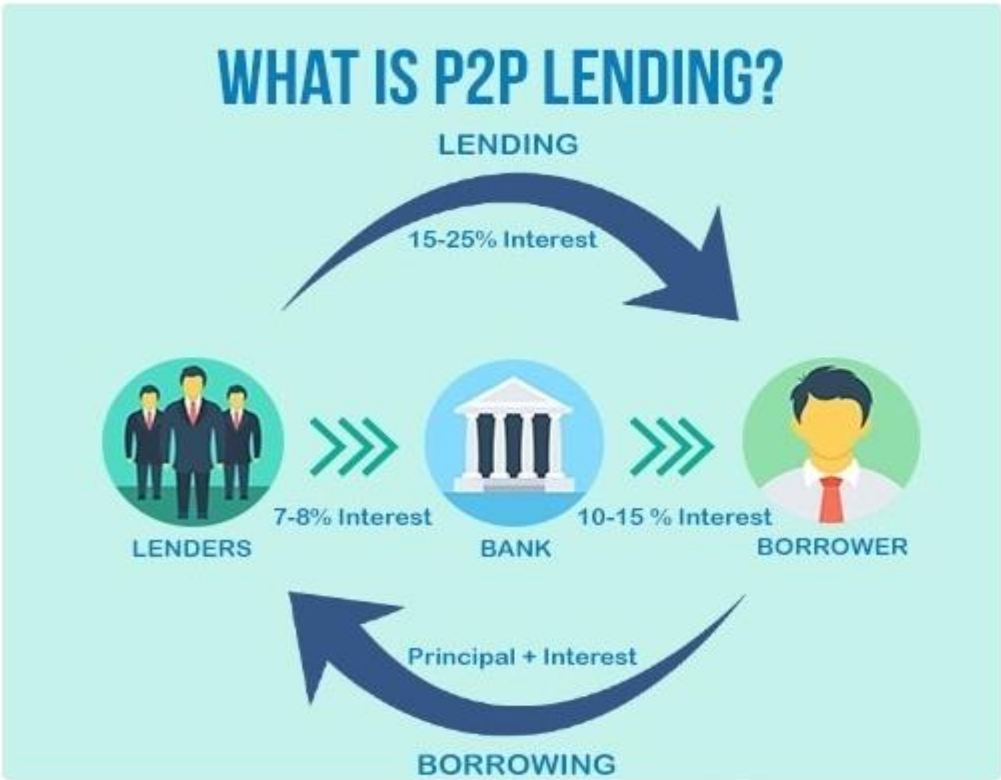

Figure 1.3: Peer to peer lending concept

(Source: https://www.google.co.in)

Transaction between borrowers and lenders takes place online via different peer-to-peer lending platforms and credit checking tools. These sites indeed have the greatest potential to revolutionize the existing financial market. Peer to peer lending companies who wants to profit through a reasonable fee, match borrowers or companies with suitable investors with attractive interest rates who are willing to invest their money for long term and are expecting a higher rate of return against banks which provide them comparatively lower rate of return. As the middle men is removed from the process, borrowers are charged with lower rates while the lenders get significantly higher rates than they would get from a bank or a traditional lender. For lenders, loans generate income in the form of interest which can often exceed the interest amount that can be earned through saving accounts and CDs. In addition, an investor is able to earn a higher return on his investment than he can get from the stock market through the interest payments he receives monthly from the borrower. On the other hand, borrowers can get access to financing that might have not approved through standard financial intermediaries. In addition borrower gets a more favourable interest rate as compared to bank.

The borrowers pay an origination fee (either a flat rate fee or as a percentage of the loan amount raised) according to their risk category. The lenders, depending on the terms of the platform, have to pay an administration fee and an additional fee if they choose to use any additional service (e.g. legal advice etc.), which the platform may provide. The platform provides the service of collecting loan repayments and doing preliminary assessment on the borrower's creditworthiness. The fees go towards the cost of these services as well as the general business costs. The platforms do the credit scoring and make a profit from arrangement fees and not from the spread between lending and deposit rates as is the case with normal financial intermediation. (RBI consultation paper, 2016)

Profile of a borrower is usually displayed on a peer-to-peer online platform where investors can assess these profiles to determine whether they would want to risk lending money to a borrower. A borrower might receive the full loan amount or only a portion of what he asked for from an investor. In the case of the latter, the remaining portion of the loan may be funded by one or more investors in the peer lending marketplace. In peer-to-peer lending, a loan may have multiple sources and monthly repayment has to be made to each of the individual sources. Peer-to-peer intermediaries are for-profit companies. Individuals and businesses that need funding for personal or commercial projects need to file an application with these intermediaries which will assess their credit risk, determine a credit rating, and apply an interest rate to their profiles. Monthly repayments are also made through the P2P intermediary who processes and forwards the payments to the lenders who invested in the loan.

While crowd funding - equity, debt based and fund based- would fall under the purview of capital markets regulator (SEBI), P2P lending would fall within the domain of the Reserve Bank of India.

1.2.4 Characteristics of P2P lending

There are various characteristics of P2P lending, some of which are as follows:

- ✓ It is sometimes conducted for profit
- ✓ It is not necessary to have common bond or prior relationship between lenders and borrowers
- ✓ Intermediation by a peer-to-peer lending company
- ✓ Transactions take place online
- ✓ Lenders may often choose which borrowers to invest in, if the P2P platform offers that facility
- ✓ The loans can be unsecured or secured and are not normally protected by government insurance but there can be protection funds like those offered by Zopa and RateSetter in the UK
- ✓ P2P lending platform offers high rate of return to investors
- ✓ Borrowers obtain loan at a lower interest rate than through traditional avenues of credit provisions such as banks.

1.2.5 Advantages and benefits of peer to peer lending

Many countries see the benefits of peer to peer lending which is a form of market-based finance; primary among them is the ability to raise capital efficiently and effectively. An individual or organisation can raise the required capital they need, in most cases without giving up large parcels of equity interest (Yum et al, 2012). As a result, many jurisdictions have actively sought to encourage the development of these markets through various regulatory means. Other benefits associated with these innovative industries include:

a) Helping economic growth through new and increasing flows of credit to SMEs and other users in the real economy: Market-based finance provides credit to the real economy and peer to peer lending is no exception. This is the benefit cited by governments who want to encourage the growth of SMEs, and the role they play, in their respective economies. SMEs are an important engine of economic growth. As such, any mechanism that helps those entities more efficiently access capital for their development and expansion helps job creation and aids economic recovery. The major benefit of peer-to-peer lending is its ability to efficiently and quickly lend money for personal loans, even if these personal loans include business projects. This has facilitated the flow of credit, which has been severely restricted since the outbreak of the financial crisis in 2008.

b) Fills a gap left by banks: The tighter restrictions on traditional lenders through higher capital requirements have reduced their appetite to issue uncollateralised credit, for personal loans or other loans (Kirby et al, 2014). Market-based finance is an alternative to traditional lending and peer-to-peer lending platforms have moved in to serve this niche market, and as a result have grown exponentially since the crisis.

c) Lower cost of capital/high returns: Leveraging off a lower cost basis: In an era of low returns for investors and scarce capital for those who need it, P2P lending provides a low cost alternative for channelling savings to the real economy, usually at lower rates than through traditional funding. Peer to peer lending alternatives provide an affordable and attainable option for raising capital.

d) Provides a new product for portfolio diversification: Peer-to-peer lending platforms have in effect provided investors with a brand new asset in the form of un-collateralised debt. This innovation enables investors to further diversify their portfolios. The diversification of assets can reduce the build-up of systemic risk as it reduces the overreliance of investors on a single asset and reduces the amount each one invests in each product.

e) Cost efficient: Online platform, unlike banks, they have little need for a physical presence in a locale which allows the platform to operate with a relatively low infrastructure cost. Hence, online platforms may be more cost efficient than traditional lenders who need a physical presence and manpower to operate effectively. Lower overhead reduces the cost of the loan for the borrower but also increases the return rate for investors as the administrative costs are lower.

f) Convenient: Online platforms are more accessible to users, who may find it easier to manage their portfolio as a result. Unlike traditional investments, which may be available only at certain times of day, these online portfolios are accessible at any time.

g) Increases competition in a space traditionally dominated by a few providers: Increased competition benefits borrowers and lenders, as well as the economy as a whole. It lowers costs and helps establish value. In addition it creates the incentive for traditional entities to innovate, reduce cost and increases efficiency.

1.2.6 Risks associated with peer to peer lending

There are a number of risks associated with peer to peer lending which challenge retail investor protection. These include:

a) Risk of default: Default rates are an important consideration in peer to peer lending. When Prosper, one of the largest peer-to-peer lending platforms in the USA, debuted in 2006 it had a low threshold on the creditworthiness of the borrowers able to obtain loans from the platform. Prosper accepted borrowers with a credit score as low as subprime 520. It expected lenders to differentiate between investment opportunities through consideration of interest rates, with higher interest rates relating to higher risk investment opportunities.
The SEC issued a Cease and Desist order in 2009, arguing that Prosper was selling unregistered securities. The platform closed for 6 months to put its

accounts in order and comply with securities regulation. The platform also raised the minimum credit score to 660, considered to be a satisfactory credit score in the US.

This episode resulted in an industry led review on the business practices of almost all peer-to-peer lending platforms. The industry imposed rules on itself which raised the minimum credit score allowed, assessed the borrower's capacity to repay their loan and used hard and soft information in order to categorise the borrowers into classes based on how safe on investment they are, and to set the interest rate according to this classification. These and other policies created a stricter investment criteria resulting in 1 in 10 loans being accepted by Lending Club, 1 in 5 being accepted at RateSetter, and similarly low acceptance rates at other platforms (Kirby et al, 2014). The consequence is an overall default rate that is reported to be in the range of 0.2% to 7% as highlighted in Table 1.1.

Table 1.1: Default rates advertised on individual platforms

Platform	Default Rate	Average default rates in domicile	Country of Domicile
Prosper	7.0%	3.76%*	USA
Lending Club	4.3%	3.76%*	USA
Auxmoney	2.6%	< 1%***	Germany
CreditEase	2.0%	1% ~	China
Funding Circle	1.5%	0.15 - 2.6%**	UK
Afluenta	1.3%	1.5%^	Argentina
RateSetter	0.3%	0.15 - 2.6%**	UK
Zopa	0.2%	0.15 - 2.6%**	UK

(Source: IOSCO research department)

Although Table 1.1 highlights that default rates in the industry are quite low, rates may appear that way because they bias. The data is sourced from the largest, most successful platforms and does not include data from those that have left the industry.

One way to mitigate this risk is through the diversification of a lenders loan portfolio. In some instances diversification is a compulsory requirement for investing through some platforms.

Another method to mitigate this risk calls for a pooled insurance fund that provides compensation in the event of a borrower default. Some platforms have implemented such provisions and, at their discretion, can reimburse lenders in the event their loan holding defaults.

b) Platform risk: The platform risk is the risk of a platform being temporarily or permanently shut down. If the platform closes it could put the lenders portfolio of loans at risk of not being repaid as the intermediary position, responsible for the collection of repayment, is unable to be fulfilled.
In most business models, peer-to-peer lending platforms set up segregated accounts so that client money goes through a separate account. In the event of a platform closure, the account can be taken over by another manager or organisation, allowing the existing loans to be run-off.

c) Risk of fraud: Peer-to-peer lending suffers from the same risks associated with any other credit provision institution, which include: identity theft, money laundering, terrorism financing, consumer privacy, and data protection violations. In some jurisdictions, the industry itself has taken the initiative for self-regulation in order to mitigate this risk. Some platforms report that they manually check each borrower for fraudulent motivations before allowing them to advertise for lenders on their sites; others use third party information as well as checking the identity of the borrowers before originating the loans. However, relatively few do similar background checks on the lenders, with most only doing the minimum required to bring them in line with anti-money laundering laws.

d) Information asymmetry and quality: Due to the anonymous nature of the peer-to-peer lending market, the lender lacks hard information on the borrower. The only hard information available to the lender is the interest rate assigned by the lending platform to the borrower. This is to maintain the borrower's anonymity. Lenders must base their decisions on unverified soft information. This requires the lender to conduct due diligence in order to differentiate between a good and a bad investment, as well as to decrease the risk of fraud.

The risk posed by information asymmetry could be mitigated through the use of standardised templates, more transparency and hard information about the borrower, standardised accounting and disclosure of the intended use of the loan.

e) Risk of investor inexperience: Another risk is the risk of investor inexperience particularly for retail investors. This risk could be increased by the perceived credibility and safety of these industries through governments lending money through these sites, and the continued regulatory changes in order to allow the industries to grow through the use of exempt markets.

In peer-to-peer lending there is no investor protection so far by way of a compensation scheme to cover defaults. This is not widely known, nor is it disclosed on many peer-to-peer lending sites. As such, retail investors, who do not have the level of knowledge or the same capacity to absorb defaults as professional investors, may suffer proportionately larger losses.

f) Liquidity Risk: The risk of illiquidity is an important risk as well as there is no secondary market for most platforms. Investors may not fully understand the risks involved in investing in illiquid stocks, and may be spurred by the promise of higher returns. The lack of liquidity is unlikely to cause systemic risk until the industry grows to a sizeable level.

g) Risk of cyber-attack: As peer-to-peer lending is largely an internet phenomenon, there is a significant risk related to cyber-security. This could come in many forms, from overloading the platform's infrastructure, to confusing accounts or identity theft. The platform's creators may need to ensure they have enough technical expertise to prevent such cyber-security issues.

1.3 Objective of the study

There are basically three objectives of this study which plays a very important role in peer to peer industry worldwide. The study is carried out for four countries which are USA, UK, China and India. The objectives of this paper can be defined as follows:

a) To find and compare models of P2P lending prevailing in different countries and suggest a model for India
b) To find and compare regulatory practices followed in different regimes and suggestions for regulatory framework to be implemented in India
c) To analyse the loan amount funded via P2P platforms in countries like USA, UK, China and India

1.4 Scope of the study

The scope of this study is limited to the study of P2P lending of four countries which are U.S.A, U.K, China and India. U.S.A, U.K and China forms the major proportion of P2P lending industry globally. Collectively, U.S.A, U.K and China make up 96% of the overall peer to peer lending market. US market accounts for 51% of the global market, with China making up just over a quarter at 28%, and the UK just behind at 17%. U.S and U.K are also the oldest markets, as these types of platforms were first established in these jurisdictions.

2. REVIEW OF LITERATURE

P2P lending is a form of crowd-funding used to raise loans which are paid back with interest. It can be defined as the use of an online platform that matches lenders with borrowers in order to provide unsecured loans (RBI consultation paper, 2016). P2P lending platforms began over a decade ago in 2005 with the objective of democratizing consumer financial services by dynamically matching individual borrowers and lenders, using technology as the enabler (Lee, 2016).

Peer-to-peer mechanism conveys "soft credit information" through social networks, and such information can be used by borrowers and lenders to reach efficient transactions (Peterson, 2002). This new digital intermediary was created on the basis of microcredit principles and has rapidly grown in recent years (Magee 2011). The Wall Street Journal has reported that the leading P2P firms have provided investors with 10% or higher annual returns at a time of historically low interest rates. They also have attracted big institutional investors such as hedge funds and wealth-management firms (Light, 2012).

According to (Packer, 2010), amid the recession triggered by the global financial crisis, the market for microfinance grew rapidly in 2009, building on the past success of traditional microfinance institutions. Disintermediation of the expensive middlemen associated with traditional financial firms by a more cost-effective online platform has created lower operations costs for the online P2P firms (Klafft, 2008).

2.1 Some big P2P platforms worldwide

In this study we have focused on large peer to peer lending platforms of basically four countries which are U.S.A, U.K, China and India. As these large platforms occupy major portion of P2P lending, loans originated from these platforms is taken as a base to study the models adopted by P2P platforms in respective country, regulatory practices prevailing in country for P2P industry, risk associated in different countries and loan amount funded by different countries via P2P lending industry.

Some of the platforms which form the base of this study are as follows:

- **Lending club** – Based out of US, it is world's largest P2P lending company founded in 2006 and was the first lender to register its offerings as securities with the Securities and Exchange Commission (SEC), and to offer loan trading on a secondary market. Headquartered in San Francisco they operate fully online without any branch location which keeps their operating cost low thus focussing more on customers. Figure 2.1 shows the user interface of lending club website.

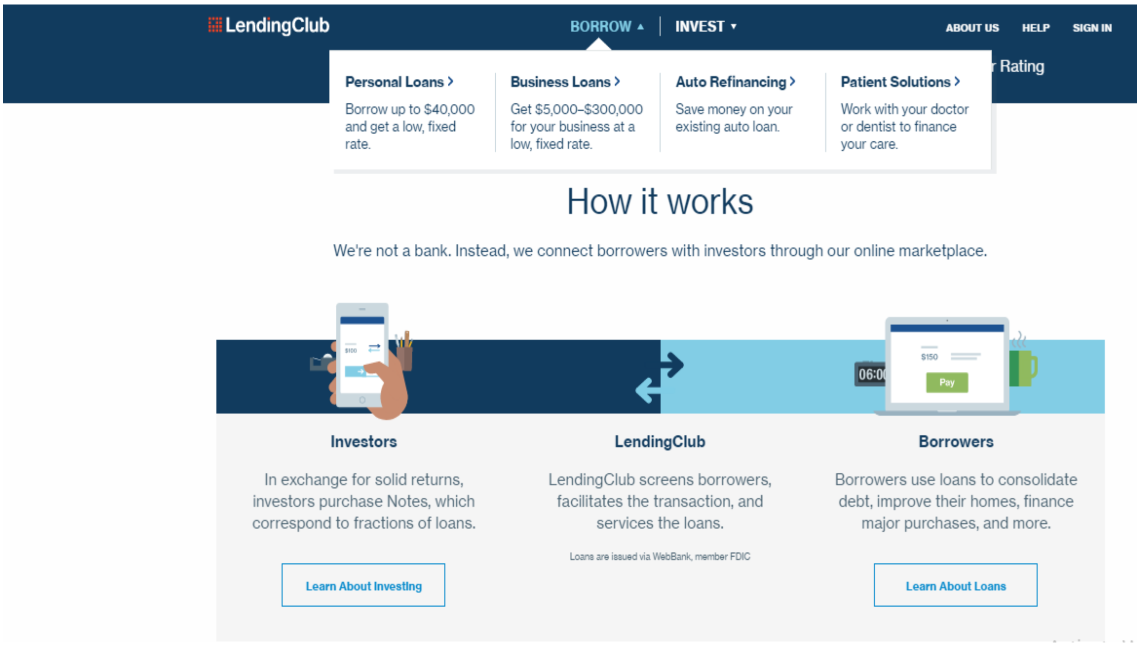

Figure 2.1: User interface of Lending Club website

(Source: https://www.lendingclub.com/)

- **Prosper** – Proper was founded in 2005 and is America's first marketplace lending platform with over $10 billion in funded loans. On Prosper, borrowers' list loan requests between $2,000 and $35,000 and individual investors invest as little as $25 in each loan listing they select. Prosper handles the servicing of the loan on behalf of the matched borrowers and investors. Prosper Funding LLC is a wholly-owned subsidiary of Prosper Marketplace, Inc. Prosper Marketplace is backed by leading investors including Sequoia Capital, Francisco Partners, Institutional Venture Partners, and Credit Suisse NEXT Fund.

- **Zopa -** Zopa is a UK online peer-to-peer lending company founded in 2005. It enables investors to lend to UK consumers directly through its peer-to-peer lending platform. Borrowers can take out loans between £500 and £25,000. All applicants are credit-checked by Zopa.

- **Ratesetter** - RateSetter is a British peer-to-peer lending company based in Bishopsgate, London. It is known for having introduced into peer to peer lending the concept of a "Provision Fund" – an internal fund to insure against borrower default. Launched in October 2010, the company has matched more than £2bn in peer to peer loans and has over 400,000 investors and borrowers.

- **CreditEase -** CreditEase is a Beijing-based leading FinTech conglomerate in China, founded in 2006. It specializes in inclusive finance and wealth management, including payment technology, marketplace lending, crowdfunding, robo-advisory, insurance technology, and blockchain products and services. CreditEase actively engages with global FinTech innovators through business incubation, commercial cooperation and investment.

- **Lufax** - Shanghai Lujiazui International Financial Asset Exchange Co., Ltd. (Lufax), is a peer to peer lending platform in China headquartered in Lujiazui, Shanghai. The company was founded in September 2011 and started with P2P lending as the only product. It is the second largest Peer-to-peer lender in China. It is an associate of China Ping An Group. The platform makes money by matching borrowers with investors, collecting a 4% fee on each loan. Since the start of the business, the company has arranged more than 200,000 peer-to-peer loans that worth a total of $2.5 billion.

Some of the common P2P lending platforms in India are:

- **Faircent** – Founded in 2013, Faircent is a peer to peer lending (or P2P lending) platform that essentially provides a virtual marketplace where borrowers and lenders can interact directly, without having to go through the traditional financial intermediaries like banks, diminishing the margins for people in need of loans. Faircent has gained recognition from the industry in various fields. It was showcased as one of the top start-ups in Start Up India, selected for the first batch of NASSCOM 10,000, part of the Microsoft Accelerator program, one of the top 10 companies from India to be selected for Web Summit in 2013, along with several other prestigious awards under their belt.

- **i2i funding** – i2i funding has started its operation in October,2015 and is one of the pioneer in P2P lending in India. Apart from providing end to end loan servicing, i2i diligently evaluates the credit risk of each of the loan projects, post which it assigns risk category and recommends an interest rate for that project
- **Lendbox** – Started in June 2015, there are thousands of people who have signed up on Lendbox and have created a lot of awareness about peer to peer lending among the borrowers which till now has been only known of few ways to get loans or good investment options. Lendbox helps people fulfilling their financial need even if they have bad credit score or urgency.

Some other big P2P lending platforms are:

- <u>Funding circle</u>: Started in 2010 in UK which now operates in U.S, Germany, Spain and Netherland.
- <u>Thin Cats</u>: Started in 2011 in UK.
- <u>LendInvest</u>: It is a non-bank mortgage lender in the UK, and is a property lending and investing platform started in 2013.
- <u>LendingWorks</u>: It was founded in 2012 in UK.
- <u>Crowdstacker</u>: It was started with aim of crowd funding and fintech on May 1, 2014 in UK.
- <u>OnDeck Capital</u>: On Deck Capital is an American online small business lending company with locations in New York City (headquarters), Arlington, Virginia and Denver, Colorado which started in 2006.
- <u>SoFi</u>: Social Finance, Inc. (commonly known as SoFi) is an online personal finance company that provides student loan refinancing, mortgages and personal loans, headquartered in California and founded in 2011.
- <u>Yirendai</u>: Online P2P lending platform which was started in China in 2012.
- <u>Monexo</u>: It is India's leading online peer to peer lending platform.

2.2 Impact of social relationships in P2P lending

Online social networks such as Facebook, LinkedIn, and MySpace, powered by the growth in digitization and Internet technologies, have dramatically altered the way users interact and connect with each other. Online P2P lending is largely decentralized with individual lenders making lending decisions independently or as part of a network of lenders (Lin, 2013). Lacking sophisticated risk assessment methodologies available to banks and centralized lending institutions, online P2P lenders are often dependent on social networks, or online community, to manage the risks in their transactions.

Social networking sites such as Facebook and LinkedIn have changed the landscape of social embeddedness by greatly facilitating the creation and maintenance of many social relations and making them highly visible (Kane et al. 2014; Oestreicher-Singer et al. 2012). In online peer-to-peer (P2P) lending individual lenders collectively bid on loan requests by individual borrowers in an online platform supported by social networking tools.

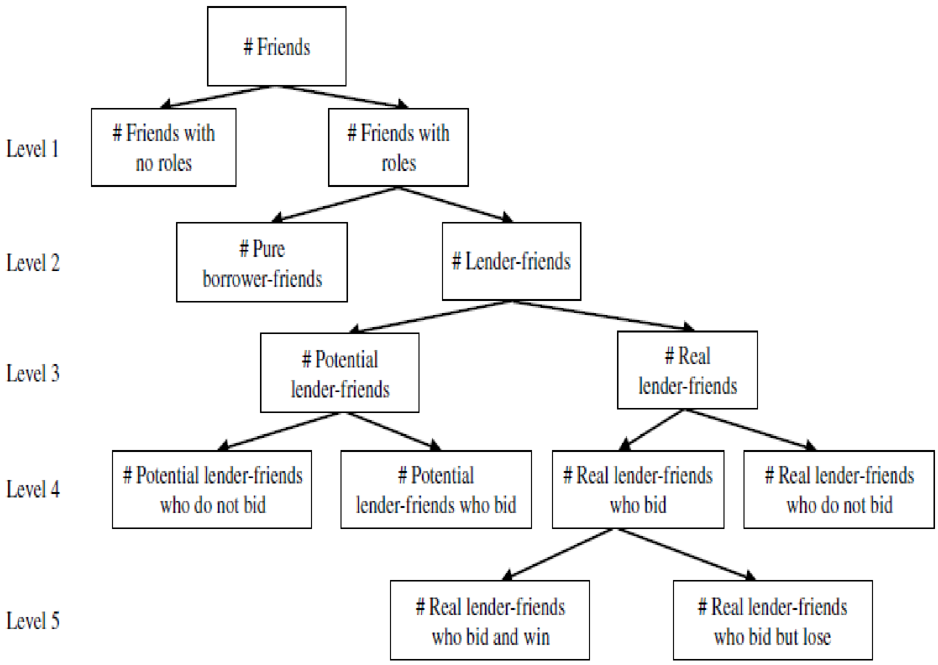

Figure 2.2: Hierarchy of friends in P2P lending

(Source: Lin et al (2013))

(Lin et al, 2013) found that friendships increase the probability of a successful listing and lower loan interest rates with more pronounced effects as we go down the friendship hierarchy as shown in Figure 2.2. Thus, lenders in the P2P market do appear to judge borrowers by the quality of company they keep. The number of friends that a borrower has and the number of friends that actually bid on a loan increase the probability of successful funding of a loan and reduce ex post default rates.

P2P lending leverages the "wisdom of the crowd" (Freedman et al, 2008; Yum et al, 2012) by allowing multiple lenders to collectively fund a loan. Micro-finance theories argue that social networks may identify good risks either because friends and colleagues observe the intrinsic type of borrowers ex ante or because the monitoring within social networks provides a stronger incentive to pay off loans ex post (Freedman et al, 2008).

2.3 Terms of use for Borrowers

Borrowers may post loan requests with a fixed term (usually one, three or five years) and ask for their loan to be funded fully or partially, as the borrower may indicate with his request that he will accept less than full funding.

Borrowers will have to meet certain criteria in order to be allowed to post requests for loans on P2P platform thus making this request available for the potential lenders to examine. Potential borrowers have an obligation to disclose to the lenders, through the intervention of the company, specific information portraying their financial status. Information that may commonly be required for disclosure on the borrower's behalf could include employment status, freehold property status, credit scores, existing incidents of paying delays or past credit defaults, debt-to-income ratio, existing credit obligations or intention of creating such through other funds. This information can provide some data for the company and the lenders to be able to categorize the lender and determine:

- ✓ Whether he is thought to be creditworthy enough to be granted the loan
- ✓ Interest rate the loan should be charged with.

Using the information offered by each borrower, the company must determine an individualized credit rating and a personalized interest rate for the loan which is then posted by the company along with the aforementioned information regarding the status of the borrower, according to his own reports, and any other information the borrower choose to disclose and is relevant for the loan. The company usually determines a general maximum loan sum which cannot be exceeded by any potential borrower but it can also set personalized maximum loan sums according to the lender's assumed creditworthiness. Along with the above information, the company has to disclose its' own fees.

2.4 Terms of use for lenders

Candidate lenders have to comply with a minimum sum of funding, a minimum amount of money accepted by the company. After viewing the informational posts regarding each loan request they have the possibility to decide to fund the full loan or a part of it. Generally it is preferred by a lender to avoid fully funding a loan request as they find partial funding of smaller portions of loans a more preferable choice. Thus they manage to minimize their credit risk dispersing their capital to numerous transactions. The funded loans amortize through equal monthly payments to their maturity date, thus producing the desirable profit for the lenders. Lenders are also prohibited from disclosing their true identities. This anonymity is accomplished and preserved through a simple tactic imposing all requests and transactions generally to be posted only under the user's (borrower's or lender's) user name the so called "screen names"

Concluding remarks:

The above review of literature indicates a dearth of studies that focus on various P2P lending platforms across the globe but comparative study of different countries based on loan amount funded via different P2P lending platforms have not been carried out. Regulatory practices followed in respective regime and model used for P2P lending does not seem to have been analysed in various studies. Suggestive model for India was also missing. There has been no discussion of suggestions for regulatory practice to be implemented in India. So the present study has been carried out to compare different countries based on loan amount funded, regulatory regimes followed and the model which these countries have adopted with the aim to suggest a suitable P2P lending model for India. Some suggestions are also given for regulatory practices to be implemented in India for P2P lending.

3. THEORETICAL FRAMEWORK

This study has been done by thoroughly researching about the regulatory practices which are prevailing in different regimes for regulating P2P industry. Through research is carried out for finding the types of models prevailing for P2P lending platforms in the countries like U.S.A, U.K and China. A detailed comparison has been drawn between regulatory practices which are followed by different countries and also between the types of model used by P2P lending platform of respective country. Since in India this P2P platform is in very nascent stage, a working model has been suggested for India.

Data has been collected from various peer to peer platforms such as Lending Club, Zopa, Ratesetter, Faircent in order to determine the health of P2P lending Industry for countries like USA, UK, China and India. In UK there is an association known as peer to peer finance association (P2PFA) which was established in 2011 as a representative and self-regulatory body for debt-based peer-to-peer lending. P2PFA members are required to meet robust standards for the transparent, fair and orderly operation of peer-to-peer lending. This platform shows cumulative data for its member platforms which currently are: Crowdstacker, Folk2Folk, Funding Circle, Landbay, Lending Works, Market Invoice, ThinCats and Zopa. This data has been thoroughly analysed individually for each country and then a detailed comparison was made for the loan amount funded via P2P platforms of different countries.

3.1 Regulatory practices in P2P industry

P2P lending is approached differently by regulators in different jurisdictions; some treats P2P lending as banking while other treats it as intermediary. Some jurisdictions like Israel and Japan have prohibited it altogether.

Across the globe, P2P lending is regulated in five different ways mentioned as follows: (RBI consultation paper, 2016)

1. Exempt market/ Unregulated through lack of definition

In these jurisdictions, either the regulation has classified P2P lending as an exempt market or there is a lack of definition in legislation. However, in some cases, there is regulation designed to protect borrowers and that mainly involves rules already in place to protect the borrower from unfair interest rates, unfair credit provision and false advertising.

Countries currently using this regime are China, Ecuador, Egypt, South Korea, Tunisia

2. Intermediary Regulation

This regulates P2P lending platforms as an intermediary. It usually requires registration as an intermediary, and other regulatory requirements depending on the jurisdiction. Generally, there are regulations that establish the prerequisites for the platforms to register in order to access the market. Other rules and requirements determine how the platform should conduct its business (for example, the licensing needed to provide credit and/or financial services).

Countries currently using this regime are Australia, Argentina, Canada (Ontario), New Zealand, United Kingdom

3. Banking Regulation

This regulates P2P lending platforms as banks due to their credit intermediation functions and is therefore regulated as banks. As such, the platforms must obtain a banking licence; fulfil disclosure requirements and other such regulations.

Countries currently using this regime are France, Germany, Italy

4. US Model

There are two levels of regulation, Federal regulation through the Securities and Exchange Commission (SEC) and State level, where platforms have to apply on a state-by-state basis. One level below the federal requirements is state regulation. Some states outright ban the practice of P2P lending (e.g. Texas). Other states place limits on the type of investors using the platforms to lend (e.g. California). In addition, if a platform wishes to operate across multiple state boundaries, it must apply to each state separately.

Country currently using this regime is United States of America.

5. Prohibited

P2P lending is banned under legislation. Countries currently using this regime are Israel, Japan

3.2 P2P lending business models

The business models have several similarities globally but also have key differences based on local financial infrastructure, regulations, customer needs and the history of evolution. There are various models for P2P lending prevalent globally such as:

1) Client segregated accounting model - This is the simplest form of P2P model, where the lenders directly interact with the borrowers and they themselves fix their counter parties. A contract is set up between the individuals with little participation by the intermediary platform. Lenders can bid on loans in an auction style, with some services providing an automated bidding option, for example Funding Circle. All funds from lenders and borrowers are separated from the platform's balance sheet and go through a legally segregated client account, over which the platform has no claim in the event of the platform's collapse. As such, the contractual obligation between borrower and lender still applies in the event of the platform's failure.

The process of client-segregated accounts model is briefed below:

a) The borrower first put in their loan request on the P2P site.

b) These loan requests are then listed on the P2P website for the lenders to identify and act on the loan requests.

c) After successful identification and assessment of credit worthiness and various other factors related to the borrower, the lenders then release the funds in favour of the borrowers, which are deposited into a specific account called the Investor Sub-Account maintained with the P2P company, separate investor sub-account for each and every client (lender and borrower)

d) These funds are then transferred into the Investor Sub-Account of the borrower for him to withdraw the same as per his convenience.

e) After the funds reach the borrower the P2P intermediary charges their administration fee from both of the clients.

f) At time of repayment (both principle and interest) borrower deposit the amount in the same Investor Sub-Account.

g) These funds are then transferred to the lender's accounts, which are then available for the lender to withdraw or use them to fund further transactions at the P2P portal.

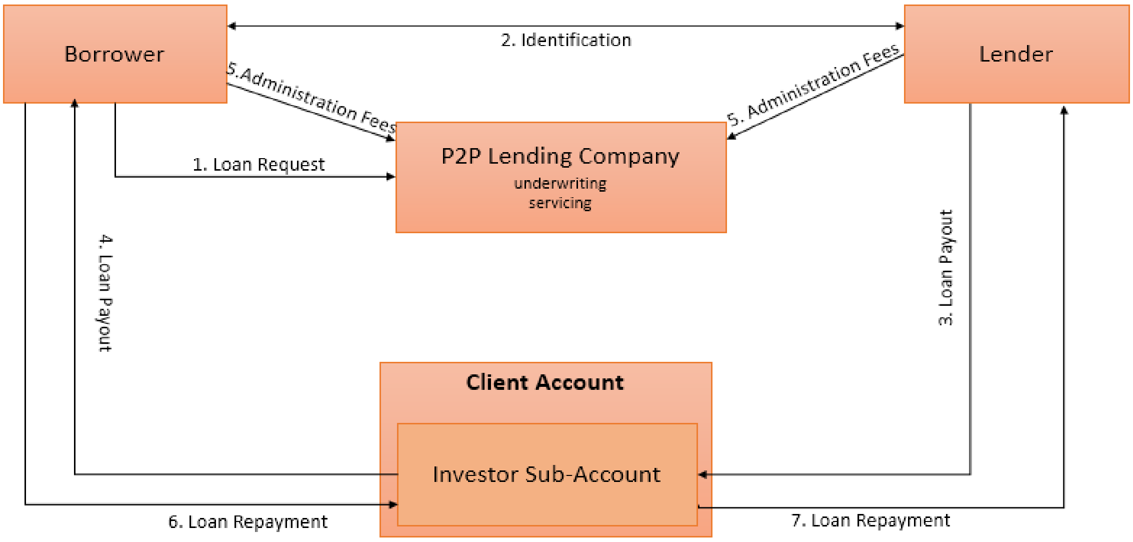

Figure 3.1 – Client segregated P2P accounting model

(Source: http://vinodkothari.com/blog/peer-to-peer-lending-business-models/)

This form of P2P model is very transparent as both the parties have complete knowledge of where their hard earned money is going or to whom one needs to pay, to pay off ones debts. Here the lenders do not face any risk of losing their money in the event of bankruptcy of the P2P company as there is a direct agreement between the lender and the borrower, nor the company faces any risk of claims from the lenders in case of default of the borrowers, as the lenders are the sole decision makers based on their own discretion, whether to advance a loan to a specific borrower or not.

2) Notary model - This is a much complex form of P2P business, which involves a commercial bank apart from the lender or the borrower. The process of the notary model is briefed below:

1. The borrower first put in their loan request on the P2P site.
2. P2P platform then forward the loan request to a commercial bank associated with it, bank then sanction the loan and issue a loan promissory note to the company.
3. Company then forward the promissory note to the borrower and charges its fees from the borrower.
4. The borrower then submits the promissory note to the issuing bank.
5. The bank in return pays the promised loan amount to the borrower.

6. Meanwhile the company lists the loan request on its website, for the lenders to view them and advance funds to finance the loan request.

7. Ones there is sufficient fund with the company from the lenders, the company immediately buys the loan receivables from the commercial bank and issues pass through certificates to lenders in proportion to their fund in a single loan.

8. At this time the company charges its administration fees from the lenders.

9. At time of repayment of the loans, the borrowers pay the company to pay off their debts which are passed to the lenders accounts held with the company for funding further loan transaction or withdrawal by the lenders.

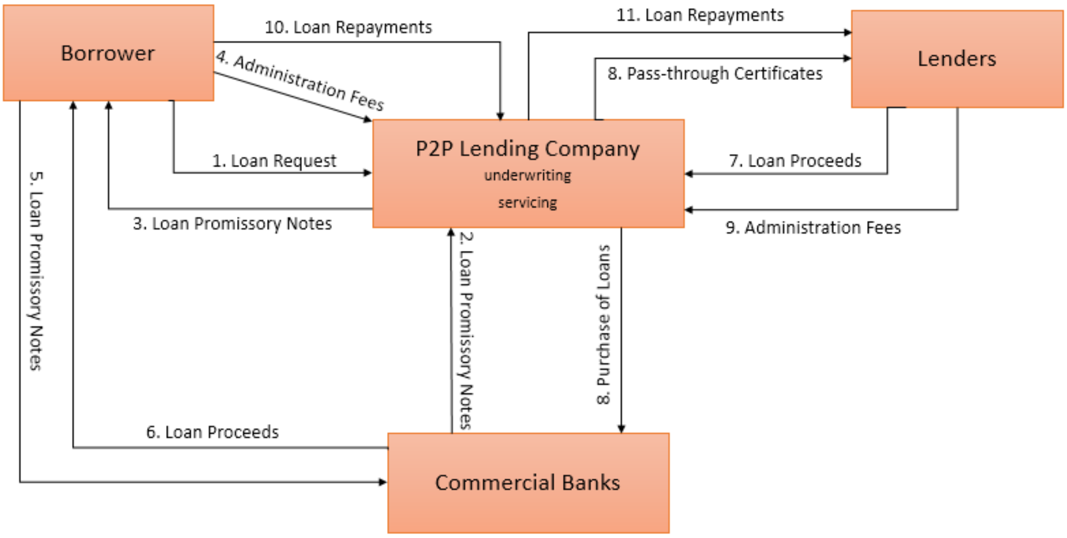

Figure 3.2 – Notary model

(Source: http://vinodkothari.com/blog/peer-to-peer-lending-business-models/)

This form of P2P model is advantageous to the borrowers as they do not need to wait for a lender to identify him/her and advance them loans, instead the company helps the borrowers by making the loans originate from the bank as soon as possible and later converting the loan into a P2P loan. This is the model used by the industry leaders like Lending Club and Zopa.

3) <u>Guaranteed return model</u> - This model allows lenders to invest in peer-to-peer loans through the intermediary platform at a set rate of return on the investment guaranteed by the intermediary platform.

A variation of this model is an Offline Guaranteed Return Model. Direct channels and face to face sales techniques are used. The borrower is then manually assessed for creditworthiness. However, in this model the platform guarantees a return of between 8-10% on the investment and it must adhere to this to remain in operation. This is the most popular model in China, and is the main model used by CreditEase. The offline aspect is necessary in order to attract borrowers and to check their creditworthiness. Market intelligence suggests that in China there is high investor interest but low borrower demand. This makes it necessary to actively attract borrowers through offline means.

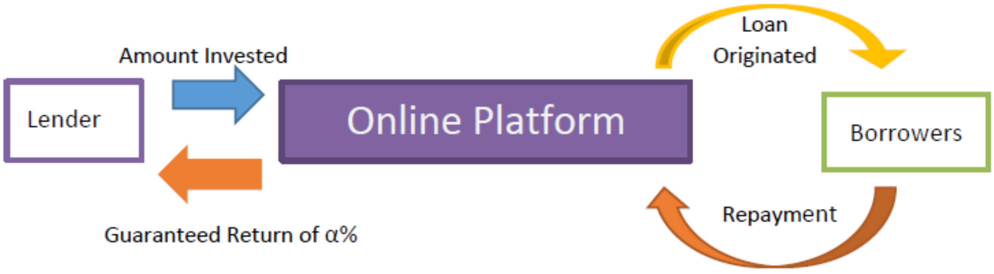

Figure 3.3: Guaranteed return model

(Source: IOSCO research department)

Another variation of this model is an Automated Guaranteed Return Model, with the only known example of this so far being TrustBuddy International AB. The lender pays into a client account the amount they wish to invest overall. The platform then automatically lends this money to borrowers it has chosen through a metric created by the platform itself. The money is then lent for free for the first 14 days, after which there is a 12% interest rate and a fee applied to the loan. This interest rate increases over time at a rate set by the platform. The platform "guarantees" a return to the lender of 12%.

4) <u>Hybrid online offline lending model</u> – It is funded mostly by retail investors. China works on this model. The platforms typically partner with third parties to identify new borrowers. Large Chinese platforms have expanded beyond lending into wealth management and insurance products to build an inclusive financial services business that caters to all customer segments.

4. ANALYSIS OF P2P LENDING INDUSTRY

In this section we have analysed scenario of P2P industry in countries like USA, UK, China and India based on:

a) Models prevailing across P2P platform
b) Regulatory practices followed for regulating P2P industry across different regimes
c) Loan amount funded via different P2P platforms across respective country.

Further a thorough comparison has been drawn between different countries based on above three factors and a working model for India has been suggested as in India this industry is still in growing phase.

4.1 P2P Lending in the United States

The P2P lending industry started in the year 2006 in the US followed by Lending Club and Prosper with other lending platforms soon thereafter. P2P lending in the United States is dominated by online platforms that have become significantly dependent on institutional funding. The key online alternate lending players in the US are:

- Lending Club
- Prosper
- OnDeck Capital
- SoFi
- Avant
- Kabbage

The P2P platforms pre-screen the application and conduct some level of verification. They apply advanced analytics to evaluate borrower credit risk and to mitigate fraud risk. They also set the loan interest rate based on borrower's creditworthiness and their internal credit models. Applications that pass verifications and meet the credit criteria are listed online.

For a borrower, receiving funding for a loan on the platform is a result of many steps like:

- Pre screening
- Creating a listing

- Investors viewing the listing
- Committing to fund the listing

Figure 4.1: Steps for receiving funding for a loan on online platform
(Source: Self-created)

Going online and creating a listing is just a request for a loan. It does not guarantee approval and requires commitment from enough investors to fund the application. A loan application can typically stay on the platform for up to 14 days, although most get funded much faster than that. Once funding is complete, approved borrowers receive the funds, after deducting the origination fee, in two to three business days. Platforms like Lending Club and Prosper are regulated by the Securities and Exchange Commission ("SEC"). They need to register the loans they originate as securities or Notes with the SEC and file regular reports. The platforms must conduct Know-Your-Customer (KYC) checks on borrowers and investors. These include verifications that they are US citizens or legal residents who are at least 18 years old with a valid bank account and a valid Social Security number. Other anti-fraud and identity verification checks are also conducted.

4.1.1 Model used by P2P platforms in U.S

Notary model discussed above in section 3.2 is used by various industry leaders in U.S. like Lending Club, Prosper. According to this model a commercial bank apart from lender or borrower is involved. The P2P platforms in the United States partner with FDIC-member banks such as Web Bank and Cross River Bank to conduct credit bureau checks, obtain loan documentation, and do loan disbursals. This relationship with the banks allows the platforms to operate with much less capital than the traditional lenders, which means they can generate more loans for every dollar of equity on their balance sheet. Since the platforms do not originate loans directly, they are not subject to prudential bank regulations for consumer lending. However, the FDIC insured partner banks must comply with those regulations including the Truth in Lending Act, Equal Credit Opportunity Act, Fair Credit Reporting Act, and Fair Debt Collection Practices Act.

4.1.2 Regulatory practices followed in U.S. for peer to peer lending

There are two levels of regulation, Federal regulation through the Securities and Exchange Commission (SEC) and State level, where platforms have to apply on a state-by-state basis.

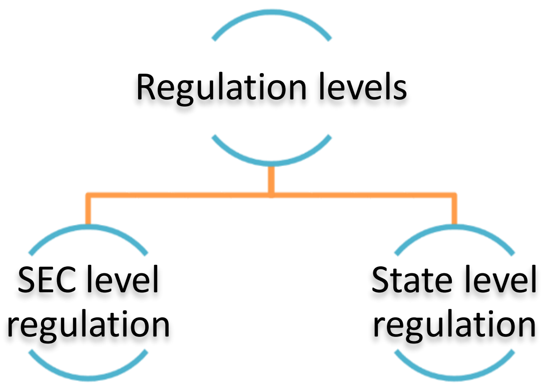

Figure 4.2: Level of regulation of P2P lending in U.S

(Source: Self-created)

One level below the federal requirements is state regulation. Some states outright ban the practice of P2P lending (e.g. Texas). Other states place limits on the type of investors using the platforms to lend (e.g. California). In addition, if a platform wishes to operate across multiple state boundaries, it must apply to each state separately.

i) SEC Level Regulation

The notes being sold under this model constitute a "security" under the Securities Act 1933. As such they must comply with SEC regulation. P2P lenders are required

to register each loan, in its entirety, which the platform arranges. These platforms are considered public entities and therefore must make public details on loan origination, investors and borrowers by month.
As a bank originates the loan, the bank and the platform are regulated in accordance to a number of federal statutes on credit provision, including but not limited to: the Bank Secrecy Act, the Electronic Fund Transfer Act, the Electronic Signatures in Global and National Commerce Act, the Equal Credit Opportunity Act and the Fair Credit Reporting Act. 13. The crowd funding rules have been adopted by SEC on October 30, 2015.

ii) State Level Regulation

State level regulation varies from state to state with three main responses:

- Complete banning of P2P platforms
- Allowing P2P platforms to elicit borrowers and sophisticated lenders only
- Allowing P2P platform activity in accordance to SEC regulatory criteria

4.1.3 Collection and analysis of data for U.S. industry leader Lending Club

Goldman Sachs estimated that over the next five years, USD 11 billion out of USD 150 billion in annual US bank profits could be threatened by non-traditional lending such as the peer-to-peer platforms. As per data of different P2P sites, there has been a sharp growing trend of online lending in the past decade. The influx of additional liquidity from the institutional investors since 2012 has enabled online lenders to grow faster and compete more directly with traditional banks.

Table 4.1: P2P funding by Lending Club from 2010-2017

Year	Amount (In million USD)
2010	231
2011	257
2012	728
2013	1971
2014	3503
2015	6417
2016	6399
2017	6583

(Source: https://www.lendingclub.com)

Below is the graph of well-known U.S. P2P site called **Lending Club** which shows the sharp increase since 2011.

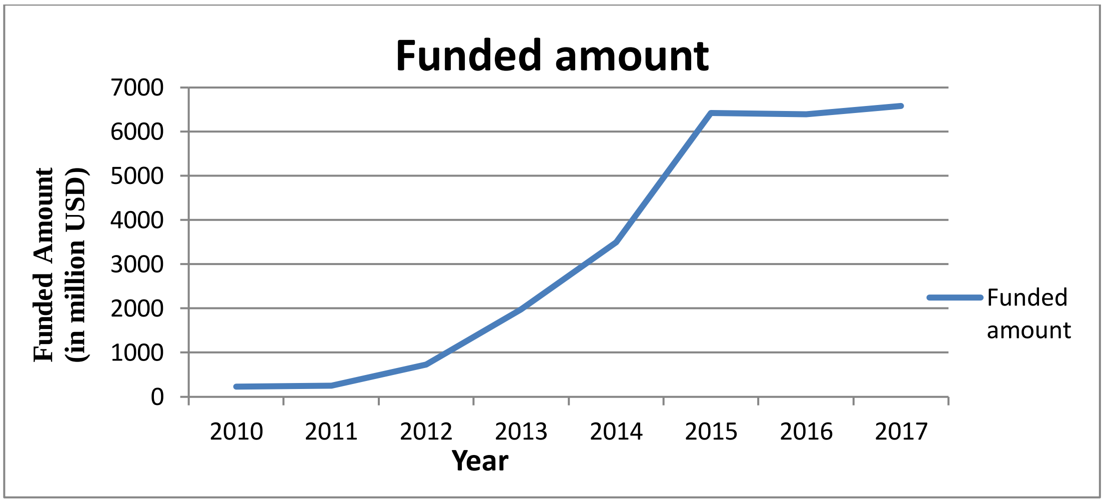

Figure 4.3: Graph showing increasing trend of P2P lending via Lending Club site (Source: Self-created)

As of mid-2016, Lending Club has funded new loan originations of over USD 20 billion since its launch while Prosper has funded loans of over USD 7 billion. SoFi started in 2011 with refinancing of student loans and has expanded into personal loans and mortgage loans. In June 2016, SoFi crossed the milestone of USD 10 billion in total new loans issued, of which USD 5.3 billion were funded in 2015 and USD 3.5 billion in the first half of 2016.

P2P unsecured consumer loans typically have annual interest rates ranging from 6 percent to as much as 30 percent, higher than many other fixed-income assets. The loan durations range from a few months to three years but most are repaid after just over a year.

Funding composition of Lending Club and Prosper shows that 100 percent of their loans in 2008 were funded by individual investors. Between 2013 and 2015, over 72 percent of business loans and 53 percent of consumer loans on marketplace lending platforms were funded by institutional investors in the US.

4.2 P2P lending in UK

Peer-to-Peer lending is a mainstream and established part of the UK's financial landscape. In United Kingdom, P2P platforms market themselves to retail investors as an alternative to bank deposits and not as a risky investment vehicle. The objective is to provide a low, stable return to retail investors and provide reasonably priced loans to individual borrowers and small businesses. Some of the largest P2P lending platforms are:

- Funding Circle
- Zopa
- Lend-Invest
- RateSetter
- Folk2folk
- Land-bay
- Lending-works
- Market-invoice
- Thin-cats

Investors can invest as little as £10 with no maximum cap. The world's first P2P lender, Zopa, was founded in the United Kingdom in 2005. The real growth in this sector began in 2014 as consumer awareness grew and the government introduced P2P specific regulations that helped build consumer confidence. A streamlined regulatory approach and a supportive government have been major drivers behind the industry growth and have given confidence to both borrowers and investors.

4.2.1 Model used by P2P platforms in U.K

Most P2P platforms in U.K works on client segregated account model discussed above in section 3.2. Unlike the United States, P2P lenders in the United Kingdom do not need to partner with banks to issue loans or conduct credit bureau checks. Having a partner bank adds an extra step in the origination process and can be confusing for both borrowers and investors.

4.2.2 Regulatory practices followed in U.K for peer to peer lending

The United Kingdom is an innovative leader in alternative finance and is also the first market in the world to impose self-regulation. In 2011, the industry created its own regulatory body, the Peer-to-Peer Finance Association, with the stated goal of "ensuring high minimum standards of protection" for lenders and borrowers in the industry.

In 2014, the United Kingdom became the first country in the world to create a regulatory framework specifically for P2P lenders platforms. Under this framework, they are licensed by the Financial Conduct Authority ("FCA"). The license enables them to issue loans and be a member of national credit bureaus.

U.K follows intermediary regulation. The UK has a legal definition of what constitutes a P2P loan (Regulatory Activities Order 36H- Operating an electronic system in relation to lending). Further, from 1 April 2014, the UK regulator, the Financial Conduct Authority (FCA), introduced a disclosure-based regulatory regime for P2P platforms to provide protection for consumer investors. It usually requires registration as an intermediary, and other regulatory requirements depending on the jurisdiction. Generally, there are regulations that establish the prerequisites for the platforms to register in order to access the market. Other rules and requirements determine how the platform should conduct its business (for example, the licensing needed to provide credit and/or financial services).

Along with the requirement ensuring that all financial promotions are fair, clear and not misleading, client money provisions and minimum capital standards are applied. Firms running platforms must also have resolution plans in place that mean, in the event of the platform collapsing, loan repayments will continue to be collected so lenders do not lose out.

4.2.3 Collection and analysis of data of various P2P lending platforms in U.K

Peer to peer finance association (P2PFA) was established in 2011 as a representative and self-regulatory body for debt-based peer-to-peer lending. The P2PFA seeks to inform and educate, promote high standards of business conduct, and work with policy-makers and regulators to ensure an effective regulatory regime. P2PFA members are required to meet robust standards for the transparent, fair and orderly operation of peer-to-peer lending. The member platforms for which cumulative data in below table 4.2 is taken are: Folk2Folk, Funding Circle, Landbay, lend-invest, Lending Works, Market Invoice, Ratesetter, ThinCats and Zopa.

Table 4.2 contains data of total amount lent by various P2P platforms in U.K at the end of specified period.

Table 4.2: Total amount lent by various platforms in U.K at the end of the period

Years	Amount funded (in million GBP)
Q3 2014	1817
Q4 2014	2163
Q1 2015	2624
Q2 2015	3131
Q3 2015	3739
Q4 2015	4399
Q1 2016	5139
Q2 2016	5802
Q3 2016	6503
Q4 2016	7348
Q1 2017	8496

(Source: https://p2pfa.org.uk)

According to the data available on P2PFA the volume of lending and capital re-paid as well as the number of current lenders and borrowers have all increased quarter-on-quarter for more than a year, demonstrating the continued mainstreaming of peer-to-peer lending platforms in the provision of finance.

Below graph 4.4 is derived from the above table which shows a continuous growth in the amount lent via P2P lending quarter on quarter. In Q3 of 2014 amount lent was £1817 which has shown a significant growth and has increased to £8496 in Q1 of 2017. Levels of new lending have increased significantly during the first quarter of 2016, continuing the trend of the last few years.

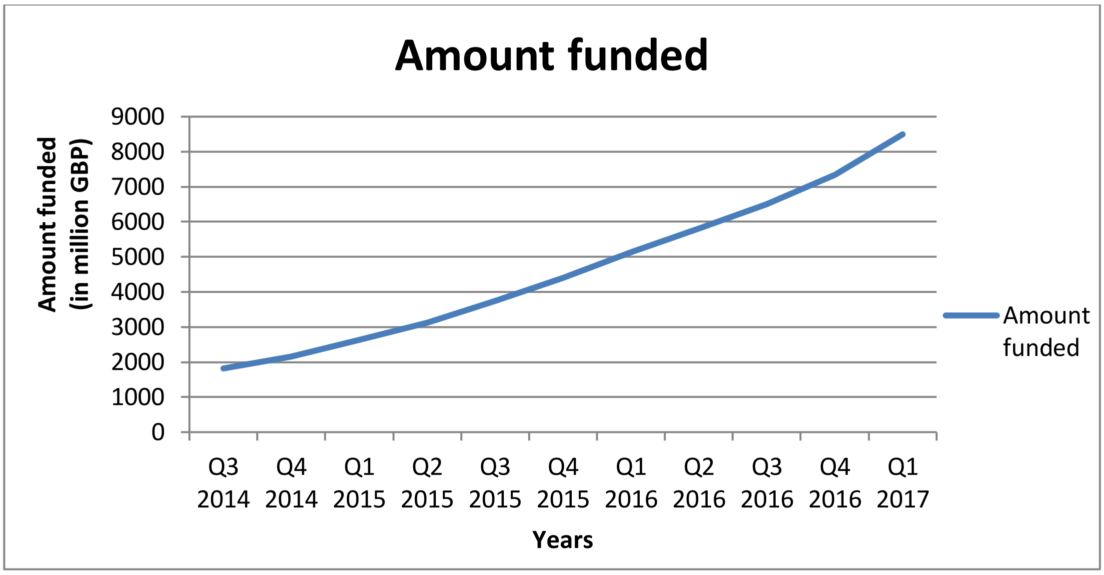

Figure 4.4: Graph showing increasing trend of P2P lending on platforms in U.K (Source: Self-created)

But in 2017 trend changes and some new members such as crowd-stacker joined P2PFA. Simultaneously Rete-setter and lend-invest has withdrawn from P2PFA membership.

Table 4.3: Cumulative lending data of member platforms of P2PFA for year 2017

	Q1 2017	*Q2 2017*	*Q3 2017*	*Q3 2017*
Crowdstacker				£35,209,322
Folk2Folk		£139,344,302	£176,419,805	£191,918,805
Funding Circle	£1,830,397,245	£2,158,457,107	£2,747,357,362	£3,093,910,983
Landbay	£43,142,119	£43,975,419	£59,561,822	£82,627,314
Lending Works	£39,368,050	£48,864,686	£71,699,386	£83,183,353
MarketInvoice	£837,793,900	£918,450,994	£1,201,857,191	£1,366,252,414
ThinCats	£211,446,000	£226,981,000	£254,955,000	£269,082,000
Zopa	£1,926,038,724	£2,172,561,894	£2,656,877,091	£2,911,145,689
Total	£5,708,635,402	£6,391,925,730	£7,168,727,657	£8,033,329,880

(Source: https://p2pfa.org.uk)

Above table 4.3 shows cumulative lending data of current member platform of P2PFA which are: Crowdstacker, Folk2Folk, Funding Circle, Landbay, Lending Works, Market Invoice, ThinCats and Zopa.

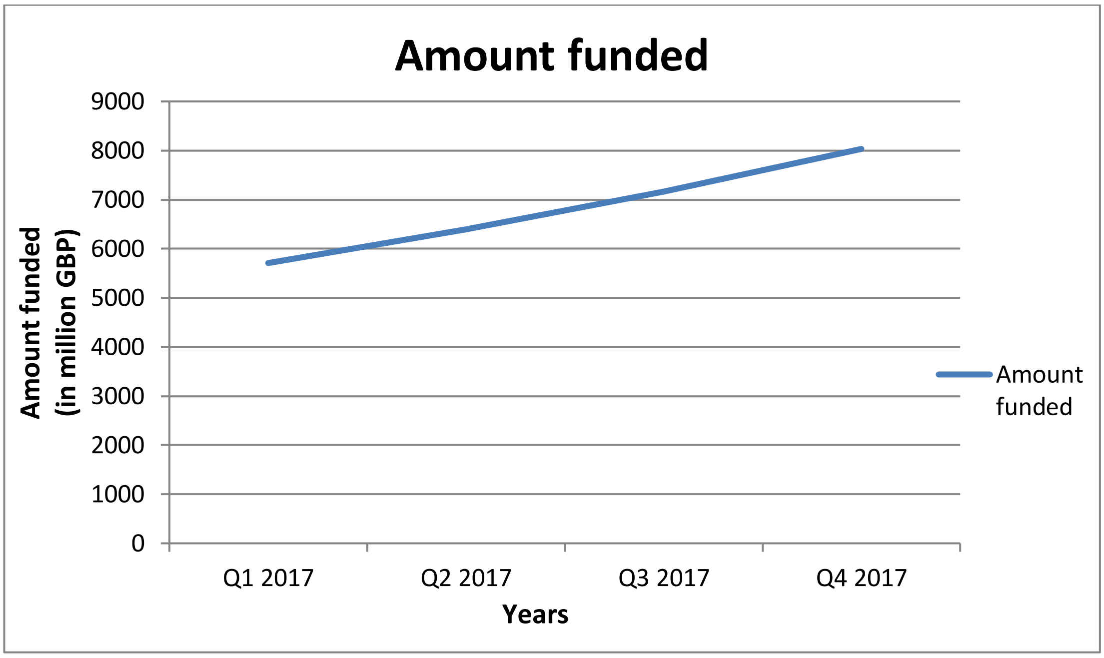

Figure 4.5: Graph showing increasing trend of cumulative lending by member platforms of P2PFA

(Source: Self-created)

The final three months of 2017 saw considerable growth in levels of new lending transacted through platforms – with more than a quarter of a million consumers and businesses currently have a peer-to-peer loan – and £836 million in new borrowing. Graph 4.5 clearly shows that cumulative lending transacted through P2PFA member platforms exceeded £8 billion.

4.3 P2P lending in China

The size and scale of the Chinese lending market is very massive. Internet finance in China started to grow rapidly in 2013 after it received explicit government support when the People's Bank of China ("PBOC") expressed support for technology companies promoting online consumer financial services. In recent years, Chinese Premier Li Keqiang has made multiple calls of support in the Report on the Work of the Government over 2014-15. Most P2P platforms in China service a client base that has traditionally not been serviced by the banks and are therefore not seen as a threat to the consumer loan business of large Chinese banks. Lufax, CreditEase and Yirendai are some of the most competitive Chinese P2P platforms. Some of the newer fintech companies, such as Dianrong in China and Wolaidai under WeLab from Hong Kong, offer their technology platform and related services to help the traditional banks build their P2P lending infrastructure.

Lujiazui International Financial Asset Exchange Co. Ltd. (commonly referred to as Lufax and now rebranded as Lu.com), based in Shanghai, is one of the largest online financial services company and P2P lender in China. It was founded in 2011 as the Internet finance arm of Ping An Group, one of China's largest insurance companies. Lufax started with P2P but has expanded into other financial service verticals. In 2015, Lufax claimed that it had over 23.3 million users.

CreditEase is arguably the largest P2P lending, wealth management and asset management company in China. Launched in 2006 with student loans, it now provides inclusive finance across a range of lending products including auto loans, rural loans, mortgages, small business loans, and consumer loans. It has a network of over 230 physical locations in China and originated loans of over USD 10 billion in 2016. CreditEase introduced wealth management products and services for its investor base in 2011 and these include equities, real estate, fixed income, private equity, alternative investments and insurance.

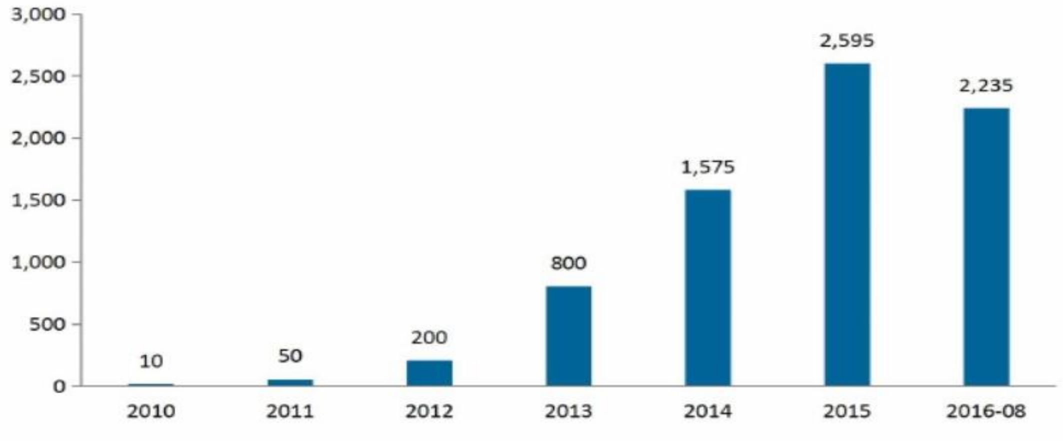

Figure 4.6: Number of online peer based lending platforms in China
(Source: Online lending house)

According to figure 4.6 at the end of August 2016, there were about 2,235 online lending platforms in China. The numbers of platforms were reduced sharply from 2595 in 2015 due to certain frauds which were uncovered during the year. With the economic slowdown in China since 2014, hundreds of online lending platforms have reportedly failed, some due to fraud or liquidity concerns and others due to rising delinquency and credit default rates. Ezubao, one of the largest P2P platforms, turned out to be a classic Ponzi scheme, with approximately 95 percent of loan applications on the platform being false and resulted in loss of $11 billion of investor’s money. . It is expected that number of online lending platforms will further reduce after regulatory rules come out.

2007	Shanghai, China Paipaidai was online, opening first page of online lending in China
2009	Shenzhen, China My089 went online, created principle advance payment model
2010	Beijing, China Renrendai went online representing online lending platform using risk reserve provision
2011	Shanghai, China Lufax, the first online lending platform backed by bank
2012	Number of online lending platform reached more than200 in China
2013	The year one of internet finance in China when online lending platforms bloomed everywhere and transaction volume exploded out
2014	Due to increasing venture capital, online lending industry developed rapidly
2015	The exposure draft of government regulatory policy about online lending industry came out
2016	On Aug 24th, China's bank regulatory commission and other three government branches published regulatory document

Figure 4.7: Development of online P2P lending in China

(Source: Self-Created by taking data from wdzj.com)

4.3.1 Model used by P2P platforms in China

The P2P lending model in China is mostly a hybrid offline/online ("O2O") model where investors are sourced online but loan applications are acquired offline. Some P2P lenders partner with small credit institutions or guarantee companies that recommend applicants offline. The platforms review the project or applicant information offline relying on traditional credit assessment methods to assess credit risks. Applications that meet the criteria are posted online for funding by the investors. The primary focus of platforms is on building an investor base and managing the technology platform.

Several O2O platforms in China are also directly subject to credit risk. They guarantee a certain level of return to investors and mitigate this credit risk in several ways including taking guarantees from third party companies for principal and interest or requiring borrowers to provide collateral. Although third party guarantees can help mitigate borrower credit risk to some extent, the counterparty risk is transferred to the guarantee companies and the number of high quality guarantee companies is limited. At times, the guarantee company may be indirectly owned by the P2P platform. If a loan defaults, investors can transfer the claim to the platforms. Platforms repay the investors first and then pursue recovery of non-performing loans from the guarantee companies or through debt collections.

Many large P2P companies in China use a credit assignment model. Under this model, a specialized creditor is established that lends money to borrowers and transfers the debt to investors. Borrowers and investors do not have a direct claim debt contract. The advantage of this model is that it can meet different needs of borrowers and investors. Deals are not done reactively as matches occur, but proactively, resulting in faster expansion.

4.3.2 Regulatory practices followed in China for peer to peer lending

It follows regulatory regime commonly known as Exempt market/unregulated through lack of definition. The P2P lending industry in China is the largest in the world with hundreds of platforms offering diverse services but it is not regulated currently. The lending supported is very much riskier than in the US or the UK, with no fully developed system of credit referencing. The China Banking Regulatory

Commission (CBRC) has issued draft rules for online lending on December 28, 2015.

In these jurisdictions, either the regulation has classified P2P lending as an exempt market or there is a lack of definition in legislation. However, in some cases, there is regulation designed to protect borrowers and that mainly involves rules already in place to protect the borrower from unfair interest rates, unfair credit provision and false advertising.

4.3.3 Collection and analysis of data of various P2P lending platforms in China

P2P platform lending in China, mainly to small businesses, is reported to have nearly quadrupled to a staggering $150 billion in 2015, more than ten times the size of US marketplace lending originations

According to WDZJ.com which is the platform for collecting all the peer to peer lending data of China, at the end of August 2016, the number of operational online lending platform in China was 2,235.

From the figure 4.8 we can see a sharp increasing trend in the transaction volume of online lending industry year on year. Accumulative transaction volume of online trading reached USD 181.81 billion (RMB 1216.288 billion) in the year 2016, which is much higher as compared to 2015 which was USD 146.83 billion.

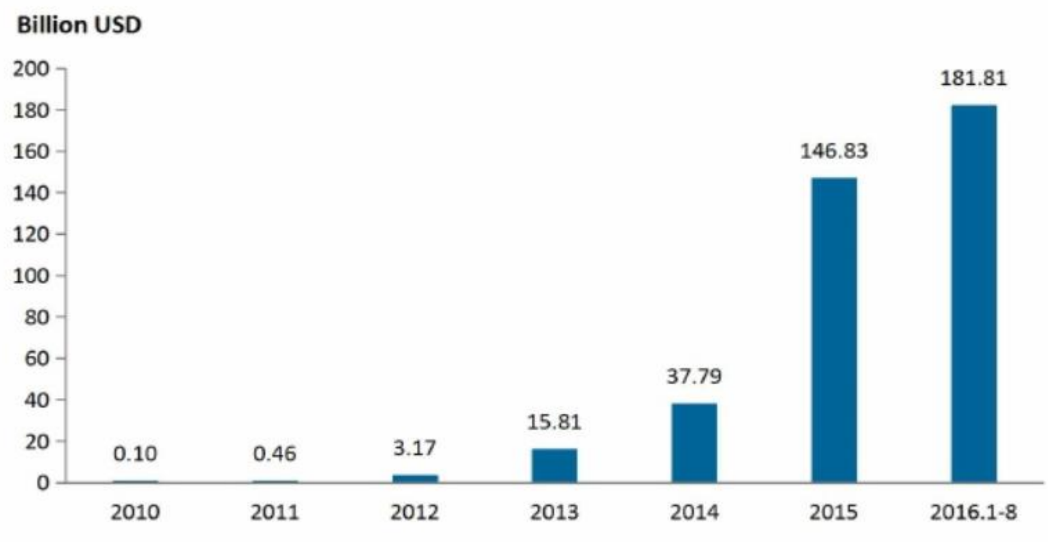

Figure 4.8: Transaction volume of online lending industry in China

(Source: www.wdzj.com)

The comprehensive rate of return continued to drop, from 12.98% in August 2015 to 10.08% in August 2016. In August 2016, average term of loan was 8.04 months and number of active online industry lenders and borrowers were 3518,000 and 1353,100 respectively.

4.4 P2P lending in India

Peer-to-Peer (P2P) lending is taking roots in India also but it is in very nascent stage here. In India, there are many online P2P lending platforms. Some of these are involved in the business targeted at micro finance activities with the stated primary goal being social impact and providing easier access of credit to small entrepreneurs. They provide web-based platform to bring the lenders and the borrowers together. One of the main advantages of P2P lending for borrowers has been lower rates than those offered by money lenders and the advantages for lenders are higher returns than what conventional investment opportunities offer. Interest rates and the methodology for calculating those rates vary among P2P lending platforms. They range from a flat interest rate fixed by the platform to dynamic interest rates as agreed upon by the borrowers and the lenders to cost plus model.

There is no credible data available regarding total lending through P2P platforms in India. However, the number of such Companies has been increasing significantly. According to media reports, close to 20 new online P2P lending companies have been launched in 2015. In 2016, there were around 30 start-up P2P lending companies in India.

Some well-known platforms for peer to peer lending in India are:

- Faircent
- i2i funding
- Lendbox
- Lenden club
- Peerlend
- Peoplelend
- Rupaiya exchange
- Bank2grow
- Monexo
- P2P easy

- Oxy loans
- Loan meet
- SLAB
- Vote4cash
- i lend

4.4.1 Operational model for P2P lending in India

P2P lending platforms are largely tech companies registered under the Companies Act and acting as an aggregator for lenders and borrowers thereby, helping create a match between them. Once the borrowers and lenders register themselves on the website, due diligence is carried out by the platform and those found acceptable are allowed to participate in lending/borrowing activity.

The companies often follow a reverse auction model in which the lenders bid for a borrower's loan proposal and the borrower has the freedom to either accept or reject the offer. Some platforms provide several additional services like credit assessment, recovery etc. In most cases, the platform moderates the interaction between the borrower and the lender. The documentation for the lending and borrowing arrangement is facilitated by the P2P platform. The lender transfers money from his bank account to borrower's bank account.

The platform facilitates collection of post-dated cheques from the borrower in the name of the lender as a proxy for repayment of the loan. The P2P forum also helps in the recovery process and as part of this, follows up for repayments and employ recovery agents too.

In this elementary model, the lending is primarily from one individual to another. The regulatory concerns in such cases would relate to KYC and recovery practices. Since all payments are through bank accounts, the KYC exercise can be deemed to have been carried out by the banks concerned.

4.4.2 Upcoming regulatory practices in India for peer to peer lending

According to a notification issued by RBI on 18 September, 2017, peer-to-peer lenders (P2P)—companies that provide loan facilitation services from their platform—will be treated as non-banking financial companies (NBFCs).

The Reserve Bank of India (RBI), on October 4, 2017, issued directions for non-banking financial companies (NBFC) that operate peer-to-peer (P2P) lending platforms. According to the directions, no NBFC can start or carry on the business of a P2P lending platform without obtaining a Certificate of Registration. Every company seeking registration with the bank as an NBFC-P2P shall have net owned funds of not less than Rs. 20 million or such higher amount as the bank may specify.

Scope of activities of NBFC-P2P

Among several other things, an NBFC-P2P can:

- ✓ Act as an intermediary providing an online marketplace or platform to participants involved in P2P lending
- ✓ Not raise deposits as defined by or under Section 45I(bb) of the Act or the Companies Act, 2013
- ✓ Not lend on its own
- ✓ Not hold, on its own balance sheet, funds received from lenders for lending, or funds received from borrowers for servicing loans or such funds
- ✓ Not cross-sell products except for loan-specific insurance products
- ✓ Not permit international flow of funds.

An NBFC-P2P will be expected to:

- ✓ Undertake due diligence on the participants
- ✓ Undertake credit assessment and risk profiling of the borrowers and disclose the same to their prospective lenders
- ✓ Undertake documentation of loan agreements and other related documents
- ✓ Provide assistance in disbursement and repayments of loan amount
- ✓ Render services for recovery of loans originated on the platform.

Prudential norms

- ✓ The aggregate exposure of a lender to all borrowers at any point of time, across all P2Ps, shall be subject to a cap of Rs 10 lakh
- ✓ The aggregate loans taken by a borrower at any point of time, across all P2Ps, shall be subject to a cap of Rs 10 lakh

- ✓ The exposure of a single lender to the same borrower, across all P2Ps, shall not exceed Rs 50,000
- ✓ The maturity of the loans shall not exceed 36 months

Fund transfer mechanism

Fund transfer between participants on the P2P lending platform will happen through escrow account mechanisms. All fund transfers shall be through and from bank accounts, and cash transactions are strictly prohibited.

The guidelines on borrowing and lending on P2P platform issued by RBI is a welcome step in a direction to bring the localised market of money lenders to a formal platform by making borrowing / lending through banking channels. In addition to the benefit of borrowers by giving easy access to credit, it will also benefit the small lenders by giving them an avenue to lend the surplus funds in a secured manner which will yield higher rate of return as compared to bank deposits. The guidelines also expressly permit the existing player to apply to RBI within 3 months for registration. The cap on the amount of borrowers / lenders, in single or in aggregate, would keep high net-worth individuals away from participating.

4.4.3 Collection and analysis of data of P2P lending platforms in India

In January, 2018 P2P companies in India took a decision of forming an association that will act as a representative for its members, as well as the country's P2P lending industry. In addition, the association will work in conjunction with the government and regulatory authorities in matters of compliance, and to further the cause of financial inclusion in the country.

The association will actively work towards creating awareness about online P2P lending in India and promoting its merits as an innovative and high-yield asset class among individual and institutional investors. In line with this aim, the association will enter into strategic partnerships and collaborations with other stakeholders or industry players, organise seminar and events. The association will also invite honorary members from various domains to strengthen its authority in the Indian financial ecosystem.

The association also intends to undertake research and development, collect data and conduct surveys that will further the development of the P2P lending industry in India. The research and its findings will be shared publicly, and exchange of ideas will be encouraged through various conferences, lectures and sponsored events. The growth projections for the P2P lending market, projected to be worth $4-5 billion by 2023, and the RBI's guidelines have lent immense credibility to the P2P lending model.

Till now no association or collective data regarding P2P lending in India is present. Most of the P2P platforms are start-ups or are emerging platforms so they have not made their data available publically. India's leading P2P lending platform Faircent has shown some of the statistics for peer to peer lending operations which are taking place at their platform.

(i) <u>Loan amount disbursed</u>: Below table shows the amount of loan disbursed to borrowers under various risk categories through Faircent.

Table 4.4: Data showing amount of loan proposed by Faircent

Risk category	**Loan Amount proposed (In INR lakhs)**
Minimal risk	4.583
Low risk	163.026
Medium Risk	1057.951
High risk	1160.734
Very high risk	249.512

(Source: https://www.faircent.com)

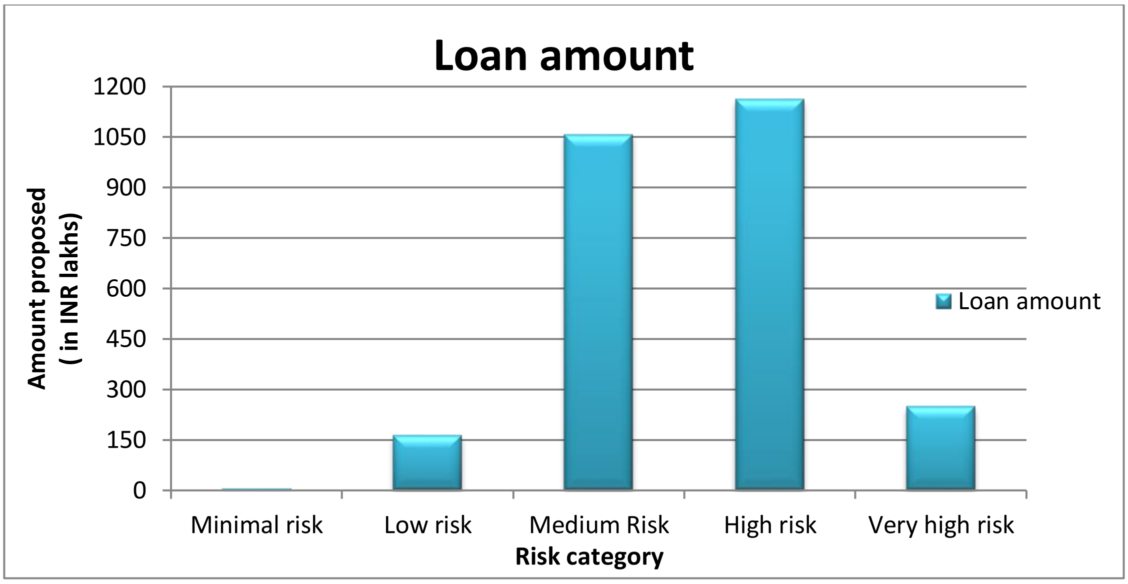

Figure 4.9: Loan amount proposed by risk bucket via Faircent platform

(Source: Self-Created)

From figure 4.9 we can see that the amount of loan proposed in various risk categories which varies from minimal risk category to very high risk category varies tremendously. We can analyse from the below graph that highest amount of loan is proposed in high risk category which is Rs.1160.734 lakhs and lowest amount of loan is proposed in minimal risk category which is Rs. 4.583 lakhs. It is due to the fact that in high risk category investors are getting high returns and in minimal risk category return obtained by investors is least. A high rate of interest is charged from the borrowers who fall in the category of high risk which give lenders a high return on their principal.

(ii) <u>Average loan tenure</u>: Table 4.5 shows the tenure for which investor provides loan to the borrower according to risk category in which borrower falls.

Table 4.5: Data showing Average loan tenure by Faircent

Risk category	**Average loan tenure (In months)**
Minimal risk	31.47
Low risk	20.23
Medium Risk	21.26
High risk	24.38
Very high risk	24.38

(Source: https://www.faircent.com)

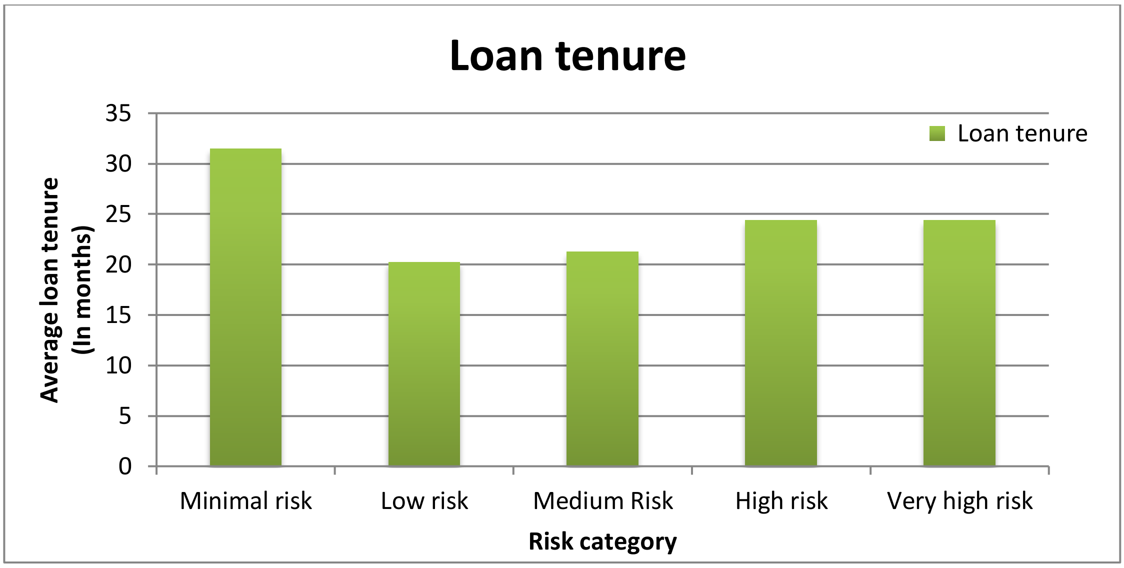

Figure 4.10: Average loan tenure for which loan is provided via Faircent platform (Source: Self-Created)

Above graph 4.10 shows the average tenure of loan given by lenders via Faircent platform according to various risk categories. It is clearly analysed from this graph that minimal risk category is having the highest tenure which is 31.47 months while lowest tenure is for the low risk category which is 20.3 months. This shows that investors are experiencing lowest risk for their money while providing loans to borrowers falling under minimal risk category thus providing them loan for a larger tenure despite getting lowest return.

(iii) Average ROI earned: Table 4.6 shows the average ROI earned through the loan provided to borrowers under various risk categories.

Table 4.6: Data showing Average ROI earned by Faircent

Risk category	**Interest rate (in %)**
Minimal risk	12.31
Low risk	16.29
Medium Risk	19.14
High risk	22.86
Very high risk	26.95

(Source: https://www.faircent.com)

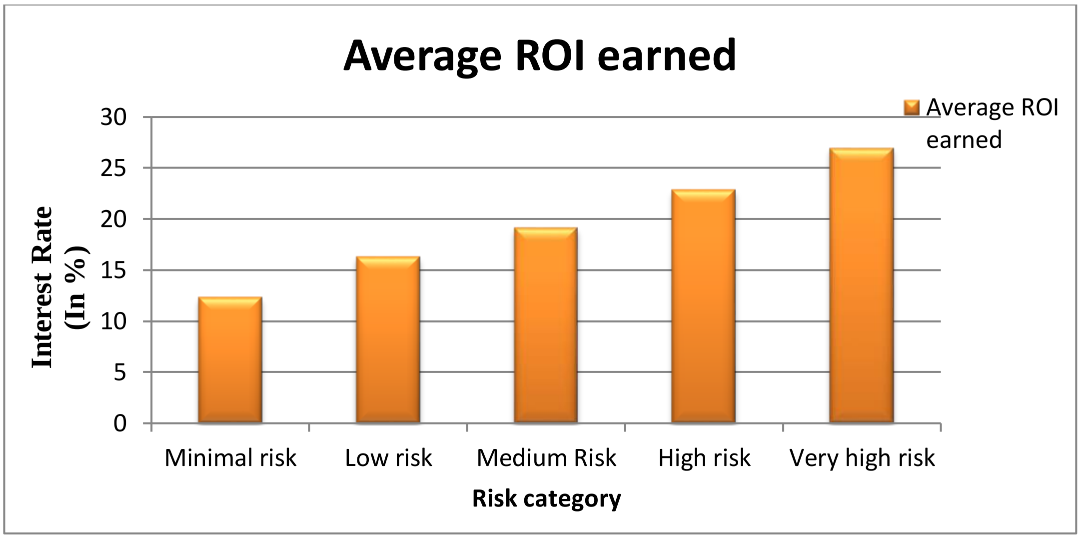

Figure 4.11: Average ROI earned for which loan is provided via Faircent platform (Source: Self-Created)

From above graph 4.11 we can clearly see that average ROI earned for very high risk category is highest which is 26.95% and ROI earned for minimal risk category is lowest which is 12.31%. This is because in very high risk category risk is highest so interest rate charged from these borrowers is maximum resulting in highest return on investment (ROI). In the "Minimal risk" category interest charged is minimum because these are the individuals who have very high credibility thus chances of not returning money becomes negligible. So for these borrowers interest rate remains low resulting in minimum ROI.

(iv) Investment returns: Below table shows the loss rate which occurred in various risk categories and net returns which Faircent obtained from various risk categories.

Table 4.7: Data showing Loss rate and net returns by Faircent

Risk category	**Loss rate (In %)**	**Net returns (In %)**
Minimal risk	0	12.9
Low risk	0	17.2
Medium Risk	0.5	19.9
High risk	5	18.7
Very high risk	10	18.6

(Source: https://www.faircent.com/view/stats)

Here in table 4.7 we have two things:

- ✓ Loss Rate – It is the percentage of borrowers in a risk portfolio who fails to pay EMIs for more than 6 months
- ✓ Net returns – It is the percentage of interest income from investment minus potential loss from defaults for all borrowers in a risk portfolio.

These two parameters are a clear indication of the category in which an investor should invest according to his perception of loss and return from his investment. From below graph we can clearly see that in “Minimal risk” as well as “Low risk” category loss rate is 0% and net returns is 12.9% and 17.2% respectively while in the “Very high risk category” loss rate is as high as 10%. This clearly shows that as investor move towards risky categories, loss rate and returns both increases but increase in loss rate is much higher than increase in net returns.

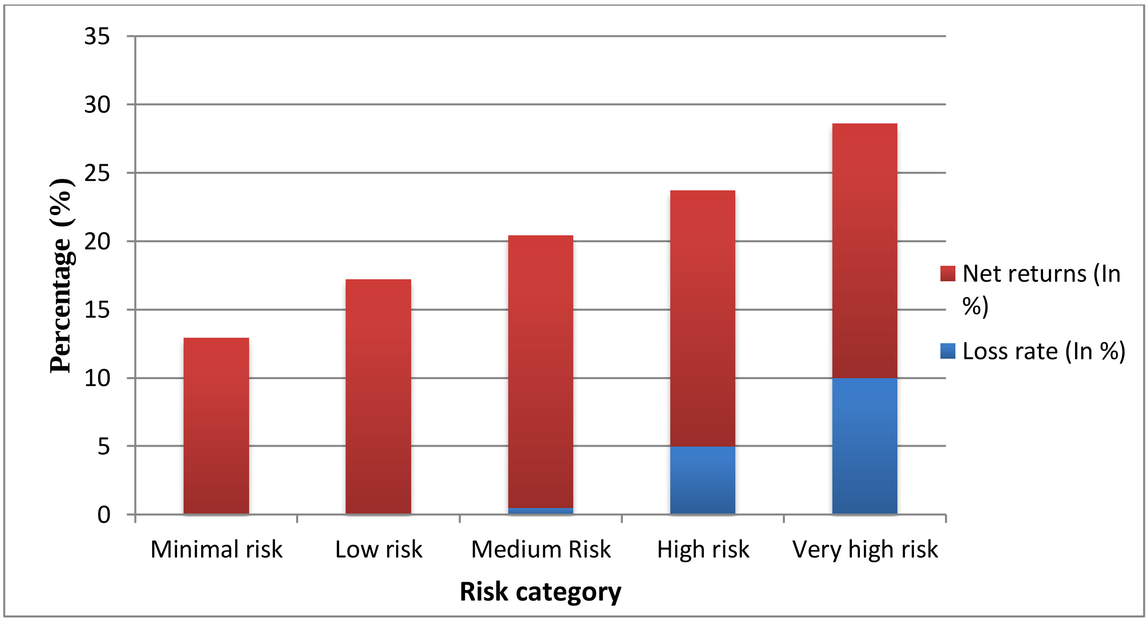

Figure 4.12: Loss rate and net returns on loan provided via Faircent platform

(Source: Self-Created)

4.5 Comparison of U.S.A, U.K, China and India

Comparison of four countries which are U.S.A, U.K, China and India respectively can be done on the various pointers such as model prevailing, regulatory practices followed which we will cover in this section. Also a model for P2P lending industry in India is suggested.

4.5.1 Comparison based on P2P lending model adopted

In section 4.1, 4.2, 4.3, 4.4 it is discussed in detail the model which U.S.A, U.K and China has adopted and model which India is trying to adopt for this booming P2P lending industry. Here we will try to draw a clear comparison of all the models so that we are able to suggest a relevant model for India from this comparison.

Table 4.8: Comparison of U.S.A, U.K, China and India based on model adopted

S.No.	Country	Model adopted	Description
1.	U.S.A	Notary model	According to this model a commercial bank apart from lender or borrower is involved. Risk of default is much less in this type of model as loans are originated from bank to borrowers initially and later on transferred to P2P platform. Involvement of a commercial bank makes this platform less risky, although risk cannot be eradicated all together.
2.	U.K.	Client segregated model	In this type of model lenders directly interact with the borrowers and they themselves fix their counter parties. No commercial bank is involved in between in this case. Risk of default is somewhat higher as compared to notary model as lenders are the sole decision makers based on their own discretion, whether to

			advance a loan to a specific borrower or not.
3.	China	Hybrid online-offline model & guaranteed return model	In this model investors are sourced online but loan applications are acquired offline. Some P2P lenders partner with small credit institutions or guarantee companies that recommend applicants offline. The platforms review the project or applicant information offline relying on traditional credit assessment methods to assess credit risks. Applications that meet the criteria are posted online for funding by the investors. This model has high credit default risk involved. Guaranteed return model allows lenders to invest in peer-to-peer loans through the intermediary platform at a set rate of return on the investment guaranteed by the intermediary platform.
4.	India	Reverse-auction model	In this model lenders bid for a borrower's loan proposal and the borrower has the freedom to either accept or reject the offer. Since all payments are through bank accounts, the KYC exercise can be deemed to have been carried out by the banks concerned.

(Source: Self-Created)

4.5.1.1 Suggestive model for India

Based on table 4.8 we can say that "**Notary model**" used by U.S.A is very efficient. This is the reason why U.S market accounts for 51% of the global market as claimed by IOSCO research department.

Also we can see that the "**Guaranteed return model**" adopted by China is also a good opportunity to attract various lenders as it provides a guaranteed return to them in any case.

Hence, a model for India which combines the features of Notary model, Client segregated model as well as guaranteed return model is more appropriate. Adoption of one of the model is not viable because in India this peer to peer lending industry is at a very nascent stage. If only "Notary model" is applied which is adopted by U.S.A (very developed nation), then we need kind of infrastructure, services provided by bank, rules and regulations somewhat similar to U.S.A which is clearly not possible in a developing nation like India.

Therefore, we can divide borrowers in India which are registering on P2P platform in various risk buckets based on their credibility which can include following categories:

a) Minimal risk
b) Low risk
c) Medium risk
d) High risk
e) Very high risk

Now we can apply different model to different categories. For "minimal risk" as well as "low risk" category for which it is already known that borrowers are having excellent credibility we can apply <u>client segregated model</u> where lender is directly interacting with the borrower and providing them loan without involvement of any financial intermediary.

For "Medium risk" category we can apply <u>Notary model</u> which includes financial intermediary like bank along with lender and borrower. This form of P2P model is advantageous to the borrowers as they do not need to wait for a lender to identify him/her and advance them loans, instead the company helps the borrowers by making the loans originate from the bank as soon as possible and later converting the loan into a P2P loan.

For "High risk" and "Very high" risk category Guaranteed return model should be applied so that lenders are provided with set rate of return on the investment guaranteed by the intermediary platform. By adopting this model for risky categories of borrowers, risk factor would definitely come down as certain amount of return is always there which an investor will get. Investors are motivated to invest in these categories because of certainty of return which they will get from P2P platform.

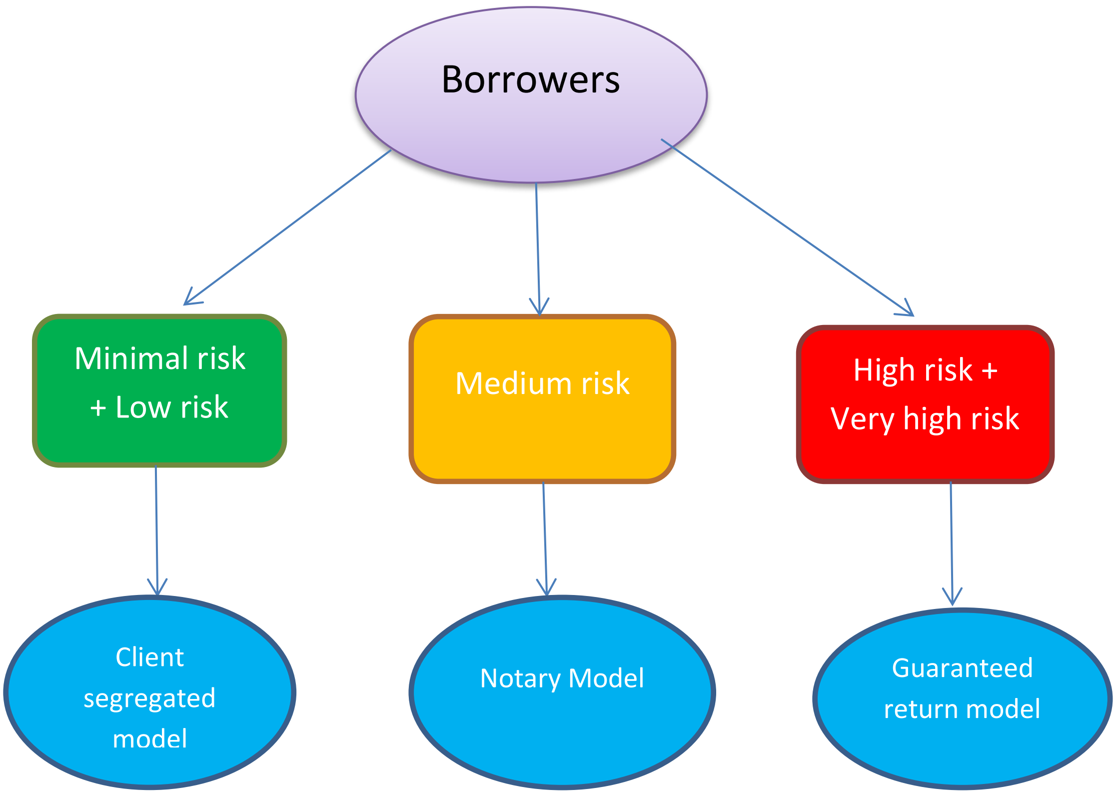

Figure 4.13: Suggestive model for P2P lending in India

(Source: Self-Created)

4.5.2 Comparison based on regulatory practices adopted for P2P lending

Table 4.9: Comparison between different countries based on regulatory practices

Country	Regulatory regime	Description
U.S.A	US Model	There are two levels of regulation, Federal regulation through the Securities and Exchange Commission (SEC) and State level, where platforms have to apply on a state-by-state basis. One level below the federal requirements is state regulation. Some states outright ban the practice of P2P lending (e.g. Texas). Other states place limits on the type of investors using the platforms to lend (e.g. California). In addition, if a platform wishes to operate across multiple state boundaries, it must apply to each state separately.
U.K	Intermediary Regulation	This regulates P2P lending platforms as an intermediary. It usually requires registration as an intermediary, and other regulatory requirements depending on the jurisdiction. Generally, there are regulations that establish the prerequisites for the platforms to register in order to access the market. Other rules and requirements determine how the platform should conduct its business (for example, the licensing needed to provide credit and/or financial services).

China	Exempt market/ Unregulated through lack of definition	In these jurisdictions, either the regulation has classified P2P lending as an exempt market or there is a lack of definition in legislation. However, in some cases, there is regulation designed to protect borrowers and that mainly involves rules already in place to protect the borrower from unfair interest rates, unfair credit provision and false advertising.

(Source: Self-Created)

Based on above table clear distinction can be drawn from all three types of regulatory regimes. Thus RBI has proposed a regulatory framework for India which would encompass the permitted activity, prudential regulations on capital, governance, business continuity plan (BCP) and customer interface, apart from regulatory reporting.

(i) Permitted Activity: Considering the present stage of development, the platform could be registered only as an intermediary i.e. the role of the platform would be limited to bringing the borrower and lender together without the lending and borrowing getting reflected on its balance sheet. The platforms will be prohibited from giving any assured return either directly or indirectly.

(ii) Prudential Requirements: The prudential requirements will include a minimum capital of Rs 2 crore. Leverage ratio may be prescribed so that the platforms do not expand with indiscriminate leverage.

(iii) Governance Requirements: The guidelines in this regard will include fit and proper criteria for promoters, directors and CEO.

(iv) Business Continuity Plan (BCP): Adequate risk management systems, BCP and back up for the data needs to be put in place since the platform also acts as a custodian of the agreements/cheques etc. In case of failure it should have alternative arrangement for continuation of its operation.

(v) Customer Interface: Confidentiality of the customer data and data security would be the responsibility of the Platform. Transparency in operations, adequate measures for data confidentiality and minimum disclosures to borrowers and lenders would also be mandated through a fair practices code. The operators would also be mandated to have a proper grievance redress mechanism to deal with complaints from both lenders and borrowers and require reporting to the Board.

(vi) Reporting Requirements: In order to assist monitoring, the platforms will need to submit regular reports on their financial position; loans arranged each quarter, complaints etc. to the Reserve Bank.

4.5.2.1 Suggestions for Regulatory framework to be implemented in India

However, through this research paper we try to come up with certain suggestions as follows:

- In this proposed regulatory mechanism by RBI, platforms should not be prohibited from giving any assured return if suggestive model in this paper is followed for India. If for "High risk" and "Very high risk" category guaranteed model is adopted then in that case platform needs to provide some kind of assured return.
- The consultation paper sets out a minimum capital requirement of Rs.20 crore. There is however inadequate disclosure of the analytical basis for this recommendation. It would be helpful for the RBI to set out its rationale for this quantitative recommendation. RBI also sets out a reference to a "leverage ratio" for P2P platforms. So there should be a relevant threshold which RBI should mention in setting out this reference.
- P2P platform (or related parties) should be prohibited from funding lenders using its service to avoid conflicts of interest
- On the basis that a P2P platform should not be permitted to lend to users of its service to avoid a conflict of interest between the platform and its users, it follows that a P2P platform should also not be permitted to accept deposits.

- The regulatory framework should mandate the use of a fair lending practices code by every platform. This may include appropriate disclosure by the platform in relation to its:
    - ✓ Shareholders (including controlling shareholders) and Directors;
    - ✓ Recovery practices code;
    - ✓ Dispute resolution mechanism;
    - ✓ Aggregate data on transaction activity, defaults, recoveries, complaints or disputes registered and whether resolved or currently pending (together with an ageing analysis of resolution timeframe)
- The regulatory framework should aim to avoid duplicating regulatory norms that exist elsewhere and would apply to entities engaged in P2P activity by virtue of being constituted under the Companies Act, 2013. This would include (but not be limited to) areas such as: governance norms, business continuity planning, internal controls.

4.5.3 Comparison based on loan amount funded in P2P industry globally

According to data released by P2PFA, the cumulative lending through P2P platforms globally, at the end of Q4 of 2015, has reached 4.4 billion GBP. Lending through P2P has grown dramatically from 2.2 million GBP in 2012 to 4.4 billion GBP in 2015 as highlighted by figure 4.14.

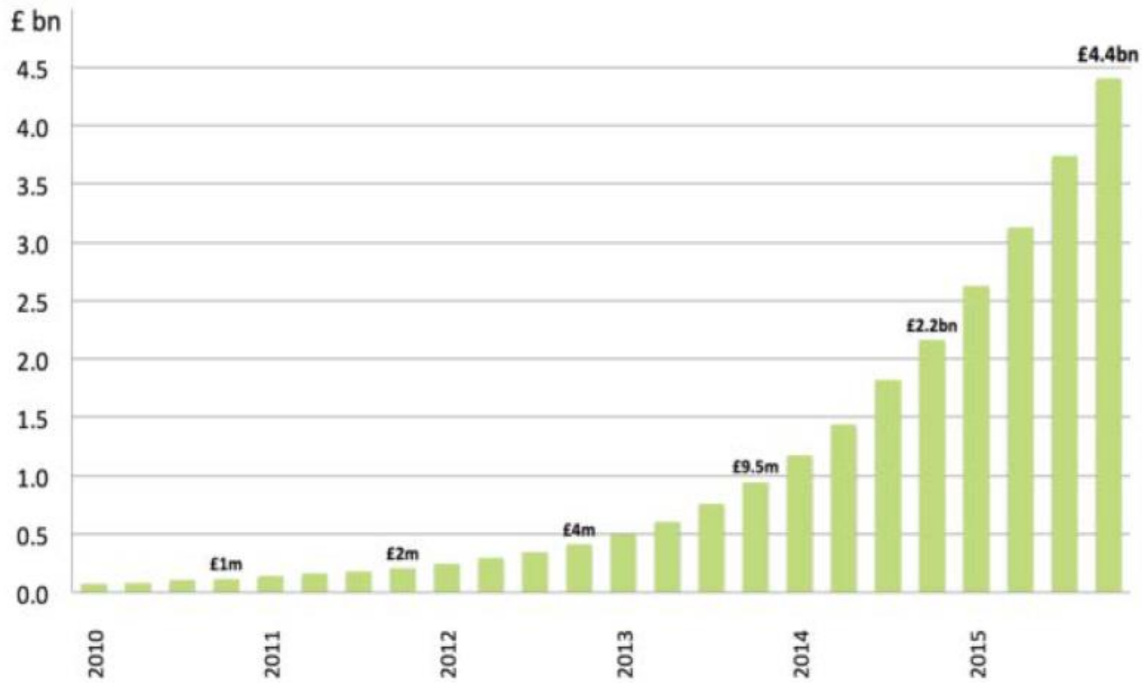

Figure 4.14: Cumulative lending through P2P platforms globally
(Source: P2PFA, U.K)

Figure 4.15 shows U.K has larger P2P lending market as compared to U.S on per capita basis. According to business insider US is the largest P2P lending market in the world by loan volume, but the UK's is 72% larger on a per capita basis. Low consumer confidence in banks (even before the financial crisis), a high degree of comfort with online platforms, and a positive regulatory environment have all helped nurture the UK's P2P lending market.

On a country-by-country basis, the USA and UK are experiencing a doubling year-on-year since 2008, the average year-on-year growth rate for the USA and UK is 79.1% and 99.5%, respectively.

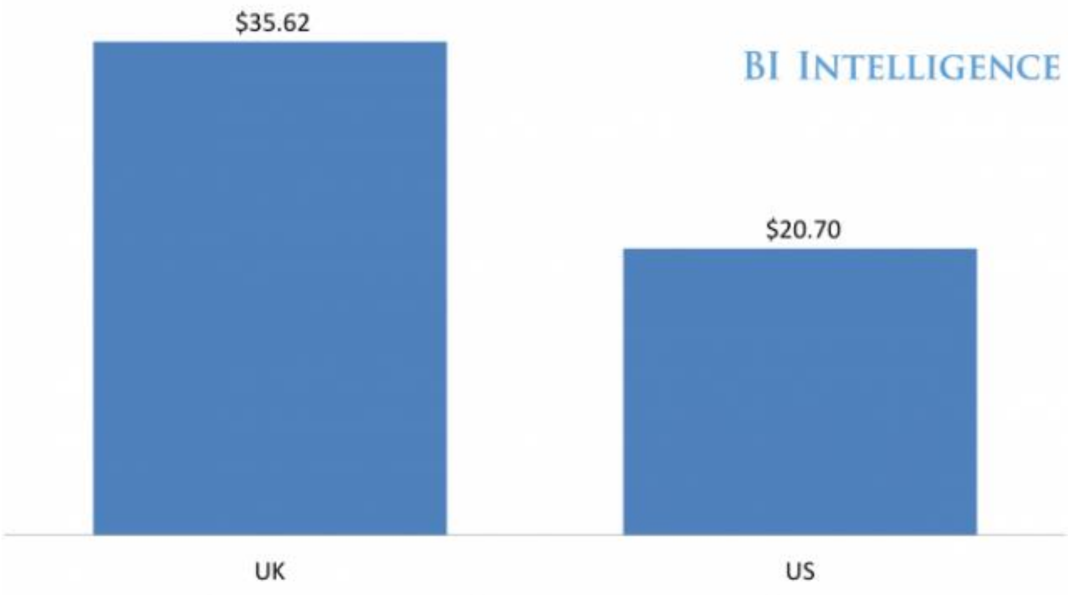

Figure 4.15: Comparison of U.S and U.K P2P lending market on per capita basis
(Source: Ernst & young, BI intelligence)

From figure 4.16 we can clearly see that U.S.A, U.K and China forms 96% of global peer to peer lending market. It also shows that for the majority of countries this market innovation has yet to develop substantially.

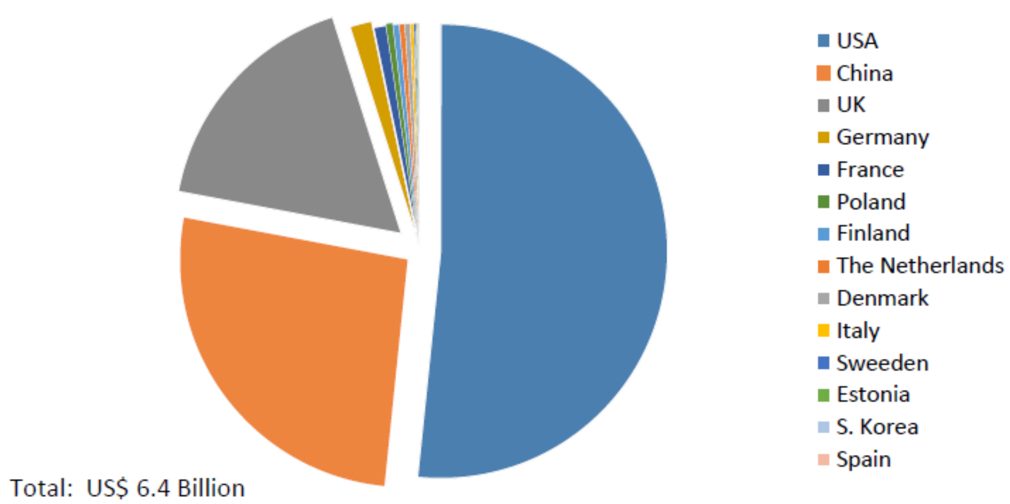

Figure 4.16: Pie chart showing peer-to-peer and equity crowd-funding market by country
(Source: IOSCO research department)

4.6 Limitations of the study

This study has been limited to the analysis of P2P industry of four countries which are USA, UK, China and India respectively. These countries have been chosen because collectively USA, UK and China make up 96% of the overall peer to peer lending market. The US market accounts for 51% of the global market, with China making up just over a quarter at 28%, and the UK just behind at 17%. USA and UK are also the oldest markets, as these types of platforms were first established in these jurisdictions. India has been chosen because in India this industry is in very nascent phase and thus a sample model and some improvement in regulatory practices was suggested through this paper.

Data collected in this study is also limited only to some of the P2P platforms of respective country and not the overall country. As this is an emerging way of lending there is no platform where data of P2P platform of each country is collected. This shows that today also P2P industry lacks transparency as not all the platforms are showing data publically on their websites. Also, some sites host statistics in a way that it lacks certain important information necessary for analysing this industry. It is very difficult to retrieve data of such platforms which are not hosting any kind of statistics on their official page. Peer to peer finance association (P2PFA) in UK is collecting information of its member platforms for all the transaction which takes place through them making the process somewhat transparent. But here also data is limited only to its member platform. So it is difficult to retrieve data of P2P platforms in UK which are not the members of P2PFA. It was a challenge to collect data for India as this industry is not well established and at a very nascent stage. At present there is no association in India which host data of all P2P platforms. On January 10, 2018 according to economic times various Indian P2P platforms would come together to form the Association of P2P Lending Platforms. The first-of-its-kind association will act as a representative for its members, as well as the country's P2P lending industry. In addition, the association will work in conjunction with the government and regulatory authorities in matters of compliance, and to further the cause of financial inclusion in the country.

4.7 Future scope

- Peer to peer lending market may pose problems for investor protection in future which need to be addressed.
- Further monitoring and research is required.
- Regulation needs to be implemented in different countries to bring more transparency in the industry.
- In order to exploit the benefits of peer to peer lending while mitigating its risks a balanced regulatory approach will be required. This balance needs to be established by respective regulators as it depends on political choices and the regulatory regime, which varies across the globe.
- At the same time there might be a need for the international harmonisation of regulatory requirements given the possible cross-border nature of peer to peer lending market.

5. CONCLUSION

Peer-to-peer lending is a form of market-based finance that is currently very small in comparison to traditional funding options, although it has experienced exceptional growth since 2010. This coupled with the focus of policymakers and regulators on growth and funding of the real economy means that this segment of the financial industry has the potential to develop into a credible investment option for sophisticated and retail investors alike.

There are a number of benefits associated with peer-to-peer lending industry. These include the ability to raise capital without giving up large parcels of equity interest, spreading of risk, higher returns for low cost capital and the boost to the economy through encouraging the growth of SMEs. However, these benefits need to be balanced with the risks posed by this innovative industry. These risks to retail investors include the risk of default or business failure, the risk of platform closure, the risk of fraud and the risk of concentration, the risk of illiquidity and cybercrime.

Regulatory regimes are varied across jurisdictions, they can be broadly classified into four regimes for regulating peer-to-peer lending: exempt market/unregulated due to lack of definition, regulated as an intermediary, regulated as a bank and the US model.

The high growth rate in peer-to-peer lending means the industry could become a more mainstream investment opportunity; its interconnectedness could expose more of the risks of the industry to the wider economy. The cross-border aspect of these platforms raises issues to what extent contract law and regulation is harmonised. The insolvency of a cross-border platform could raise uncertainty especially in identifying which contract law may apply when the parties are domiciled in differing jurisdictions with differing legal systems. This will need to be addressed in the future if this industry is to be able to grow into a viable source of investment and credit provision internationally.

Although peer to peer lending industry does not currently constitute a systemic concern, but if allowed to grow without proper management, then there is a possibility of it becoming an important issue, in a systemic context, in the future.

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