# Peer-to-Peer Lending: Structures, Risks and Regulation<sup>1</sup>

Kevin Davis<sup>2</sup> & Jacob Murphy<sup>3</sup>

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## **Abstract**

In this paper we provide a concise overview of the key characteristics of P2P lending platforms. We examine risks involved and consider alternative regulatory approaches to P2P lending. We argue that the P2P model is an example of how modern technology enables the integration of the functions of a market operator and a provider of individual managed accounts (investor directed portfolio services) for end users (as well as provision of other economic functions). This, we argue, removes the basis for a legislative/regulatory distinction between market operators and market participants/financial service providers which underpins current Australian regulation. A new approach to regulation of markets is warranted which reflects this and which would lead to P2P operators being regulated under that more general framework rather than, as is currently the case, managed investment schemes.

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<sup>&</sup>lt;sup>2</sup> Department of Finance, University of Melbourne and Australian Centre for Financial Studies (Monash University). Kevin.davis@unimelb.edu.au

<sup>&</sup>lt;sup>3</sup> Department of Finance, University of Melbourne This paper is partly based on work undertaken for an Honours thesis in the Department of Finance, University of Melbourne and subsequently under a Kinsman Fellowship.

#### 1. Introduction

Peer-to-Peer (P2P) lending involves the matching of borrowers and investors via a web-based platform and the operator managing, as an agent for investors, the resulting repayment obligations of borrowers. P2P lending is a fast growing industry globally with the number of operators as well as the number of loans being issued increasing substantially over the last 10 years. The USA and the UK have the most established P2P lending markets. UK based Zopa is recognized as the first P2P operator launched in 2005 while USA based Lending Club is the world's largest P2P operator and as of 31 March 2016 had issued over \$18.7 billion worth of loans since launching in 2007. The Australian P2P lending industry has been slower to develop but now includes P2P operators such as SocietyOne, RateSetter, MoneyPlace, ThinCats and True Pillars.

P2P lending is, in a number of respects, little different from other platform-based markets which enable buyers and sellers of heterogeneous goods and services to trade, with prices determined ultimately by demand and supply, but in the short run by auction processes or fixed price offers. Examples include accommodation services (AirBnB or Hotels.com), transport (Uber), new and second hand goods (EBay, Gumtree, GraysWine Online), all of which have been made feasible by modern digital technology.<sup>4</sup>

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<sup>&</sup>lt;sup>4</sup> Einav et al (2015) analyse these types of peer to peer markets and discuss issues involved in their regulation. They note that in fast growing and evolving industries, regulations which appear sensible at an early stage may soon become unsuitable. On the other hand, in platform businesses where there may be significant network and scale economy effects, early stage regulation may be appropriate to influence emergence of a desirable industry structure and conduct.

But there are some important differences. First, P2P operators provide their own quality assessment of the product (loan) being offered – which is a form of financial advice. Second, P2P operators manage (over several years) the subsequent physical delivery to the purchaser (investor) of the obligations (interest and principal repayments) of the vendor (borrower) – creating a principal-agent relationship. Third, P2P operators provide purchasers with account management (financial) services (Investor Directed Portfolio Services – IDPS 1 enabling purchasing (and possibly subsequent resale) and custody of products (loan assets), and receipt (and possible reinvestment in new products, storage, or withdrawal) of cash receipts from products owned.

Development of regulation of P2P platforms in Australia has recognised all of these features (ASIC, 2016) but has arguably focused on the last (account management and investment facilitation) which is a feature of both managed investment schemes (MIS) and IDPS (such as operated by stockbrokers). In the absence of suitable legislation which reflects all of the features outlined above, regulation of P2P operators has defaulted to compliance with MIS regulatory requirements.

We argue that this is not ideal and that P2P platforms (and associated services) are an example of a more general integration of provision of a number of economic functions made possible by "Fintech". <sup>8</sup> This warrants reassessment of the current

<sup>&</sup>lt;sup>5</sup> Quality assessment of vendors or products (or purchasers) on other platform markets is typically via participant ratings.

<sup>&</sup>lt;sup>6</sup> Another principal-agent relationship is created when (some) platforms allocate investors into funding of specific loans meeting specified criteria (such as risk grade or maturity).

<sup>&</sup>lt;sup>7</sup> Definition of IDPS and relevant regulation can be found in ASIC (2015)

<sup>&</sup>lt;sup>8</sup> Thus, whereas much discussion of financial innovation relates to potential for "unbundling" of economic functions (such as in the case of securitisation

legislative framework which is based on treating those functions as being provided separately by separate entities – as was the case under older technology. Specifically, we argue that P2P platforms combine together the functions of a market (exchange) operator and a provider of financial services (individual account and trading facilitation) such as exemplified by stockbrokers (market participants). Of particular importance, Fintech can enable direct access to the market by end-users (without the need for broker – market participant involvement) and integrated provision of those functions listed above. This removes the case for a regulatory structure based on a distinction between market operators and financial service providers (market participants) which is a special case of non-integrated provision resulting from old technology.

ASIC (2013) notes that its Regulatory Guide 172 regarding market operator licences will be reviewed in total in "due course". We suggest that this needs to be undertaken in the context of the now (or emerging) feasible integration of market operation and associated services (such as IDPS or IPO bookbuilds for new security issuers) due to Fintech, and recognise that separate specialised treatment of market operators is no longer appropriate (but may be a special case of a more general approach). As part of that more general review, P2P regulation could be shifted from the MIS category (which itself may be a subset of the more general approach) to the new "omnibus" regulatory model.

We first outline the key features of P2P lending, then consider risk characteristics which give rise to regulatory concerns before examining the options for regulation.

enabling separation of origination and funding of loans), we note that it may also provide new opportunities for "bundling".

## 2. Key Characteristics of P2P Lending

The focus of P2P operators has predominantly been the personal and small business loan markets. However as this financial innovation develops it is expanding into an increasing number of different loan markets such as trade credit and mortgages. P2P lending is often thought of as connecting retail investors and borrowers but has evolved such that often the majority of investor funds come from institutional investors. This has led to the term "marketplace lending" also being used to describe P2P lending.

The attraction for borrowers is the potential to access credit when they may have otherwise been declined from traditional financing methods and/or the possibility of receiving more attractive interest rates on loans. While traditional intermediaries can use risk based pricing and "new" forms of credit-relevant information (such as social media), their limited use of these has been one factor providing opportunity for growth of P2P platforms to date. Investors are attracted to these online platforms which can offer access to different asset classes with risk-return characteristics which may appear superior to traditional investment options. Personal loans for example have traditionally been the domain of banks and credit unions. P2P lending allows investors to directly invest in this asset class and potentially benefit from any associated yield premiums.

P2P lending is an example of an innovation that enables different forms of financing to overcome financial frictions such as information asymmetry and transactional costs. Ultimately, long run viability will depend upon whether use of new technology and techniques for assessing (and managing) borrowers and matching them with investors involves reduced operating costs and/or better risk assessment than traditional intermediation. It will also depend upon the interest of investors in the

risk-return features offered and the compatibility of outcomes with investor expectations.

The P2P operator uses the online platform to directly match borrowers and investors rather than acting as a traditional financial intermediary. Once a borrower applies for a loan the P2P operator will perform a proprietary credit assessment of the borrower. If the borrower is deemed creditworthy their loans will be anonymously listed, together with risk-related information, on the platform for investors to fund. Investors will then select the loans or type of loans in which to invest based on their individual risk appetite. Investors are either forced or highly recommended to invest in smaller fractions of multiple loans rather than being exposed to the risk of investing in a single loan. Once the loan has been fully funded the borrower is issued the loan. The P2P operator will perform ex post monitoring and management of borrowers on behalf of investors.

Acting as facilitators rather than intermediaries means that P2P operators do not typically invest any capital into loans on their platform. Therefore P2P operators are not exposed to the credit risk despite being responsible for the credit assessment of borrowers. The main source of revenue for P2P operators is transaction fees from matching loans on their platforms (although if revenue were instead derived from ongoing loan management fees charged to borrowers a credit risk exposure would result due to revenue loss if borrowers default). <sup>9</sup> This creates a principal-agent problem as P2P operators have a short run incentive to maximise loan volume which could influence the stringency of their credit assessments. Competition between P2P operators for borrower listings could also have similar effects.

<sup>&</sup>lt;sup>9</sup> In this regard "trailing commissions" may in this case act to reduce moral hazard.

However, the long term viability of P2P operators (and return on their capital invested in developing the platform business) depends ultimately on meeting investor expectations. Therefore there is a long run reputational incentive to maintain the integrity of the credit assessment process. But potential reputational spillovers mean that operational failures or poor performance of "fly by night", or incompetent, operators can pose reputational risks for other industry members. Thus some method of imposing minimum quality standards on entrants is important for existing operators as well as for consumer protection. <sup>10</sup>

Murphy (2016) defines two different types of P2P lending operating models in use around the world. The first is the *active P2P lending model* that enables investors to directly select loans in which to invest from the pool of potential borrowers listed on the platform. Investors will not know the identity of borrowers but will know information arguably related to their creditworthiness such as annual income, home ownership status and the purpose of the loan. This model contrasts with the *passive P2P lending model*. Passive model investors can select the risk category and the maturity of loans in which they would like to invest and the P2P operator will match them to a set of borrowers whose loan applications meet these criteria. The investor cannot directly choose which loans to invest in. As such investors are only aware of the average characteristics of categories of borrowers on the platform rather than the specific characteristics of the borrowers they have invested in. Passive model operators are arguably exposed to a greater reputational risk from investments not meeting an investor's reasonable expectations as they are selecting borrowers based

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<sup>&</sup>lt;sup>10</sup> That does however raise the potential for such requirements to act as a regulatory entry barrier to the benefit of traditional intermediaries or existing P2P operators.

on an investor's specified criteria rather than allowing investors to select individual borrowers.

A major challenge for both model types is to set the interest rate on loans to efficiently equate the flow of loan demand and the supply of funds (Murphy, 2016). The first of three different interest rate setting approaches is to allow the borrower to set the maximum rate at which they are willing to borrow (above some risk related, operator determined, minimum rate) and for investors to then bid for the loans in an auction process. If there are sufficient bids to fully fund the loan by the auction closing date the interest rate is set, if it is a uniform rate auction, at the highest successful bid. If it is a mixed rate auction investors receive the rate that they bid and the borrower pays a weighted average of all the successful bids. If the loan is not fully funded by the auction closing date, the loan is withdrawn from the platform and investors can invest their funds in other loans. This interest rate setting process is similar to a book building process often used for initial stock listings. Only active P2P model operators use this method.

The second interest rate setting process, used by some active and passive P2P operators, is to determine the rate by assigning a proprietary risk grade and related interest rate to the loan based on the P2P operator's risk assessment. This creates the risk of excess supply of funds (and rapid funding of the borrower) or deficient supply of funds (and non-funding of the borrower). In the *active P2P lending model* that can occur at the individual borrower level, while in the *passive* model, the operator will need to determine some way (such as by adjusting interest rates) to equilibrate aggregate demand and supply for the particular risk category.

The final interest setting method used by P2P operators is to operate a market similarly to a stock market order book. Based on their level of risk and the maturity of

the requested loan, borrowers receive an estimate of the interest rate they could receive in the market. The borrower either accepts the prevailing market rate or sets a higher or lower maximum rate at which they are willing to borrow. Investors also see the market rate for the different investment options and can set the rate they will invest at as the market rate or a higher or lower minimum rate. The P2P operator then matches investors and borrowers whose bid and offer interest rates are compatible (and which generate the required level of funding) to originate loans. This method is currently only used by passive P2P model operators.

Both active and passive model types either force or strongly recommend that investors diversify their investment as small amounts in a number of loans rather than being exposed to a single borrower. However investors have less control over their level of diversification under a passive model as the P2P operator selects the number of borrowers an investor's funds are matched to on the platform. Passive model operators counteract this potentially higher risk for investors by typically implementing a reserve fund in an attempt to cover any potential capital losses investors may experience. Borrowers pay a fee into the fund when applying for the loan and the fund is designed to grow to cover unexpected losses on the platform which would otherwise lead to investors not receiving at least a return of their capital.

#### 3. Risks and Returns

P2P lending involves a range of risks for poorly informed participants, which regulators are rightly worried about.

Default risk and poorly informed Investors

P2P operators are providing access to asset classes to which investors have previously had limited, if any, exposure. There is thus the potential for investors to

not understand the true nature of the risks of P2P investing. As P2P operators act similarly to credit rating agencies in many cases, the investors have to rely on the integrity, accuracy and consistency of the P2P operator's risk assessment. As described above, investors must be confident that the risk assessment incentives of P2P operators are aligned with their best interests as investors. To help alleviate these concerns, P2P operators often publicly release the details and risk characteristics of all loans on the platform. Increased transparency allows investors to have a better understanding of the risk characteristics of borrowers and decrease the level of informational asymmetry.

Investors must also assess the appropriateness of the credit spreads provided across the risk spectrum of borrowers. P2P operators attempt to implement risk based pricing such that the interest rate charged on loans is closely related to the risk level of the borrower. Investors can use publicly available information to determine the characteristics of higher risk versus lower risk borrowers on the platform and assess the consistency of a P2P operator's risk assessment. The reputational incentive for P2P operators is strong such that it is in their interests to have confidence in their risk assessment ability however there is the potential for inaccurate risk assessments which can expose investors to borrower defaults.

Even if investors understand the risk, the issue remains of what rate of return they should expect. Intuitively, a P2P investment is approximately equivalent to holding both equity and deposits in a depository institution specialising in the same type of loans. (There are obvious differences due to the illiquidity of the P2P investment, and the need for depository institutions to hold liquid assets to deal with depositor withdrawals). Consequently, the required return of P2P investors should be similar to the weighted average cost of funds of a similar depository institution (with

the dividend imputation system largely washing out the tax consequences of the corporate structure of the latter). This highlights the fact that long run viability of P2P operators will depend upon comparative operating cost and risk assessment abilities.

#### Financial advice

P2P operators perform a function equivalent to a Credit Rating Agency when they provide risk grades of potential borrowers. This is a form of financial advice to potential investors and raises the issues of the quality of such advice (reliable risk grading) and the potential for conflicted remuneration arrangements (fee income from borrowers which can be interpreted as analogous to commissions from manufacturers of financial products). Further potential advice-related risks arise if the marketing of P2P investment opportunities involves relationships with financial advisers.

# *Investment Illiquidity*

The maturity matching of borrowers and investors makes P2P investments largely illiquid. There is the potential for P2P operators to develop secondary markets enabling investors to liquidate investments by selling loans held to other investors (or to the P2P operator acting as a market maker) and many P2P operators do provide some such facility. These secondary market arrangements are relatively limited, but there is little reason in principle that secondary markets could not develop further. This is particularly true if P2P operators publish the borrower characteristics and repayment performance of loans publicly. In such circumstances, investors wishing to sell loans have no superior information to potential purchasers, thus alleviating the adverse selection problem which can otherwise impede market development.

# Agency Risk

Investors face the risk that a P2P operator may cease operations due to unprofitability of the business model or operational events such as failure of the platform software, even though borrowers are not in default. In that case, the problem arises of how the management of ongoing borrower repayments and their transmission to investors is to be handled. While transfer of the "loan book" and investor accounts to another operator is one possibility under the direction of an administrator or liquidator, this would most likely involve significant losses to investors.

Also relevant in this regard is the potential for fraud. Recently, in the USA, Lending Club's CEO resigned after problems with their operational practice was discovered. Lending Club had altered the details of a specific group of loans in order to make them meet a specific investor's risk criteria. The investor purchased these loans on the premise of false information.

# Risks for Borrowers

Australian regulation of credit imposes a number of constraints upon retail lenders. One is "responsible lending" requirements imposing an obligation to assess the suitability of a loan given the borrower's personal circumstances. It is not clear how this accords with P2P lending involving many investor/lenders and where the P2P operator in essence facilitates rather than makes the loan. Currently P2P operators are required to hold an Australian Credit Licence given that facilitation role. Rejection of potential borrowers for whom a loan is unsuitable is one way of meeting responsible lending requirements, but arguably so also is assigning a credit grade which reflects an assessment of the likelihood of default.

Another potential risk for borrowers arises from the nature of loan collection/default management policies.

## 4. Regulation

Regulators around the world are continually developing their regulatory responses to the new operating models in the P2P lending industry. The objectives are to ensure investors and borrowers are protected from fraud and mis-selling of products while not stifling potential benefits from financial innovation. In some jurisdictions regulators have attempted to fit existing legislation to P2P lending while others have implemented specific P2P lending. In this section we consider how P2P lending overlaps with a range of specific extant regulatory arrangements and argue that it provides an informative example of how "Fintech" is making those arrangements less relevant and requiring a rewriting of legislation to facilitate new types of financing arrangements.

Despite both banks and P2P operators competing in loan markets and raising funds from retail investors, P2P operators do not come under bank regulations such as Basel III capital and liquidity requirements. This reflects the passing on of credit and liquidity risk to investors. Whether this gives P2P lending a regulatory cost advantage over depository institutions is unclear since, as outlined earlier, a P2P investment is broadly equivalent to a combined investment in bank equity and deposits/debt. The answer hinges, *inter alia*, on whether costs to banks of minimum capital (and other) regulations offset the benefits of explicit and implicit government guarantees – about which there are conflicting views.

Australia regulates P2P operators under a Management Investment Scheme (MIS) framework (ASIC, 2016). This existing legislation was not designed with P2P lending in mind but ASIC has required (in the absence of an obviously better legislative alternative) P2P operators to fit into this structure. Arguably this is the wrong model. First, investors are not involved in a "collective" investment where all

have pro rata share in a common set of assets. Second, MIS do not, in principle, originate new securities, but provide investors with a mechanism to invest in a diversified portfolio of existing securities. Of course, in practice, this has not always been the case, with MIS encompassing mortgage trusts, REITs, and agribusiness where assets (real or financial) have been originated and managed by the Responsible Entity (RE). Experience suggests that this is not necessarily an ideal approach, and the RE model seems more suited to schemes where investments take the form of purchases of existing securities with market determined prices and with limited operational activities (which affect the value of the assets) being required of the manager. This is not the case for P2P lending.

Rather P2P lending online platforms are an example of a primary market for new securities in which prices are determined, but where the P2P operator also acts similarly to investment banks or stockbrokers when they enable an IPO for listing on the stock market. The P2P operator completes the risk assessment and enables the distribution however they do not underwrite loans on their platform. On this interpretation, a critical issue is essentially what "prospectus" requirements should be applied regarding the P2P operator acting as the agent for the individual issuer of the securities. On this interpretation, regulation should relate primarily to the information made publicly available about potential borrowers, and also subsequent loan performance as an indicator of the reliability of the agent (the P2P operator) in providing relevant *ex ante* information. However, the involvement of the P2P operator in managing the assets suggests that this is only part of the relevant approach, and

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<sup>&</sup>lt;sup>11</sup> In that regard the relatively recent development of the ASX "bookbuild" facility for companies to make participation in IPOs more available to individual investors may provide a useful example.

minimum standards to limit the operational risk (e.g. of platform failure) would also seem relevant.

Looking ahead, the potential for P2P operators to develop secondary markets in the loans on their platform suggests that regulation as a "market operator" might be even more appropriate.

While the loans issued on their platform do not sit on the P2P operator's balance sheet they play an important role in managing the assets, quite different to the activities of a traditional exchange. This structure makes the P2P platform somewhat comparable to a special purpose vehicle (SPV) such as used in securitisations, where securities are originated and placed into a structure which obtains funding from investors. However, there are a number of differences. Typically in a securitisation, the origination occurs separately to the ultimate investor funding (via warehouse or deposit funding). Second, in contrast to an SPV (where third party insurance / guarantees may be incorporated), the P2P operator does not provide any implicit backing of loans and there are no equity tranches to help overcome information asymmetries or pre-payment risks. Nevertheless, the similarities of a P2P platform with a securitisation master-trust arrangement, which involves a number of separate securitisations in which investors have claims on different loan pools, are apparent.

Yet another perspective in considering regulatory arrangements is to note that P2P operators play a role similar to Credit Rating Agencies. Fees are charged to the potential borrower and with risk based cost of funding, the potential issue arises of competition for business leading to declines in rating quality.

But perhaps the most important consideration is that P2P operators also provide individual managed accounts for investors, and enable end user investors to interact directly with the market rather than through designated market participants.

Because funds are required to be in place in an account on the platform prior to submitting demand for securities and ultimately investing in them, and because of the advances in digital information technologies, the traditional need for designated market participants to reduce transactions costs and settlement risks is removed.

Currently, regulation of market operators is separate from regulation of market participants as financial service providers. That latter regulation encompasses concerns about operational risks, financial advice etc. What the P2P development shows is that, with modern technology, there is not necessarily any natural distinction between a market operator and a financial service provider. Indeed, there is no obvious reason why the one entity could not operate a market for particular securities, provide direct access for end user investors and issuers of securities, provide managed accounts for investors which include provision of deposit-like facilities, and manage the flow of payments from securities issuers to holders of those securities.

Modern technology requires a rethink of the structure of capital markets regulation which involves distinctions and separate regulation based on institutional practices and arrangements emanating from older technology. Those arrangements, and the regulatory structure based on them, are a special case of the more general arrangements becoming increasingly available via Fintech developments.

#### 5. Conclusion

ASIC (2013) notes the case for an updating of market operator regulation. We argue that P2P lending provides a clear example of the necessity for that to allow for the integrated provision of a market and a range of financial services. Doing so, and developing a regulatory structure more consistent with institutional arrangements now feasible and, arguably, more efficient, and with different risk characteristics would enable a better approach to regulation of P2P operators.

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