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A REVOLUTION IN PROGRESS: REGULATING P2P
LENDING PLATFORMS

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Peer-to-peer (“P2P”) lending, defined broadly as the use of non-bank online platforms that match borrowers with lenders, is arguably one of the most important innovations in the area of alternative finance. It changes the way lenders and borrowers interact, reconstructs the credit market by driving massive disintermediation, and reshapes our general understanding of financial systems.

This Article analyzes the current state of the P2P lending market with the goal of developing policy recommendations to facilitate the safe growth of this important market segment. It starts by providing an extensive overview of the P2P lending market from four different perspectives: the financial intermediary role of the platforms, the characteristics of the market, benefits and risks faced by market participants, and its regulation in leading jurisdictions. This descriptive analysis demonstrates how the P2P lending market has changed over time and identifies recent trends, risks, and challenges that require regulatory attention.

In light of this analysis, the Article then proceeds to discuss policy implications in three key areas. First, it shows that P2P lending platforms, originally designed to serve as online marketplaces that only match lenders with borrowers, have gradually evolved into new financial intermediaries that perform various brokerage activities and provide tools intended to help lenders manage their credit risks. It then argues that regulation should be modified to better suit this new financial intermediary role and discusses key considerations. Second, the Article examines the disclosure provisions faced by platforms and proposes imposing consistent disclosure standards tailored to the characteristics of different types of P2P lending platforms. It presents specific examples of such disclosure requirements and provides justifications for imposing them. Finally, the article outlines key concerns related to the increasing involvement of institutional actors in P2P lending platforms—

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adverse selection among different types of lenders and growing financial stability risks—and discusses their regulatory implications.

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INTRODUCTION

Peer-to-peer (“P2P”) lending, defined broadly as the use of non-bank online platforms that match borrowers with lenders, is arguably one of the most important innovations in the area of alternative finance. It changes the way lenders and borrowers interact, allowing them to transact directly with each other without the involvement of traditional financial intermediaries, it reconstructs the credit market by driving massive disintermediation (and later re-intermediation), and it reshapes our general understanding of financial systems by introducing novel financial business models.

Since its emergence in 2005, this new market segment quickly evolved into a global industry with a market volume of over \$300 billion in 2017,¹ attracting significant attention by both policymakers and academics who began debating the appropriate way to regulate this rapidly growing market. In many jurisdictions, leading financial regulators have identified the promise of P2P lending to promote financial inclusion, provide an alternative source of finance to consumers and small and medium enterprises (“SMEs”), and increase competition in the credit market; accordingly, they sought to encourage the development of this new market segment. As the market became more mature, however, regulators gradually began identifying serious concerns, mainly in terms of consumer protection and financial stability, and thus faced the challenge of promoting market innovation while maintaining financial stability and appropriate protection for both lenders and borrowers.²

1. See *infra* Section II.B.

2. This relates to the innovation trilemma developed by Brummer and Yadav, who posit that the three foundations of financial regulation are market integrity, rules simplicity, and financial innovation. They argue that regu-

With this challenge in mind, financial regulators around the world adopted various regulatory approaches.³ In the United States, the Securities Exchange Commission (“SEC”) intervened in the P2P lending market in its very early days, in 2008, determining that the products issued by P2P lending platforms meet the broad definition of a security under the 1933 Securities Act, hence requiring platforms to comply with its disclosure and registration provisions. China, by contrast, adopted a laissez-faire approach and left the market unregulated until 2015, when the People’s Bank of China initiated a tailored regulatory framework. In the U.K., the Financial Conduct Authority (“FCA”) retained responsibility for regulating P2P lending platforms in 2014, requiring new platforms to obtain authorization and comply with prudential requirements. This array of regulatory responses reflects the difficulties financial regulators have had in appropriately responding to this rapidly growing market.

In view of the increasingly essential role of P2P lending platforms as alternative sources of finance on the one hand and the difficulties faced by regulators in overseeing this new market on the other, this Article examines the current state of the market and provides regulatory recommendations to allow its safe growth. To this end, it analyzes the P2P lending market from four different perspectives: the platforms’ (changing) financial intermediary role, the characteristics of the P2P lending market, the benefits and risks faced by market participants, and the regulation of P2P lending in leading jurisdictions. This descriptive analysis demonstrates how the P2P lending market has changed over time and identifies contemporary trends, risks, and regulatory challenges, which require new regulatory approaches. In light of this analysis, the Article then develops policy recommendations.

The remainder of this Article is organized as follows. Part I analyzes the role of P2P lending platforms. It explains how P2P lending platforms work, analyzes different business models of P2P lending and examines the financial intermediary

lators can achieve at most two out of the three objectives at any given time. If, for example, regulators seek to promote market integrity and clear rulemaking, this will probably require broad prohibitions that would hamper financial innovations. See Chris Brummer & Yesha Yadav, *FinTech and the Innovation Trilemma*, 107 GEO. L.J. 235, 244–49 (2018).

3. See *infra* Part IV.

role of P2P lending platforms. It shows that while these platforms were originally designed to act as online marketplaces that only match lenders with borrowers, they evolved into new financial intermediaries that perform various brokerage activities and provide tools intended to help lenders manage their credit risks.⁴ This re-intermediation process has significant regulatory implications, discussed *infra* Part V.

Part II examines the P2P lending market. It outlines three sets of determinants that have encouraged the formation of P2P lending platforms and analyzes the characteristics of leading P2P lending markets: the United States, the U.K., and China. This analysis helps assess how different regulatory responses have affected this growing market, thus providing valuable insight into the ongoing discussion on the optimal regulatory framework. In the course of analyzing the current state of the P2P lending market, the Article also identifies three recent trends—institutionalism, re-intermediation of platforms, and the development of secondary markets—and discusses their market effects.

Part III provides a risk-benefit analysis from the perspectives of borrowers', lenders', and the market in order to determine *how* borrowers and lenders participating in P2P lending platforms should be protected and *who* should be responsible for regulating these platforms. If these platforms create greater risks to lenders then, plausibly, regulators experienced in protecting investors in the capital market through disclosure should be responsible for P2P lending regulation. If instead borrowers face greater risks, then perhaps financial consumer protection regulators should take the lead. Finally, if P2P lending platforms create significant risks in terms of financial stability, banking regulators should possibly be involved as well. A risk-benefit analysis helps answer this question.

Part IV examines how US financial regulators have responded to the emergence of P2P lending and compares their approach to those of their Chinese and U.K. counterparts. This analysis complements the risk-benefit analysis by demonstrating different regulatory approaches to balancing the risks

4. See generally Tetyana Balyuk & Sergei Davydenko, *Reintermediation in FinTech: Evidence from Online Lending* 14 (Michael J. Brennan Irish Fin. Working Paper Series, Paper No. 18-17, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3189236.

and benefits faced by lenders and borrowers. It also complements the market analysis by showing the effects of different regulatory responses on the market.

Finally, in light of this four-step analysis, Part V discusses policy implications in three key areas. First, it discusses the reintermediation of platforms and proposes modifying the regulation to better suit the market's new financial intermediary role. Second, it examines the disclosure provisions faced by platforms and suggests imposing consistent disclosure standards tailored to the characteristics of different types of P2P lending platforms. Third, it outlines key concerns related to the increasing involvement of institutional lenders in P2P lending platforms and discusses their regulatory implications.

I.

OVERVIEW OF P2P LENDING PLATFORMS

P2P lending platforms come in a variety of forms, providing different types of loans, determining the interest rates differently, and performing the financing process differently. This Part explains how P2P lending platforms work and provides a general overview of their business models and key characteristics. Section I.A describes the general process by which a P2P lending platform facilitates loan requests. Section I.B describes different business models and characteristics of P2P lending platforms. Finally, Section I.C describes their intermediary role.

A. *How Do P2P Lending Platforms Work?*

A P2P lending platform involves an online platform on which loan requests are matched with lending offers. P2P lending platforms generally process loan requests as follows.⁵ Initially, a potential borrower contacts the platform and determines the terms of her loan request. The platform then requests credit and personal information from the borrower, to assess her credit risk. Once the borrower's information is col-

5. For an overview of this process, see generally Kevin Davis & Jacob Murphy, *Peer to Peer Lending: Structures, Risks and Regulation*, 3 J. APPLIED FIN. 37, 38 (2016); Robin Hui Huang, *Online P2P Lending and Regulatory Responses in China: Opportunities and Challenges*, 19 EUR. BUS. ORG. L. REV. 63, 70–71 (2018); Rainer Lenz, *Peer-to-Peer Lending: Opportunities and Risks*, 7 EUR. J. RISK & REG. 688, 691–92 (2016).

lected and verified, the platform decides whether to accept or reject the loan request and afterwards, classifies each accepted loan request into risk categories, which determine their interest rate.⁶ If a potential borrower is found creditworthy, her request will be anonymously listed on the platform for a pre-determined period, along with risk-related information.⁷

Next, during that period, lenders can select any loan request in accordance with their risk preference and place an offer to provide a portion of the requested amount.⁸ They can place bids for each loan application until the requested amount is received.⁹ Once the offered amounts match the requested amount, the loan is originated. The platform then collects the money from the lenders' bank accounts and transfers it to the borrower. In return, the lenders receive a credit claim.¹⁰ After the transaction is consummated, the platform collects a service fee from both parties.¹¹

6. Prosper, for example, provides each loan request with a credit rating represented by seven letters. See PROSPER FUNDING LLC, PROSPECTUS 5 (2018), https://www.prosper.com/Downloads/Legal/Prosper_Prospectus_2018-12-12.pdf. Funding Circle categorizes each loan application into risk bands that range from A+ to E in the United Kingdom, Germany and the Netherlands, and A+ to D in the United States. See FUNDING CIRCLE HOLDINGS LTD., PROSPECTUS 68 (2018), https://lexismarkettracker.lexisnexis.com/documents/0031/31070/151587/MT_Registration%20Document_3%20September%202018_Funding%20Circle%20Holdings%20Limited.pdf. For a general overview of the prescreening process, see Boris Vallée & Yao Zeng, *Marketplace Lending: A New Banking Paradigm?*, 32 REV. FIN. STUD. 1939, 1945 (2019).

7. For example, Prosper adds to each loan application information about “the desired loan amount, interest rate and corresponding yield percentage, the minimum amount of total bids required for the loan to fund, the Prosper Rating [credit rating] and Prosper Score for the listing, the applicant’s debt-to-income ratio, certain credit information from the applicant’s credit report, the applicant’s numerical credit score range, and the applicant’s self-reported annual income range, occupation and employment status.” See PROSPER FUNDING LLC, *supra* note 6, at 5.

8. Lenz, *supra* note 5, at 691–92.

9. Some platforms also offer auto-investment tools that allocates lenders’ funds automatically in accordance with guidelines provided by the lender in advance. Prosper, for example, offers Auto Invest: an automated loan search tool that invests available funds based on investors’ specified investment criteria and allocation targets, helping investors to build their desired portfolio. See PROSPER FUNDING LLC, *supra* note 6, at 70–71.

10. Lenz, *supra* note 5, at 692.

11. Platforms generally charge both origination fees and servicing fees, which are paid during loan reimbursement. See Olena Havrylchuk, *Regulatory*

B. *The Characteristics of P2P Lending Platforms' and Business Models*

While the process by which P2P lending platforms facilitate loan requests is similar in most cases, different platforms provide different types of loans, determine the interest rates differently, and perform the financing process differently, depending on the business model. This Section briefly describes the different business models adopted by P2P lending platforms and outlines their key characteristics.¹² Understanding the characteristics of P2P lending platforms and the differences between different P2P lending platforms' business models is important for the discussion on the optimal regulatory framework, since each model involves different types of borrowers and lenders, with different expectations, exposed to different risk types, and consequently requiring different regulatory responses.

1. *Loan Types*

P2P lending platforms generally focus on one or more of the following types of loans: consumer, business, real estate, and microfinance. Most P2P lending platforms in China and the United States focus on consumer lending. The loans in these platforms are generally unsecured and the interest rates are relatively high. For example, in Prosper, in September 2018, the interest rates ranged from 5.3% to 32.3%;¹³ loan terms are set at three to five years, and loans size range from \$2,000 to \$40,000.¹⁴

Other P2P lending platforms focus on business lending aiming to provide SMEs deemed undeserving by traditional

Framework For The Loan-Based Crowdfunding Platforms 14 (OECD Working Papers No. 1513, 2018), [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ECO/WKP\(2018\)61&docLanguage=EN](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ECO/WKP(2018)61&docLanguage=EN) [hereinafter Havrylchuk, *Regulatory Framework*].

12. For a general overview of P2P lending platforms' business models, see generally Eugenia Omarini, A. *Peer-to-Peer Lending: Business Model Analysis and the Platform Dilemma*, 2 INT'L J. FIN. ECON. TRADE. 31 (2018); COMMITTEE ON THE GLOBAL FINANCIAL SYSTEM (CGFS) AND THE FINANCIAL STABILITY BOARD (FSB), FINTECH: CREDIT MARKET STRUCTURE, BUSINESS MODELS AND FINANCIAL STABILITY IMPLICATIONS 11–16 (May 22, 2017), https://www.bis.org/publ/cgfs_fsb1.pdf.

13. See PROSPER FUNDING LLC, *supra* note 6, at 38.

14. *Id.* at 6.

banks with an external source of finance.¹⁵ A prominent example is Funding Circle, a U.K.-based platform that focuses exclusively on business lending. Loans on Funding Circle stretch from six to 60 months (average of 52 months in 2018), with rates ranging from 1.9% to 27% (average of 11%).¹⁶ The loans are typically unsecured, but if the borrower is a limited-liability company, loans are normally guaranteed by personal guarantees. Amounts range from £5,000 to £1 million (£500K for unsecured loans), and the average in H1 2018 was approximately £70,000.¹⁷

Another type of P2P lending platform is property lending. Compared to consumer and business lending, property lending is less risky, and accordingly, interest rates are lower. Property loans are typically secured against a specific property. For example, U.K.-based platform Proplend offers loans “secured against income producing Commercial Property in England and Wales,”¹⁸ and “takes a 1st charge over the property offered as security.”¹⁹ Proplend offers short-term loans (six to 18 months) for commercial bridging purposes and commercial mortgage loans for up to five years. Amounts range from £250K to £5 million.²⁰

Finally, some P2P lending platforms focus on microfinance, aiming to alleviate world poverty. Unlike P2P business, consumer, and property lending platforms, which are for-profit companies, these are mostly nonprofit organizations. A notable example is Kiva, an international platform

15. SMEs are a main source of employment and economic growth, but they often face significant challenges in obtaining finance from traditional institutes (e.g. high transactions costs and high-risk premiums). P2P business lending platforms emerged as an important alternative source of funding for these businesses. On the importance of SME finance, see generally OECD, FINANCING SMEs AND ENTREPRENEURS 2018: AN OECD SCOREBOARD (2018), <https://www.oecd.org/cfe/smes/Highlights-Financing-SMEs-and-Entrepreneurs-2018.pdf>; WORLD BANK GRP., IMPROVING ACCESS TO FINANCE FOR SMEs: OPPORTUNITIES THROUGH CREDIT REPORTING, SECURED LENDING AND INSOLVENCY PRACTICES (May 2018), <http://www.doingbusiness.org/content/dam/doingBusiness/media/Special-Reports/improving-access-to-finance-for-SMEs.pdf>.

16. FUNDING CIRCLE HOLDINGS LTD., *supra* note 6, at 62.

17. *Id.* at 61–62.

18. *Platform Frequently Asked Questions*, PROPLEND, <https://www.proplend.com/about-platform/frequently-asked-questions/>.

19. *Id.*

20. *Id.*

“with a mission to expand financial access to help underserved communities thrive.”²¹ To this end, Kiva relies on local intermediaries (called field partners), who evaluate borrowers in developing countries and set loan terms accordingly.²² Using field partners, Kiva is able to reach more borrowers in remote and rural places. In Kiva’s model, lenders do not receive any interest from the borrowers; only the field partners do—to cover operational costs.²³ As such, the former group does not expect to profit as a result of a third party’s efforts and hence Kiva, unlike other P2P lending platforms in the United States, is not subject to securities regulation.²⁴

2. *Lender Type: Retail vs. Institutional*

P2P lending platforms were originally designed to serve retail lenders only, but they increasingly opened to institutional lenders such as banks, hedge funds, and pension funds.²⁵ For example, Balyuk and Davydenko analyzed data from Prosper and found that between 2013–2019 retail inves-

21. *About Us*, KIVA, <https://www.kiva.org/about> (last visited Mar. 5, 2020).

22. *How Kiva Works*, KIVA, <https://www.kiva.org/about/how> (last visited Mar. 5, 2020).

23. *Id.*

24. See Kevin E. Davis & Anna Gelpern, *Peer-to-Peer Financing for Development: Regulating the Intermediaries*, 42 N.Y.U. J. INT’L L. & POL. 1209, 1241 (2010); U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-11-613, PERSON-TO-PERSON LENDING: NEW REGULATORY CHALLENGES COULD EMERGE AS THE INDUSTRY GROWS 40–41 (2011) [hereinafter GAO REPORT]; Andrew Verstein, *Misregulation of Person to Person Lending*, 45 U.C. DAVIS L. REV. 445, 516 (2011). Verstein argues that Regulating P2P lending platforms under SEC creates a “cliff effect where some regulated firms face steep compliance burdens but relatively similar firms can avoid all SEC oversight.” *Id.* at 509. P2P lending platforms that offer positive interest rates are treated similarly to traditional public company issuers of securities and consequently face steep compliance burdens, whereas platforms that offer zero interest rates (e.g. Kiva) face no registration and disclosure requirements. In both cases, borrowers pay interest rates and lenders face similar risks, but nevertheless lenders and borrowers’ protection are completely different. Verstein claims that this cliff effect may potentially affect platforms’ incentives, causing them to adopt business models that “they might otherwise consider inefficient or incompatible simply to obtain regulatory freedom.” *Id.* at 516. He further argues that the potential victims of the cliff effect are Kiva’s lenders, “who encounter risks and philanthropy very differently than they might expect.” *Id.*

25. See Balyuk & Davydenko, *supra* note 4, at 11; see also Benjamin Käfer, *Peer to Peer Lending: A (Financial Stability) Risk Perspective* 25–28 (MAGKS Joint

tors funded only 8.4% of loans;²⁶ and Ziegler *et al.* found that the presence of institutional investors in P2P consumer lending platforms in the U.S. market rose from 53% in 2015 to 97% in 2017.²⁷ Consequently, nowadays, most P2P lending platforms target both retail and institutional lenders and offer two lending channels: a “whole loan channel,” through which accredited and institutional lenders can purchase whole listed loans and a “fractional note channel,” through which retail lenders can purchase fractional loans.²⁸

3. *Manual vs. Auto-Bidding*

P2P lending platforms typically offer lenders two options: active and passive. In the first, lenders can place bids directly on loan applications based on the information provided by the platform. That is, lenders assess the information provided by the platform and decide whether to place an offer to fund a loan request based on their own risk assessment. In the second option, by contrast, lenders are not provided any information about a specific loan application. Instead, they select a desired risk category and loan maturity and the platform then matches them to a pool of loan applications that meet their investment criteria.²⁹

In recent years, lenders increasingly rely on automated lending tools rather than manually allocating their funds.³⁰ Some platforms have even completely eliminated the active matching option. Funding Circle, for example, did so in 2017, and now offers only two automated lending options: a “conservative” one, in which lenders’ funds are automatically allocated only to borrowers that assessed as lower risk, and a “balanced” one, in which funds are automatically allocated across

Discussion Paper Series in Economics, Working Paper No. 22, 2016), <https://www.econstor.eu/bitstream/10419/144687/1/858781697.pdf>.

26. Balyuk & Davydenko, *supra* note 4, at 11.

27. TANIA ZIEGLER ET. AL., CAMBRIDGE CTR. FOR ALT. FIN., REACHING NEW HEIGHTS: THE 3RD AMERICAS ALTERNATIVE FINANCE INDUSTRY REPORT 32 (2018), <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/reaching-new-heights/> [hereinafter CCAF, 3RD AMERICAS ALTERNATIVE FINANCE INDUSTRY REPORT].

28. See, e.g., PROSPER FUNDING LLC, *supra* note 6, at 44, 46, 190.

29. See Davis & Murphy, *supra* note 5, at 39–40.

30. See Balyuk & Davydenko, *supra* note 4, at 11–12 (showing that from 2013–2018, over 77% of Prosper’s loans were funded through automated investment tools).

all borrower types.³¹ Funding Circle explained this shift claiming that manually bidding can be confusing to lenders and lead to lack of diversification.³²

4. *Auction vs. Fixed Interest Rate*

Different P2P lending platforms determine the interest rates differently. In the early days of the market, loan rates were determined primarily via a reverse auction model.³³ In this model, borrowers set the maximum interest rate that they were willing to pay, lenders set the minimum rate they are looking to obtain for a given risk category, and the platform then held an automatic reverse auction, “gradually increasing the interest rate payable on the loan until there are sufficient bids to fully fund the loan.”³⁴ However, empirical evidence suggested that, as time went by, the reverse auction model was gradually replaced by a fixed interest rate model, with fixed rates set in advance for each risk category.³⁵ For example, Prosper and Funding Circle moved from a reverse auction to a fixed interest rate model in 2010 and 2015, respectively.³⁶ One of the main reasons for this, according to Funding Circle, is that auctions are typically confusing and complex, and are

31. *How Do I Become an Investor and How Do I Lend?*, FUNDING CIRCLE, <https://support.fundingcircle.com/hc/en-us/articles/214635866-How-do-I-lend-> (last visited Mar. 10, 2020).

32. Maria Terekhova, *Funding Circle Simplifies Its Investment Protocol*, BUS. INSIDER (Aug. 22, 2017), <https://www.businessinsider.com/funding-circle-simplifies-its-investment-protocol-2017-8>.

33. See Balyuk & Davydenko, *supra* note 4, at 2.

34. Alistair Milne & Paul Parboteeah, *The Business Models and Economics of Peer-to-Peer Lending* 5 (European Credit Research Inst., Working Paper No. 17, 2016), <https://www.ceps.eu/system/files/ECRI%20RR17%20P2P%20Lending.pdf>.

35. See Balyuk & Davydenko, *supra* note 4, at 7, 17–19. This trend is not unique to P2P lending platforms. Einav et al., for example, document a similar trend in the e-commerce market, analyzing eBay’s switch from auctions to posted prices. See Liran Einav, Chiara Farronato, Jonathan Levin & Neel Sundaresan, *Auctions Versus Posted Prices in Online Markets*, 126 J. POL. ECON. 178 (2018).

36. See Peter Renton, *Prosper.com Has a New Look and a New Business Model*, LEND ACAD.: LENDIT FINTECH NEWS (Dec. 20, 2010), <https://www.lendacademy.com/prosper-com-has-a-new-look-and-a-new-business-model/>; *Fixed Interest Rate Loans – Important Funding Circle Update*, FUNDING CIRCLE (Sept. 2, 2015), <https://www.fundingcircle.com/blog/2015/09/fixed-interest-rate-loans-important-funding-circle-update/>.

thus unattractive to borrowers, who cannot assess the costs associated with their loans in advance.³⁷

5. *The Notary vs. Segregated Account Model*

P2P lending platforms generally implement either a client segregated account or a notary model. Under the former, the platform itself originates the loans, but the funds collected are managed in segregated client accounts, separate from the platform's balance sheet.³⁸ The rationale is that in the event of platform insolvency, lenders and borrowers' funds will not be affected, and the P2P loan request contracts will remain valid.³⁹ In other words, the creditors are the lenders themselves. This model has been adopted by platforms in the U.K. (e.g., Zopa) and China (e.g., Lufax).

Under the notary model, by contrast, the loan is originated by a partnering bank, which means that lenders and borrowers are not in a direct contractual relationship. This model has been adopted by US platforms, since in the United States only licensed banks are entitled to originate loans.⁴⁰ In Prosper, for example, the platform first issues a series of notes for each loan. Subsequently, a third-party bank, WebBank, "originates and disburses the loan to the corresponding borrower and then sells it to [Prosper]. . . in exchange for principal amount received from the sale of corresponding notes."⁴¹ In contrast with the segregated account model, here the platform becomes the creditor and hence, in the event of borrower default, lenders have claims only towards the platform. This model has been criticized for imposing greater credit risks on lenders.⁴² Table 1 below summarizes the business models discussed in this Section.

37. See *Important Update: We've Introduced Fixed Interest Rates for All New Loans*, FUNDING CIRCLE, <https://www.fundingcircle.com/uk/fixerate/> (last visited Mar. 10, 2020).

38. See Huang, *supra* note 5, at 70; see also Lenz, *supra* note 5, at 692.

39. See Lenz, *supra* note 5, at 692.

40. *Id.*

41. GAO REPORT, *supra* note 24, at 12; PROSPER FUNDING LLC, *supra* note 6, at 6.

42. See, e.g., Paul Slattery, *Square Pegs in a Round Hole: SEC Regulation of Online Peer-to-Peer Lending and the CFPB Alternative*, 30 YALE J. REG. 233, 248 (2013); Verstein, *supra* note 24, at 489.

TABLE 1: P2P LENDING BUSINESS MODELS

Category	Subcategory
A. Loan Types	1. P2P Consumer Lending (e.g., Prosper). 2. P2P Business Lending (e.g., Funding Circle). 3. P2P Property Lending (e.g., Proplend). 4. P2P Microfinance Lending (e.g., Kiva).
B. Lending Channels	1. Whole Loan Channel. 2. Fractional Loan Channel.
C. Matching Services	1. Passive Matching. 2. Active Matching.
D. Pricing Mechanisms	1. Reverse Auction Model. 2. Fixed Interest Rate Model.
E. Financing Process	1. Client Segregated Account (e.g., Zopa). 2. Notary Model (e.g., Prosper).

C. *The Intermediary Role of P2P Lending Platforms*

P2P lending platforms were originally designed to act as online marketplaces that only matched lenders with borrowers, but evolved over time into new intermediary roles, “performing essentially all tasks related to loan evaluation [e.g., loan evaluation and pricing].”⁴³ Based on the previously discussed characteristics of P2P lending platforms, this Section analyzes the new financial intermediary role of P2P lending platforms,⁴⁴ to gain a better understanding of the risk allocation between the different parties involved in P2P lending transactions, essential for discussing the optimal regulatory framework.

Traditional financial intermediaries typically perform two functions: brokerage and maturity and risk transformation.⁴⁵ P2P lending platforms were originally designed to perform the brokerage function by allowing lenders (supply side) and borrowers (demand side) to transact directly with each other online.⁴⁶ Over time, however, these platforms began performing additional brokerage activities, filling the new gaps that were created by the disintermediation of banks. First, nowadays,

43. Balyuk & Davydenko, *supra* note 4, at 1.

44. For a similar discussion, see Olena Havrylchuk & Marianne Verdier, *The Financial Intermediation Role of the P2P Lending Platforms*, 60 *COMP. ECON. STUD.* 115 (2018).

45. *Id.* at 116.

46. *Id.*

platforms tend to collect information on borrowers, verify it, and perform prescreening—i.e., they assess borrowers' creditworthiness and decide whether to accept or reject their application. By doing so, they help overcome informational asymmetries between lenders and borrowers that can result in credit rationing, whereby lenders are unwilling to fund loans at any rate due to concerns about borrowers' hidden riskiness.⁴⁷ Second, as mentioned, P2P lending platforms are gradually replacing the reverse auction model with the fixed interest rate model.⁴⁸ Finally, platforms are gradually becoming more active in matching borrowers with lenders, with increasing number of lenders investing in loans through auto-investment tools that allocate their funds automatically in accordance with their pre-determined preferences.⁴⁹ Overall, P2P lending platforms are gradually performing more and more brokerage activities—e.g., screening, pricing, and matching services—and consequently, lenders are becoming more passive.

The second function of traditional financial intermediaries is maturity and risk transformation. Unlike banks, P2P lending platforms do not take deposits or perform maturity transformation; rather, the liability of borrowers in these platforms has the same maturity as the lender's asset.⁵⁰ The absence of maturity transformation services can be considered as a benefit, since it prevents the risk of a bank run.⁵¹ On the other hand, it creates liquidity risk for lenders, "who may not fully understand the risks involved in investing in illiquid stocks."⁵² To mitigate this risk, a growing number of P2P lending platforms operate secondary markets, allowing lenders to

47. Balyuk & Davydenko, *supra* note 4, at 14; *see also* Joseph E. Stiglitz & Andrew Weiss, *Credit Rationing in Markets with Imperfect Information*, 71 AM. ECON. REV. 393 (1981).

48. *See* Balyuk & Davydenko, *supra* note 4; Havrylchuk & Verdier, *supra* note 44, at 120–21.

49. *See* Balyuk & Davydenko, *supra* note 4, at 12–13.

50. *See* Käfer, *supra* note 25, at 23–24.

51. *See* Douglas W. Diamond & Philip H. Dybvig, *Bank Runs, Deposit Insurance, and Liquidity*, 91 J. POL. ECON. 401 (1983).

52. Eleanor Kirby & Shane Worner, *Crowd-funding: An Infant Industry Growing Fast* 27 (Staff Working Paper of the IOSCO Research Department, Paper No. 3, 2014), <https://memofin-media.s3.eu-west-3.amazonaws.com/uploads/library/pdf/Crowd-funding-An-Infant-Industry-Growing-Fast%5b1%5d.pdf>.

liquidate their loans.⁵³ Although the existing secondary markets are still limited and do not operate globally, they are constantly evolving, and some platforms have begun implementing automated investment tools to help lenders reallocate their funds in secondary markets (e.g., LendingRobot).⁵⁴

Finally, a growing number of P2P lending platforms provide tools intended to help lenders manage their credit risks. To begin with, many platforms offer auto-investment tools that can reduce lenders' risk by diversifying their loan portfolios across different borrowers, as well as between old and new loans on the secondary market, and thus reduce their credit risk.⁵⁵ Additionally, some platforms offer contingency funds designed to cover losses for lenders in the event of default.⁵⁶ These funds "may be funded by borrowers, investors or in some cases using the platform's own money (including money the platform would otherwise take as profit if no default occurs),"⁵⁷ and serve as an additional lender risk-reduction tool.

To conclude, P2P lending platforms, originally developed to match lenders with borrowers on an online platform, have begun providing various financial intermediary services. They provide loan screening and loan pricing services, allowing lenders participating in P2P lending platforms to become more passive. Additionally, they operate secondary markets to mitigate the liquidity risk, and auto-investment tools and contingency funds to help lenders manage their credit risk. Regulators should pay close attention to the changing scope of the intermediary role of P2P lending platforms, which transforms the risk allocation between the parties involved.

II.

OVERVIEW OF THE P2P LENDING MARKET

Part I provided a comprehensive overview of P2P lending platforms and described their intermediary role in the online

53. See Havrylchyk & Verdier, *supra* note 44, at 122.

54. See Käfer, *supra* note 25, at 25.

55. See Havrylchyk & Verdier, *supra* note 44, at 123.

56. See *id.* at 123–24; FIN. CONDUCT AUTH., LOAN-BASED ('PEER-TO-PEER') AND INVESTMENT-BASED CROWDFUNDING PLATFORMS: FEEDBACK ON OUR POST-IMPLEMENTATION REVIEW AND PROPOSED CHANGES TO THE REGULATORY FRAMEWORK 18 (Consultation Paper CP18/20, June, 2018) [hereinafter FCA, CP18/20].

57. FCA, CP18/20, *supra* note 56, at 18.

lending market. This Part complements it by providing a macro, high-level overview of the development and expansion of the P2P lending market. Section II.A describes the key factors behind the rapid expansion of P2P lending platforms. Section II.B compares P2P lending markets in China, the U.K., and the United States. Section II.C outlines three recent market trends: institutionalism, re-intermediation, and the development of secondary markets.

A. *Key Drivers*

Since its emergence in 2005, the P2P lending market experienced extraordinary growth and by 2017, it already reached a global volume of over \$300 billion.⁵⁸ The rapid growth and expansion of this market have attracted significant attention from researchers, who examine its drivers. This Section reviews this literature and outlines three sets of determinants that have encouraged the formation and expansion of P2P lending platforms.

The first set of drivers relates to the global financial crisis.⁵⁹ Although the P2P lending market emerged before the crisis, P2P platforms became especially popular in its aftermath. Commentators have attributed this rapid crisis-related growth to both credit demand and supply sides factors. On the credit demand side, one line of literature suggests that banks' instability and the public's mistrust of them after the global financial crisis pushed borrowers to seek an alternative source of funding.⁶⁰ Public confidence in the regulated banking sys-

58. See generally BRYAN ZHANG ET AL., CAMBRIDGE CTR. FOR ALT. FIN., 5TH UK ALTERNATIVE FINANCE INDUSTRY REPORT (Nov. 2017), <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/5th-uk-alternative-finance-industry-report/> [hereinafter CCAF, 5TH UK ALTERNATIVE FINANCE INDUSTRY REPORT]; CCAF, 3RD AMERICAS ALTERNATIVE FINANCE INDUSTRY REPORT, *supra* note 27; TANIA ZIEGLER ET AL., CAMBRIDGE CTR. FOR ALT. FIN., 3RD ASIA PACIFIC REGION ALTERNATIVE FINANCE REPORT (Nov. 2018), <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/3rd-asia-pacific-region-alternative-finance-industry-report/> [hereinafter CCAF, 3RD ASIA PACIFIC REGION ALTERNATIVE FINANCE REPORT].

59. See, e.g., Olena Havrylchuk et al., *The Expansion of the Peer-to-Peer Lending* (July 2019) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2841316.

60. On the increasing distrust in banks in the aftermath of the global financial crisis, see, e.g., *Financial Crisis, Five Years on: Trust in Banking Hits*

tem decreased due to the realization that the financial system cannot survive the failure of several large banks,⁶¹ and consequently, the demand for a diversified financial system increased. Another line of literature focuses on the credit supply side and shows that due to a stringent regulation on banks' capital, liquidity, and corporate structure after the crisis, banks became more selective when granting loans, thus reducing credit supply.⁶² Block, De Vries and Sandner analyzed the effects of the crisis on venture capital firms, and found similar results, which suggest that these firms became more selective after the financial crisis, pushing start-ups to seek alternative funding sources.⁶³ Small startups, unlike large companies, typically have no access to additional sources of credit, such as initial public offerings, and hence their need for an external source after the crisis became urgent.

The second set of drivers relates to the rapid expansion of information and communication technologies. Kirby and

New Low, GUARDIAN (Aug. 9, 2012), <https://www.theguardian.com/business/2012/aug/09/financial-crisis-anniversary-trust-in-banks>; Lawrence White, *British Public Don't Trust Banks 10 Years After Crisis, Survey Finds*, REUTERS (Aug. 16, 2018), <https://uk.reuters.com/article/uk-britain-banks/british-public-dont-trust-banks-10-years-after-crisis-survey-finds-idUKKBN1L11EL>.

61. Shahar Ayal, Daphna Bar-Haim & Moran Ofir, *Behavioral Biases in Peer-to-Peer (P2P) Lending*, in BEHAVIORAL FINANCE: THE COMING OF AGE 367, 368 (Itzhak Venezia ed., 2019).

62. Puri, Rocholl, and Steffen, for example, analyzed the effects of the financial crisis on global lending to retail customers, based on data set of German savings banks from 2006–2008, and found that banks affected by the U.S. financial crisis became more selective in granting retail loans compared to unaffected banks. See Manju Puri, Jörg Rocholl & Sascha Steffen, *Global Retail Lending in the Aftermath of the US Financial Crisis: Distinguishing between Supply and Demand Effects*, 100 J. FIN. ECON. 566 (2011). In line with these results, De Roure, Pelizzon, and Thakor found that “banks lose market share to P2P lenders when banks are faced with an exogenous increase in regulatory costs,” due to the reduction in credit supply. In other words, they found that P2P lending platforms have at least partly replaced banks affected by the global financial crisis and reduced the credit supply side. See Calebe de Roure, Lorian Pelizzon & Anjan V. Thakor, *P2P Lenders Versus Banks: Cream Skimming or Bottom Fishing?* 18 (Sustainable Architecture for Fin. in Europe (SAFE), Goethe Univ. Frankfurt, Working Paper No. 206, 2018).

63. See Joern H. Block, Geertjan De Vries & Philipp Sandner, *Venture Capital and the Financial Crisis: An Empirical Study Across Industries and Countries*, in THE OXFORD HANDBOOK OF VENTURE CAPITAL 37 (Douglas Cumming ed., 2012).

Worner claim that the development of P2P lending platforms can be attributed to Web 2.0 applications.⁶⁴ 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” (e.g., EBay).⁶⁵ Web 2.0 applications typically act as a two-sided market, wherein a “platform creates value by connecting two (or more) distinct groups of users. It facilitates interactions between them by lowering transaction costs and search costs.”⁶⁶ P2P lending platforms were inspired by these ideas and emerged as online platforms that connected borrowers and lenders while reducing transaction and search costs for both sides. Another study, by Huang, analyzed factors that drove market growth in China and suggested that the rapid growth of the retail e-commerce market, combined with the rapid adoption of the internet, provided a solid basis for online lending platforms, many of which were financial subsidiaries of e-commerce giants.⁶⁷ Relatedly, Haddad and Hornuf analyzed determinants that encouraged fintech startup formation, including P2P lending platforms, and found that the rapid expansion of the internet and mobile phones had a positive impact on the development of this market segment, allowing new platforms to access a wider consumer base, including customers who previously could not be reached.⁶⁸

The third set of drivers relates to countries’ legal and economic characteristics. Rau found that the general characteristics of the legal system—e.g., the quality of regulation—positively affect crowdfunding financing volume (including P2P lending) in a country.⁶⁹ Haddad and Hornuf found that fintech startups, including P2P lending platforms, were more likely to emerge in well-developed economies and capital markets, where entrepreneurs had better access to funds required

64. See Kirby & Worner, *supra* note 52, at 12.

65. *Id.*

66. Havrylchuk & Verdier, *supra* note 44, at 117.

67. Huang, *supra* note 5, at 66.

68. Christian Haddad & Lars Hornuf, *The Emergence of the Global Fintech Market: Economic and Technological Determinants*, 53 *SMALL BUS. ECON.* 81 (2019).

69. P. Raghavendra Rau, *Law, Trust, and the Development of Crowdfunding* (May 31, 2019) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2989056.

to finance their businesses.⁷⁰ Finally, Rau and Claessens *et al.* found that less competitive banking sectors were positively related to higher P2P and crowdfunding lending activities,⁷¹ suggesting that a “less competitive banking system could mean higher margins on bank credit and thus boost alternative credit sources like fintech credit.”⁷² Some commentators also attributed the expansion of P2P lending platforms to learning costs, indicating that their expansion was faster in countries with a more educated, urban, and young population.⁷³ These results rely on the notions that human capital, proxied by education, can diminish the learning costs associated with the switch from banks to P2P lending platforms and that younger populations are more likely to adopt new technologies.

B. *Characteristics of P2P Lending Markets*

Having understood what drove the expansion of P2P lending platforms, this Section compares P2P lending markets in the U.K., the United States, and China.⁷⁴ For each market, it describes the market value, dominant loan type, types of borrowers and lenders, proportion of institutional funding in P2P lending platforms, and level of market concentration. This analysis helps assess how different regulatory responses have affected this growing market and thus is essential for discussing the optimal regulatory framework.

The U.K. is the birthplace of P2P lending platforms and the largest alternative finance market in Europe.⁷⁵ The alternative financial market in the U.K. has experienced rapid growth in recent years and reached a total market volume of £6.2 billion in 2017, representing an annual growth rate of

70. Haddad & Hornuf, *supra* note 68.

71. See Rau, *supra* note 69; Stijn Claessens et al., *Fintech Credit Markets around the World: Size, Drivers and Policy Issues*, BIS Q. REV. 29 (2018).

72. Claessens et al., *supra* note 71, at 36.

73. Havrylchuk et al., *supra* note 59, at 10.

74. For an overview of the dominant platforms that operate in each country, see Eugenia Macchiavello, *Peer-to-Peer Lending and the Democratization of Credit Markets: Another Financial Innovation Puzzling Regulators*, 21 COLUM. J. EUR. L. 521, 527–36 (2015).

75. See TANIA ZIEGLER ET AL., CAMBRIDGE CTR. FOR ALT. FIN., SHIFTING PARADIGMS: THE 4TH EUROPEAN ALTERNATIVE FINANCE BENCHMARKING REPORT 16 (2019), <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/shifting-paradigms/>.

35.2% since 2011.⁷⁶ The largest alternative finance platforms in the U.K. are P2P business and consumer lending platforms. The former reached a total market volume of £2.04 billion in 2017, up from £193 million in 2013, and the latter reached a total market volume of £1.4 billion.⁷⁷ Combined, P2P lending platforms generated approximately £4.66 billion in 2017.

The U.K. market is relatively concentrated, with the three largest platforms—Funding Circle (35.04%), Zopa (30.34%), and Ratesetter (23.12%)—accounting for over 88% of the local online lending market in January 2020.⁷⁸ The presence of institutional investors in alternative finance platforms in the U.K. is relatively small but increasing in a steady pace, rising from 26% and 32% in 2015 to 40% and 39% in 2017 in business and consumer lending platforms, respectively.⁷⁹

The U.S. market has also experienced rapid growth during the same period. In 2015, it was dominated by consumer lending, which reached a total market volume of \$18 billion, representing an annual growth rate of 204% from 2013–2015. P2P business lending generated a much smaller volume in 2015, valued at \$2.58 billion. In 2017, P2P consumer lending market volume shrunk to a total market volume of \$14.7 billion, down from \$21 billion in 2016. Similarly, the P2P business lending volume decreased to \$1.45 billion in 2017.

The proportion of institutional lenders in the U.S. market is significant. In 2017, 97% (76%) of the volume in P2P consumer (business) lending platforms was driven by institutional investors. The proportion of banked borrowers in alternative finance platforms in the United States is relatively high, with 72% borrowers having full access to bank financial services.⁸⁰ The P2P lending market is highly concentrated, dominated by

76. BRYAN ZHANG ET AL., CAMBRIDGE CTR. FOR ALT. FIN., PUSHING BOUNDARIES: THE 2015 UK ALTERNATIVE FINANCE INDUSTRY REPORT 15 (Feb. 2016), <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/pushing-boundaries/>; CCAF, 5TH UK ALTERNATIVE FINANCE INDUSTRY REPORT, *supra* note 58.

77. *Id.*

78. See *P2P Lending & Equity in the UK (GBP)*, P2PMARKETDATA, <https://p2pmarketdata.com/p2p-lending-funding-volume-uk/> (last updated Jan. 31, 2020).

79. See CCAF, 5TH UK ALTERNATIVE FINANCE INDUSTRY REPORT, *supra* note 58.

80. CCAF, 3RD AMERICAS ALTERNATIVE FINANCE INDUSTRY REPORT, *supra* note 27, at 49.

Lending Club and Prosper, who in January 2020 were jointly responsible for over 93% of the market.⁸¹

China is the largest market in the world. Established in 2006–2007, the Chinese P2P lending market quickly became the largest in terms of both volume and number of platforms. China's alternative finance market reached a total volume of \$358 billion in 2017, up from a mere \$6 billion in 2013, accounting for 99% of the overall Asia region market volume.⁸² The largest alternative finance models in China are P2P consumer and business lending platforms.⁸³ The former reached a total market volume of \$52.4 billion in 2015 and continued to develop, reaching a market volume of \$224.4 billion in 2017.⁸⁴ Similarly, the total volume of P2P business lending developed rapidly and reached \$97.4 billion in 2017.⁸⁵

The presence of institutional lenders in P2P lending platforms is significantly lower than in the United States, with only 5% and 6% in P2P business and consumer lending platforms, respectively, in 2016.⁸⁶ Interestingly, but not surprisingly, the proportion of borrowers in alternative financial platforms with inadequate or no access to credit from conventional banks is

81. See *P2P Lending & Equity in the US (USD)*, P2PMARKETDATA, <https://p2pmarketdata.com/p2p-lending-funding-volume-usa/> (last updated March 31, 2020).

82. CCAF, 3RD ASIA PACIFIC REGION ALTERNATIVE FINANCE REPORT, *supra* note 58, at 25.

83. *Id.*, at 31.

84. CCAF, 3RD ASIA PACIFIC REGION ALTERNATIVE FINANCE REPORT, *supra* note 58, at 32.

85. *Id.* It worth mentioning that the Chinese market has dropped sharply in recent years (2018–2020) due to new regulatory provisions. For example, Reuters reports that “[o]nly 427 existing P2P firms were still operating by the end of October [2019], down from 6,000 at their 2015 peak.” Cheng Leng & Engen Tham, *China Gives P2P Lenders Two Years to Exit Industry: Document*, REUTERS (Nov. 28, 2019), <https://uk.reuters.com/article/us-china-p2p/china-gives-p2p-lenders-two-years-to-exit-industry-document-idUKKBN1Y2039>. However, due to lack of clear and consistent data (about our variables) with relation to the Chinese market in these years, we decided to limit our analysis to the year 2017.

86. See Kieran Garvey et al., CAMBRIDGE CTR. FOR ALT., CULTIVATING GROWTH: THE 2ND ASIA PACIFIC REGION ALTERNATIVE FINANCE INDUSTRY REPORT 37 (2017), https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2017-09-cultivating-growth.pdf; CCAF, 3RD ASIA PACIFIC REGION ALTERNATIVE FINANCE REPORT, *supra* note 58, at 39.

relatively high, amounting to 40% and 6%, respectively.⁸⁷ Table 2 summarizes these results.

TABLE 2: THE AMERICAN, CHINESE, AND BRITISH P2P MARKETS IN 2017⁸⁸

Variable	US	China	UK
ALTERNATIVE FINANCE MARKET			
Total Market Volume	\$42.8bn	\$358bn	£6.19bn
Largest Alternative Finance Model	Balance Sheet Consumer Lending	P2P Consumer Lending	P2P Business Lending
No. of SMEs That Raised Capital through Online Alternative Finance (Amount Raised)	130,264 (\$10.1bn)	103,476 (\$2.23bn)	29,500 (£4.2bn)
THE P2P MARKET			
P2P Consumer Lending	\$14.66bn	\$224.4bn	£1.4bn
P2P Business Lending	\$1.45bn	\$97.4bn	£2.04bn
P2P Real Estate Lending	\$1.23bn	\$5.9bn	£1.22bn
Market Concentration	<i>Concentrated.</i> Lending Club and Prosper account for over 93% of the market (2020)	<i>Dispersed.</i> The biggest 100 platforms account for less than 30% of the market (2018)	<i>Concentrated.</i> Three platforms account for over 85% of the market (2019)
Dominant Loan Type	Consumer	Consumer	Business
Dominant Business Model	Notary Model	Segregated Account Model	Segregated Account Model
STATUS OF P2P LENDERS AND BORROWERS			
Proportion of Institutional Funding in P2P Consumer Lending	97%	6% (2016)	39%
Proportion of Institutional Funding in P2P Business Lending	76%	5% (2016)	40%
Proportion of Institutional Funding in P2P Real Estate Lending	80%	15% (2016)	34%

87. See CCAF, 3RD ASIA PACIFIC REGION ALTERNATIVE FINANCE REPORT, *supra* note 58, at 53.

88. See CCAF, 3RD AMERICAS ALTERNATIVE FINANCE INDUSTRY REPORT, *supra* note 27, at 12, 28, 31, 56; CCAF, 3RD ASIA PACIFIC REGION ALTERNATIVE FINANCE REPORT, *supra* note 58, at 19, 20, 32, 39; CCAF, 5TH UK ALTERNATIVE FINANCE INDUSTRY REPORT, *supra* note 58, at 7, 11, 13, 17; Claessens et al.,

C. *Recent Trends*

The P2P lending market, although relatively young, has changed profoundly over the last decade. This Section identifies three recent trends in this rapidly growing market—institutionalism, re-intermediation, and the development of secondary markets—and explains their effects.

1. *Institutionalism*

P2P lending platforms were originally designed to serve retail lenders only, but increasingly opened to institutional lenders such as banks, hedge funds, and pension funds.⁸⁹ Recent estimates suggest that institutional lenders are increasingly dominating the P2P lending market. Ziegler et al., for example, found that in 2017, 97% (76%) of the volume in P2P consumer (business) lending platforms in the U.S. market was driven by institutional lenders.⁹⁰ The entrance of the institutional lenders to the P2P lending market has coincided with increasing securitization of P2P loans.⁹¹ As the P2P lending market grows, so does the need for funding, and to meet this need, P2P lending platforms have increasingly begun “bundling loans together and selling them off to institutional investors as ‘asset-backed securities.’”⁹²

supra note 71, at 41 (find that as of July 2018, the biggest 100 platforms in China account for less than 30% of the market).

89. See Balyuk & Davydenko, *supra* note 4, at 11; see also Käfer, *supra* note 25, at 25–28.

90. CCAF, 3RD AMERICAS ALTERNATIVE FINANCE INDUSTRY REPORT, *supra* note 27, at 31. This development is not unique to US platforms, and commentators suggest that other platforms operating in the U.K. and in Asia (excluding China) are gradually being dominated by institutional lenders as well. See, e.g., Balyuk & Davydenko, *supra* note 4, at 11; CCAF, 5TH UK ALTERNATIVE FINANCE INDUSTRY REPORT, *supra* note 58, at 17–18. In the rest of Europe, however, it seems that retail lenders still provide most the funding. See TANIA ZIEGLER ET AL., CAMBRIDGE CTR. FOR ALT. FIN., SHIFTING PARADIGMS: THE 4TH EUROPEAN ALTERNATIVE FINANCE BENCHMARKING REPORT (2019), <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/shifting-paradigms/> (showing that although the nominal value of institutional investment in P2P consumer and business lending has increased year-over-year, its share has fallen compared to retail investment).

91. See Käfer, *supra* note 25, at 25–26; U.S. DEP’T OF THE TREASURY, OPPORTUNITIES AND CHALLENGES IN ONLINE MARKETPLACE LENDING 35–36 (2016).

92. Jeff Cox, *Does This Sound Familiar? Peer Lenders Are Packaging Loans and Selling Them to Wall Street*, CNBC (Feb. 9, 2017), <https://www.cnbc.com/>

The entrance of institutional lenders is important for several reasons. To begin with, these actors are often referred to as “smart money,” in the sense that given their expertise and adequate sources of capital, they can choose investments that yield higher returns⁹³ and their entrance increases the heterogeneity of lenders’ sophistication in P2P lending. Recent empirical studies analyzed how the entrance of institutional lenders changed the P2P lending market and showed that it strongly affected retail lenders’ behavior and reshaped platforms’ incentives. For example, Lin et al. studied how the labeling of institutional investors in Prosper as “Institutional Lenders” affected retail lenders’ behavior and found that retail investors were crowded out.⁹⁴ Another study, by Vallée and Zeng, examined how the participation of institutional lenders affected platforms’ design choice.⁹⁵ It theorized that in maximizing loan volume, a platform trades off the positive and negative effects associated with sophisticated lenders participation. On the one hand, it showed, theoretically and empirically, that sophisticated lenders actively screen listed loans and their participation improves platforms’ screening outcomes. On the other hand, it argued that the heterogeneity in lenders’ sophistication creates an adverse selection problem among lenders, which can reduce loan volume. It showed that sophisticated lenders screen loans differently than retail lenders, significantly outperforming them, and claimed that “[b]ecause sophisticated investors can identify and finance good loans before unsophisticated investors invest, sophisticated investor participation lowers the average quality of loans eventually facing unsophisticated investors.”⁹⁶ Moreover, being aware of this adverse selection problem, unsophisticated investors may require a higher interest rate that may reduce

2017/02/09/peer-lenders-packaging-loans-and-selling-to-wall-st-in-big-numbers.html.

93. See Martin J. Gruber, *Another Puzzle: The Growth in Actively Managed Mutual Funds*, 51 J. FIN. 783, 807 (1996); Lu Zheng, *Is Money Smart? A Study of Mutual Fund Investors’ Fund Selection Ability*, 54 J. FIN. 901 (1999); Mingfeng Lin, Richard Sias & Zaiyan Wei, *Institutional Investors in Online Crowdfunding* (Jan. 2017) (unpublished manuscript), http://www.fmaconferences.org/Boston/II_LSW.pdf.

94. Lin, Sias & Wei, *supra* note 93, at 4.

95. Vallée & Zeng, *supra* note 6, at 1939.

96. *Id.* at 1941.

the amount of loan applications on the platform.⁹⁷ Finally, the study found that these effects shrink when the platform reduces the amount of information available to lenders and concluded that the platform trades off these two effects when managing its information production.

Finally, the growing involvement of institutional lenders in P2P lending platforms raises concerns with financial stability risks, as it increases the exposure of the general financial system to P2P lending.⁹⁸ For these reasons, regulators should pay close attention to the entrance of institutional lenders and monitor the effects associated it, including financial stability concerns and fair treatment between retail and institutional P2P lenders.

2. *Re-Intermediation*

P2P lending platforms were originally designed to act as online marketplaces that only matched lenders with borrowers, thereby disintermediating traditional intermediaries. Over time, however, they evolved into new intermediaries, and began “performing essentially all tasks related to loan evaluation [e.g., loan evaluation and pricing]”⁹⁹—a process often referred to as re-intermediation.

The rationale behind this shift can be explained by the theoretical model presented by Vallée and Zeng. In their model, “sophisticated investors can choose to become informed and perform additional screening at a cost, whereas unsophisticated investors buy all loans on offer as long as the average loan quality is high enough for them to break even.”¹⁰⁰ The model predicts that when platform pre-screening cost is high, at its early days, it optimally chooses to perform less pre-screening tasks and disclose more information to investors. Under these conditions, the model predicts that “sophisticated investors will actively screen loans and pick only high-quality ones, while unsophisticated investors will not par-

97. *See id.* at 1942.

98. *See generally* Macchiavello, *supra* note 74, at 542; Shen Wei, *Internet Lending in China: Status Quo, Potential Risks and Regulatory Options*, 31 *COMPUTER L. & SECURITY REV.* 793, 806 (2015).

99. Balyuk & Davydenko, *supra* note 4, at 1.

100. *Id.* at 2; *see also* Vallée & Zeng, *supra* note 6, at 1941–42.

ticipate in the market.”¹⁰¹ However, as the platform develops, “there comes a point at which its loan assessment becomes sufficiently accurate to attract unsophisticated investors, who fully rely on the platform’s judgment. The equilibrium then switches to one in which the platform does all the screening”¹⁰² and distributes less information to investors.

This change in the financial intermediary role of P2P lending platforms should be a special focus of financial regulators, since it affects the risk allocation between the parties involved in P2P lending transactions. By providing screening, credit assessment, and matching services, platforms can reduce lenders’ transaction costs, increase their diversification, and mitigate adverse selection problems faced by lenders (who cannot assess the quality of borrowers *ex ante*).¹⁰³ To ensure that these problems are appropriately mitigated, however, regulators should modify their supervision to better suit the financial intermediary role of platforms.

3. *Secondary Markets*

A growing number of P2P lending platforms operate secondary markets, allowing lenders to liquidate their loans.¹⁰⁴ Prominent examples include U.K.-based Zopa, which offers an internal secondary market called “Rapid Returns,”¹⁰⁵ and the largest platforms in the United States, Lending Club and Prosper, which provide lenders the option of selling their loan shares before the maturity date through a third-party secondary market platform called Folio Investing (although Prosper

101. Balyuk & Davydenko, *supra* note 4, at 3; Vallée & Zeng, *supra* note 6, at 1941.

102. Balyuk & Davydenko, *supra* note 4, at 2–3; Vallée & Zeng, *supra* note 6, at 1941.

103. The adverse selection risk is particularly high in the context of P2P lending due to platforms’ tendency to finance riskier projects (compared to traditional alternatives). See Havrylchuk, *Regulatory Framework*, *supra* note 11, at 23.

104. See generally Havrylchuk & Verdier, *supra* note 44, at 122; FCA, CP18/20, *supra* note 56, at 18.

105. See *Safeguard and Rapid Return Loans*, ZOPA BLOG (June 24, 2013), https://blog.zopa.com/2013/06/24/safeguard_and_rapid_return_loans/.

shut it down in 2016).¹⁰⁶ Despite their recent growth, however, the relative size of P2P secondary markets is still limited.¹⁰⁷

The development of secondary markets for P2P loans improves lender liquidity and is thus essential for the development of the market.¹⁰⁸ At the same time, however, it raises new regulatory concerns. Commentators in the U.K. have claimed that the existing secondary markets are still limited in size and may create false perceptions about liquidity and investors' ability to exit.¹⁰⁹ Others have claimed that the existence of these markets may raise concerns "about insider trading and market abuse (when loans are traded with discounts and premiums)."¹¹⁰ These concerns, combined with the essential role of secondary markets in the development of the P2P lending market, require regulators to pay close attention to the development of the former. In general, they should strive to ensure that appropriate mechanisms exist to prevent and detect market manipulation practices and that the promotion of secondary market services is not misleading.¹¹¹

III.

POTENTIAL BENEFITS AND RISKS

P2P lending platforms utilize innovation technologies (AI and big data analytic tools) to cut out traditional intermediaries, and consequently, create a new set of benefits and risks.¹¹² This Section discusses these benefits and risks from the perspective of borrowers', lenders', and the market. Understanding these perspectives is essential in order to determine *how* borrowers and lenders should be protected and *who*

106. See Kevin Wack, *Prosper Shuts Down the Secondary Market for Its Loans*, AM. BANKER (Oct. 3, 2016), <https://www.americanbanker.com/news/prosper-shuts-down-the-secondary-market-for-its-loans>.

107. See Havrylchuk, *Regulatory Framework*, *supra* note 11, at 21.

108. Nevertheless, the regulatory status of these secondary markets remained unclear in several jurisdiction and they were even forbidden in some countries. *See id.*

109. See FCA, CP18/20, *supra* note 56, at 32. See also U.S. DEP'T OF THE TREASURY, *supra* note 91, at 25–26 (stating that existing secondary markets for P2P loans are limited in size and discusses their importance).

110. Havrylchuk, *Regulatory Framework*, *supra* note 11, at 21.

111. *Id.* at 22.

112. For an overview of the risks and benefits associated with P2P lending platforms, see generally Lenz, *supra* note 5, at 694–97; Macchiavello, *supra* note 74, at 536–42; Kirby & Worner, *supra* note 52, at 21–28.

should be responsible for regulating these platforms. If, for example, P2P lending platforms create greater risks to lenders—who purchase securities (notes) and put their capital in a risky investment—then one may argue that securities regulators, who have proven experience in protecting investors in the capital market through disclosure, should be responsible for P2P lending regulation. If instead borrowers face greater risks, then perhaps financial consumer protection regulators should take the lead. Finally, if P2P lending platforms create significant risks in terms of financial stability, then perhaps banking regulators should be involved as well.

A. Borrowers' Perspective

P2P lending platforms provide borrowers, including unbanked or underbanked ones, with an alternative source of credit and tend to provide a better user experience compared with the traditional alternatives. On the other hand, however, borrowers participating in P2P lending platforms are exposed to substantial privacy risks, irrational credit assessments that take into account their gender, age, and attractiveness, and empirical evidence suggests that they are prone to behavioral biases that cause them to deviate from rational decision-making. This Section briefly discusses these benefits and risks.

On the benefits side, P2P lending platforms may promote financial inclusion by providing access to credit for risky borrowers with limited credit history. In traditional credit markets, “a potential borrower must have a sufficient amount of historical credit information available to be considered ‘scorable.’ In the absence of this information, a credit score cannot be generated, and a potentially creditworthy borrower is often unable to obtain credit and build a credit history.”¹¹³ P2P lending platforms utilize a wider variety of data sources—e.g., insurance claims, use of mobile phones, educational history, and property ownership—and thus may solve this problem.¹¹⁴ Jagtiani and Lemieux support this argument empiri-

113. FIN. STABILITY BD., ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING IN FINANCIAL SERVICES: MARKET DEVELOPMENTS AND FINANCIAL STABILITY IMPLICATIONS 12 (2017), <https://www.fsb.org/wp-content/uploads/P011117.pdf>.

114. FED. TRADE COMM’N, BIG DATA: A TOOL FOR INCLUSION OR EXCLUSION? 6 (2016), <https://www.ftc.gov/system/files/documents/reports/big->

cally, showing that the use of alternative sources of data by Lending Club allowed borrowers “with few or inaccurate credit records (based on FICO scores) to access credit.”¹¹⁵ Empirical evidence from Germany further suggests that P2P lending platforms have expanded credit access to high-risk borrowers, “a segment of borrowers that banks are unwilling (or unable because of bank capital requirements, for example) to supply.”¹¹⁶

Surveys of P2P borrowers further suggest that the convenience of using an online platform is an important benefit of P2P lending platforms.¹¹⁷ Compared to traditional alternatives, the lending process in P2P platforms tends to be more convenient, since they are generally accessible 24/7; less documentation is required to fill a loan application; the application process may be completed online; and decisions are made more quickly.¹¹⁸ Commentators further suggest that since P2P lending platforms utilize AI and big data tools for credit scoring, they can benefit borrowers by producing more accurate credit assessments;¹¹⁹ and that P2P lending platforms are perceived to be an attractive alternative to borrowers with low income, who might prefer to join P2P lending platforms to avoid

data-tool-inclusion-or-exclusion-understanding-issues/160106big-data-rpt.pdf [hereinafter FTC REPORT].

115. Julapa Jagtiani & Catharine Lemieux, *FinTech Lending: Financial Inclusion, Risk Pricing, and Alternative Information* 35 (Fed. Reserve Bank of Phila., Working Paper No. 17-17, 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3005260.

116. Calebe de Roure, Loriana Pelizzon & Paolo Tasca, *How Does P2P Lending Fit into the Consumer Credit Market?* 17 (Deutsche Bundesbank Discussion Paper No. 30/2016), <https://www.econstor.eu/bitstream/10419/144836/1/865628904.pdf>.

117. See Lenz, *supra* note 5, at 696 & n.26.

118. See Kirby & Worner, *supra* note 52, at 22; DELOITTE, A TEMPORARY PHENOMENON? MARKETPLACE LENDING: AN ANALYSIS OF THE UK MARKET 23 (2016), <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/financial-services/deloitte-uk-fs-marketplace-lending.pdf>.

119. See JOINT COMM. ON EUROPEAN SUPERVISORY AUTHS. (ESA), JOINT COMMITTEE FINAL REPORT ON BIG DATA 6–8 (2018), https://www.esma.europa.eu/sites/default/files/library/jc-2018-04_joint_committee_final_report_on_big_data.pdf.

the potential embarrassment of being judged face-to-face by bank officers.¹²⁰

On the risks side, commentators claim that borrowers participating in P2P lending platforms might be subject to erroneous or biased credit assessment due to flaws in the process of collecting, analyzing, and interpreting data. Commentators have voiced concern in relation to the inaccuracy of the new data sources being included in credit scoring by P2P lending platforms;¹²¹ potential lack of representativeness in the collecting process, which may lead to biased datasets;¹²² and erroneous interpretation of data, due mainly to confusion between correlation and causation (big data analytics typically provide only the former).¹²³ Combined, these potential flaws in the credit assessment process may cause borrowers to pay higher interest rates or to be excluded only because they share same characteristics with borrowers with poor repayment history.¹²⁴

Additionally, commentators have asserted that the availability of new data categories in P2P lending platforms (e.g., photos, race, and gender) exposes borrowers to discrimination by lenders.¹²⁵ Empirical studies found that when lenders assess the information disclosed about borrowers, they discriminate

120. See Eric C. Chaffee & Geoffrey C. Rapp, *Regulating Online Peer-to-Peer Lending in the Aftermath of Dodd-Frank: In Search of an Evolving Regulatory Regime for an Evolving Industry*, 69 WASH. & LEE L. REV. 485, 496 (2012).

121. See ESA, *supra* note 119, at 6.

122. See FTC REPORT, *supra* note 114, at 8.

123. See *id.* at 8–9.

124. See *id.* at 9. Over the years, however, financial regulators have placed some provisions to prevent these flaws. For example, Regulation B prohibits discrimination in credit scoring system. See 12 C.F.R. § 202.5. But while these provisions partially mitigate some of the concerns, regulators still face the challenge of enforcing them as big data tools used in credit scoring still present informational uncertainties for them. For a discussion on the inadequacies in the existing legal framework for credit scoring, see Mikella Hurley & Julius Adebayo, *Credit Scoring in the Era of Big Data*, 18 YALE J.L. & TECH. 148, 183–95 (2016).

125. See generally Macchiavello, *supra* note 74, at 539–40. However, over the years, financial regulators have placed some provisions aimed at preventing such discriminatory effects. For example, The Equal Credit Opportunity Act makes it unlawful for lenders to discriminate potential borrowers on the basis of race, color, religion, national origin, sex, or age. See 15 U.S.C. § 1691 (2018). But while these provisions partially mitigate some of the concerns, regulators still face the challenge of adequately enforcing them. For a discussion, see Hurley & Adebayo, *supra* note 124.

against certain types of borrowers based on their gender, attractiveness, race, and age. For example, Pope and Sydnor found that loan requests without a picture or with pictures of black and older individuals are less likely to receive funds and that black borrowers are likely to pay higher interest rates than white borrowers with similar credit profiles;¹²⁶ Chen et al. analyzed the Chinese P2P lending platform PPdai.com and found that female borrowers, although found to be more creditworthy, had to pay higher interest rates;¹²⁷ and Ravina found that more attractive borrowers were more likely to obtain funds.¹²⁸

Observers have further asserted that borrowers in P2P lending platforms are exposed to privacy risks. Borrowers participating in P2P lending platforms in the United States are required to provide financial and private information, which in turn publish it online, as well as in the SEC's online EDGAR database.¹²⁹ This exposes borrowers to substantial privacy risks, as in the event of a cyber data breach.¹³⁰

Finally, empirical evidence suggests that borrowers in P2P lending platforms are subject to behavioral biases, causing them to deviate from rational decision-making. For example, Ayal et al. analyze Debt Account Aversion—"individuals' tendency to consistently [pay] off small debts first to reduce the nominal number of debts, although at the same time they had larger debts with higher interest rates"¹³¹—in the context of P2P lending, and found that "when electing to repay a portfolio of P2P and bank debts (compared to paying multiple bank

126. See Devin G. Pope & Justin R. Sydnor, *What's in a Picture? Evidence of Discrimination from Prosper.com*, 46 J. HUMAN RES. 53 (2011).

127. Dongyu Chen, Xiaolin Li & Fujun Lai, *Gender Discrimination in Online Peer-to-Peer Credit Lending: Evidence from a Lending Platform in China*, 17 ELECTRONIC COM. RES. 553 (2017).

128. Enrichetta Ravina, *Love & Loans: The Effect of Beauty and Personal Characteristics in Credit Markets* (July 2008) (unpublished manuscript), <https://law.yale.edu/sites/default/files/area/workshop/leo/document/E.Ravina2.pdf>.

129. See Verstein, *supra* note 24, at 500–01.

130. See Slattery, *supra* note 42, at 245–46.

131. Ayal, Bar-Haim & Ofir, *supra* note 61, at 369–70; Moty Amar et al., *Winning the Battle but Losing the War: The Psychology of Debt Management*, 48 J. MARKETING RES. S39 (2011).

debts), borrowers exhibit a lower level of rational behavior and are more prone to [Debt Account Aversion].”¹³²

B. *Lenders’ Perspective*

Lenders participating in P2P platforms generally receive higher financial returns compared to traditional alternatives, but in exchange are exposed to higher credit and operational risks. This Section briefly discusses these potential benefits and risks.

On the benefits side, since P2P lending platforms do away with a level of intermediation, they can offer an attractive interest rate to lenders who seek to diversify their investment portfolio with a new asset class.¹³³ Indeed, commentators suggest that the interest rates offered by P2P lending platforms substantially compensate for the additional risk assumed by lenders investing in them (e.g., there is no deposit insurance and no promise of returns).¹³⁴ The interest rates offered by P2P lending platforms have become particularly attractive in recent years, as bank interest rates hover around zero. Additionally, P2P lending platforms tend to offer auto-investment tools that allocate lenders’ funds automatically in accordance with guidelines they provide in advance, thus helping investors build an appropriately diversified portfolio.¹³⁵

On the risks side, commentators have asserted that lenders participating in P2P lending platforms are exposed to credit and operational risks (the risk of loan default and other unexpected financial losses caused by platform failures).¹³⁶ Although these risks may apply to every intermediary structure in the credit market, they are particularly high in the P2P lending context due to existing misalignment between lenders and platforms’ incentives. To begin with, nowadays the revenues of platforms’ mainly come from origination fees, which are paid at the time of loan origination, and servicing fees, paid during

132. Ayal, Bar-Haim & Ofir, *supra* note 61, at 368.

133. Kirby & Worner, *supra* note 52, at 21.

134. *See, e.g.*, Milne & Parboteeah, *supra* note 34, at 4; Lenz, *supra* note 5, at 694–95.

135. Prosper, for example, offers Auto Invest: an automated loan search tool that automatically invests available funds based on investor’s specified investment criteria and allocation targets. *See* PROSPER FUNDING LLC, *supra* note 6, at 71.

136. *See* GAO REPORT, *supra* note 24, at 18–21.

loan reimbursement.¹³⁷ Under this fee structure, platforms have a strong incentive to maximize loan origination volume but a little incentive to maximize loan quality. Additionally, when P2P lending platforms “retain the difference between the interest paid by borrowers and that paid to investors,”¹³⁸ they are incentivized to facilitate risky loans with higher interest rates, to increase their marginal profit. This may potentially expose lenders to higher risk, without an additional reward. Combined, these incentive misalignments exacerbate existing credit and operational risks.

Another risk from the lenders’ perspective concerns the enforcement of defaulted or late loans. Loans in P2P lending platforms are typically unsecured and lenders’ investment in each loan is generally too small to justify a lawsuit.¹³⁹ Additionally, as Verstein claims, “assembling a class of P2P lenders sufficient for a class action lawsuit would likely be difficult.”¹⁴⁰ Therefore, lenders participating in P2P lending platforms may face significant enforcement difficulties compared with traditional financial institutes. Additionally, they face credit risk in the event of platforms’ insolvency. This risk holds especially for US P2P lending platforms, wherein lenders are effectively unsecured creditors of the platform.¹⁴¹ Though the risk of insolvency applies to every intermediary structure, it is particularly severe in P2P lending platforms, since these platforms tend to be small in terms of human capital, narrowly focused on one type of service, and poorly capitalized, and thus more fragile.¹⁴² It worth mentioning, however, that this risk is partially mitigated in P2P lending platforms that adopt that segregated account model, as explained *infra* Part I.

Another line of literature suggests that lenders in P2P lending platforms deviate from the rational benchmark when translating the information disclosed by P2P lending platforms into a financial decision.¹⁴³ For example, empirical studies show that P2P lenders are prone to herding behavior, i.e., they

137. Balyuk & Davydenko, *supra* note 4, at 33.

138. FCA, CP18/20, *supra* note 56, at 26.

139. Käfer, *supra* note 25, at 18.

140. Verstein, *supra* note 24, at 504.

141. *Id.* at 489.

142. William Magnuson, *Regulating Fintech*, 71 VAND. L. REV. 1167, 1200 (2018); Käfer, *supra* note 25, at 20–23.

143. See generally Ayal, Bar-Haim & Ofir, *supra* note 61.

are subject to social influences when bidding on loans.¹⁴⁴ Other empirical studies show that lenders' portfolios are often biased towards "familiar" assets, in both the domestic and international contexts. In the domestic context, lenders were found to be more likely to fund borrowers who are similar to them in ethnicity, gender, occupation, or place of residence.¹⁴⁵ Internationally, lenders were found to favor borrowers located in their domestic market.¹⁴⁶ This bias is contradictory to traditional models of finance, which suggest that to maximize the portfolio's expected payoff while reducing its associated risk, investors should diversify their portfolios, both domestically and internationally.¹⁴⁷ Finally, empirical evidence suggests that lenders in P2P lending platforms are subject to the stereotypes-and-representativeness bias in that they tend to categorize borrowers as representatives of a well-known class and to overemphasize the significance of that categorization and ignore other statistical information when making probability judgements.¹⁴⁸ For example, empirical studies found that lenders were biased against young or old borrow-

144. See, e.g., De Liu, Daniel J. Brass, Yong Lu & Dongyu Chen, *Friendships in Online Peer-to-Peer Lending: Pipes, Prisms, and Relational Herding*, 39 MIS Q. 729 (2015); Michal Herzenstein, Utpal M. Dholakia & Rick L. Andrews, *Strategic Herding Behavior in Peer-to-Peer Loan Auctions*, 25 J. INTERACTIVE MARKETING 27 (2011).

145. See, e.g., Jeff Galak, Deborah Small & Andrew T. Stephen, *Microfinance Decision Making: A Field Study of Prosocial Lending*, 48 J. MARKETING RES. (Special Issue) S130 (2011); Ravina, *supra* note 128.

146. See, e.g., Mingfeng Lin & Siva Viswanathan, *Home Bias in Online Investments: An Empirical Study of an Online Crowdfunding Market*, 62 MGMT. SCI. 1393 (2016).

147. Gur Huberman, *Familiarity Breeds Investment*, 14 REV. FIN. STUD. 659 (2001).

148. See Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 185 SCI. 1124 (1974); Ayal, Bar-Haim & Ofir, *supra* note 61, at 381.

ers,¹⁴⁹ female borrowers,¹⁵⁰ and black borrowers,¹⁵¹ and in favor of attractive borrowers,¹⁵² with one study finding that lenders tended to show greater tolerance for attractive borrowers' dishonest behavior.¹⁵³

Last, lenders participating in P2P lending face a liquidity risk. The ability of P2P lenders to sell their participations during the maturity period, which may last several years, is still very limited, due to the limited amount of secondary markets.¹⁵⁴ This risk can be further exacerbated by misleading promotions made by platforms that may create false perceptions about lenders' ability to exit.¹⁵⁵ Importantly, the liquidity risk should be considered when comparing the interest rates offered by P2P lending platforms with the interest rates offered by traditional financial institutes (e.g., banks). While the interest rate on P2P loans is relatively high, P2P loans are typically illiquid, and thus should not be compared to traditional alternatives such as bank deposits.¹⁵⁶

C. Market Perspective

On the benefits side, the rise of P2P lending platforms may drive economic growth through providing SMEs with an alternative source of finance. SMEs are a main source of employment and economic growth, but they often face significant challenges in obtaining finance from traditional institutes

149. Yuliya Komarova Loureiro & Laura Gonzalez, *Competition Against Common Sense: Insights on Peer-to-Peer Lending as a Tool to Allay Financial Exclusion*, 33 INT'L J. BANK MARKETING 605 (2015) (finding that P2P lenders are biased against young borrowers who are considered riskier and less likely to repay). On the other hand, Pope & Sydnor, *supra* note 126, found that younger borrowers are funded more. Ayal et al. theorized that "[t]his contradiction may be caused by differences between platforms or the time gap between these studies." Ayal, Bar-Haim & Ofir, *supra* note 61, at 381.

150. While loans requested by female borrowers are more likely to be funded, female borrowers tend to pay higher interest rates for their funded listings. See, e.g., Chen, Li & Lai, *supra* note 127, at 577.

151. See, e.g., Pope & Sydnor, *supra* note 126.

152. See, e.g., Ravina, *supra* note 128.

153. Jia Jin, Bonai Fan, Shenyi Daid & Qingguo Ma, *Beauty Premium: Event-Related Potentials Evidence of How Physical Attractiveness Matters in Online Peer-to-Peer Lending*, 640 NEUROSCIENCE LETTERS 130 (2017).

154. See Kirby & Worner, *supra* note 52, at 27–28.

155. See FCA, CP18/20, *supra* note 56, at 32; U.S. DEP'T OF THE TREASURY, *supra* note 91, at 25.

156. Lenz, *supra* note 5, at 695.

(e.g., high transactions costs and high-risk premiums).¹⁵⁷ Against that financing gap, P2P business lending platforms can emerge as an important alternative source of funding.¹⁵⁸ Commentators have further asserted that the rise of P2P lending platforms may increase the competition in the credit market, thus incentivizing traditional financial institutes to innovate, reduce cost, and increase efficiency.¹⁵⁹

On the risks side, commentators have examined whether P2P lending platforms pose a systemic threat to the financial sector and concluded that presently, P2P lending does not create significant systemic risk, but it could do so in the future, as the industry grows and the link between P2P lending platforms and traditional financial institutes grows stronger.¹⁶⁰ Although P2P lending platforms pose, to some extent, financial stability and contagion concerns, these concerns should be interpreted in the appropriate perspective. First, in many jurisdictions, P2P lenders and borrowers' funds are managed in segregated client accounts, which are separated from the platforms' balance sheet.¹⁶¹ Hence, in the event of insolvency, lender returns should not be affected. Second, most P2P loans (in the United States) have a maturity of more than one year.¹⁶² This

157. See OECD, FINANCING SMEs AND ENTREPRENEURS 2018: AN OECD SCOREBOARD 1 (2018), <https://www.oecd.org/cfe/smes/Highlights-Financing-SMEs-and-Entrepreneurs-2018.pdf>.

158. See Kirby & Worner, *supra* note 52, at 21.

159. See *id.* at 22.

160. See, e.g., *id.* at 33–35, 45; Macchiavello, *supra* note 74, at 542.

161. See Havrylchyk, *Regulatory Framework*, *supra* note 11, at 26 (finding that in some jurisdictions (e.g., Israel and Mexico) “clients’ money should be held in a special trust account” and in most jurisdictions “platforms do not even have the right to handle clients’ money and should rely on a payment institution or obtain a license of a payment institution to do this”).

162. See Balyuk & Davydenko, *supra* note 4 (analyzing loans originated by Lending Club and Prosper between 2007–2019 and finding that the average maturity range from 42.91 (in Lending Club) to 42.95 (in Prosper) months and that the median maturity is 36 months (in both platforms)). See also de Roure, Pelizzon & Thakor, *supra* note 62 (analyzing data from the German platform Auxmoney and finding that most loans have a maturity of three years); and Kirby & Worner, *supra* note 52, at 24 (analyzing data from the “largest, most successful platforms” as of September 2013 (Prosper, Lending Club, Auxmoney, CreditEase, Funding Circle, Affluenta, RateSetter, and Zopa) and finding that the average maturity is 3 years). In China, the average maturity seems to be lower compared to the United States. See Claessens et al., *supra* note 71, at 41 (finding that the average maturity of P2P loans rose from 7 months in 2012 to 9 months in 2018).

means that unlike banks, which provide short-term loans used to support liquidity, P2P lending platforms provide mainly long-term loans that are more akin to security investments.¹⁶³ Thus, the effect of a failure of P2P lending platform on the economy is likely to be more limited compared to that of banks failure.¹⁶⁴ Third, P2P lending platforms, in contrast to banks, do not take deposits or perform maturity transformation; rather, the liability of borrowers in P2P lending platforms has the same maturity as the lender's asset.¹⁶⁵ The absence of maturity transformation services prevents the risk of a bank run.¹⁶⁶ Collectively, these points imply that the financial stability concerns posed by platforms are limited not only because of their presently small size, but also because of their unique features.

IV.

P2P LENDING REGULATION

The previous Parts provided a descriptive overview of the P2P lending market. They explained how P2P lending platforms work, provided a comparative overview of the P2P lending market, and examined the risks and benefits associated with P2P lending from borrowers and lenders' perspectives, as well as from a market perspective. Additionally, they outlined recent trends in the market—institutionalism, re-intermediation, and the development of secondary markets—that require special attention from regulators. Against that background, this Part analyzes how financial regulators around the world have responded to the emergence of P2P lending platforms.

The core objectives of financial regulation are efficiency, fairness, and stability.¹⁶⁷ With the emergence of P2P lending platforms, financial regulators faced the challenge of resolving the tension between these objectives, while addressing the

163. See OXERA, THE ECONOMICS OF PEER-TO-PEER LENDING 60 (Sept. 2016), https://www.oxera.com/wp-content/uploads/2018/03/The-economics-of-P2P-lending_30Sep_.pdf-1.aspx.pdf.

164. See *Id.*

165. Käfer, *supra* note 25, at 23–24.

166. See Diamond & Dybvig, *supra* note 51.

167. See, e.g., William Magnuson, *Financial Regulation in the Bitcoin Era*, 23 STAN. J.L. BUS. & FIN. 159, 197 (2018); Douglas W. Arner, Janos Barberis & Ross P. Buckley, *The Evolution of FinTech: A New Post-Crisis Paradigm?*, 47 GEO. J. INT'L L. 1271, 1307 (2016).

questions of when to regulate, how to regulate, and who should be responsible for regulating P2P lending platforms.¹⁶⁸ Firstly, financial regulators faced a challenge with respect to the timing of their intervention. P2P lending platforms, like other innovative technologies in the financial industry, have grown exponentially,¹⁶⁹ and regulators faced the dilemma of whether to intervene the market in its early days to preserve market integrity and rule simplicity at the potential cost of halting market innovation, or adopt a laissez-faire approach to allow market innovation until the technology becomes mature enough.¹⁷⁰ Secondly, regulators faced the challenge of determining how P2P lending platforms should be regulated. That is how to mitigate the risks faced by borrowers and lenders as well as the financial stability risks posed by the platforms without burdening market innovation. Lastly, P2P lending platforms have disintermediated traditional credit services and created a hybrid model involving credit, operational, and legal risks that are common in banking, securities, and financial consumer activities. Therefore, regulators faced the challenge of determining who should be responsible for regulating P2P lending platforms. This Part examines how financial regulators in the United States, the U.K., and China have addressed these challenges.

A. *The United States*

In the United States, the Securities and Exchange Commission (“SEC”) intervened in the P2P lending market in its

168. See Mark D. Fenwick, Wulf A. Kaal & Erik P.M. Vermeulen, *Regulation Tomorrow: What Happens When Technology Is Faster than the Law?*, 6 AM. UNI. BUS. L. REV. 561, 571–72 (2017). For an analogous discussion on the regulatory challenges associated with FinTech innovations, see Moran Ofir & Ido Sadeh, *More of the Same or Real Transformation: Does FinTech Warrant New Regulation?*, HOUS. BUS. & TAX L.J. (forthcoming, 2020); Moran Ofir & Ido Sadeh, *The Rise of FinTech: Promises, Perils, and Challenges*, in LEADING LEGAL DISRUPTION: ARTIFICIAL INTELLIGENCE AND A TOOLKIT FOR LAWYERS AND THE LAW (Giuseppina D’Agostin et al. eds., forthcoming, 2020).

169. See Arner, Barberis & Buckley, *supra* note 167, at 1307–11 (describing the challenge faced by financial regulators with respect to the timing of their intervention in the fintech era, wherein financial innovations grow rapidly from too-small-to-care to too-big-to-fail, skipping the “too-large-to-ignore” phase, when regulators generally start addressing compliance issue).

170. This relates to the innovation trilemma developed by Brummer and Yadav. Brummer & Yadav, *supra* note 2, at 244–49.

very early days, by issuing a cease-and-desist order against Prosper in November 24, 2008.¹⁷¹ In the order, the SEC determined that “[t]he financial instrument offered by Prosper meets the definition of an investment contract as set forth in *Howey*”¹⁷² (“an investment of money in a common enterprise with profits to come solely from the efforts of others”¹⁷³); and that Prosper notes are securities under the *Reves* test.¹⁷⁴ Consequently, since the financial products offered by Prosper were unregistered securities, the SEC concluded it had violated Parts 5(a) and 5(c) of the Securities Act of 1933, and ordered Prosper to cease operation.¹⁷⁵ This order, which required P2P lending platforms to comply with the SEC’s disclosure and registration requirements, led many market participants to either leave the U.S. market or cease operation. For example, Prosper ceased operation until July 13, 2009; Lending Club ceased operation from April 7 to October 13, 2008, to comply with the SEC’s requirements;¹⁷⁶ Zopa withdraw from the U.S. market in 2008 due to “regulatory reasons”;¹⁷⁷ and Loanio, formerly a leading competitor of Prosper and Lending Club, “ceased operation after filling its registration statement in 2009.”¹⁷⁸

171. Prosper Marketplace, Inc., Securities Act Release No. 8984, 94 SEC Docket 1913 (Nov. 24, 2008) [hereinafter Prosper Cease and Desist Order].

172. *Id.* at 4. For an analysis of P2P notes as securities under the Securities Act of 1933 § 2(1), see Verstein, *supra* note 24, at 477–88; Jack R. Magee, *Peer-to-Peer Lending in the United States: Surviving after Dodd-Frank*, 15 N.C. BANKING INST. 139, 154–56 (2011).

173. SEC v. W. J. Howey Co., 328 U.S. 293, 301 (1946).

174. Prosper Cease and Desist Order, *supra* note 171, at 5. In *Reves v. Ernst & Young*, 494 US 56, 66–67 (1990), the Court established “a four-part family resemblance test to determine whether a note is a security, which is comprised of the following factors: (i) the motivations of the buyer and seller; (ii) the plan of distribution; (iii) the reasonable expectations of the investing public; and (iv) the existence of an alternate regulatory regime.” For an analysis of the application of the *Reves* test, see Magee, *supra* note 172, at 156–58 (examining whether Prosper notes are securities under *Reves* and concluding that “it is clear that the notes were properly designated as securities under the precedent in *Reves*”).

175. Prosper Cease and Desist Order, *supra* note 171, at 6; Magee, *supra* note 172, at 153.

176. See Magee, *supra* note 172, at 153.

177. *Zopa U.S.*, ZOPA (Oct. 9, 2008), <https://blog.zopa.com/2008/10/09/zopa-us/>; see Slattery, *supra* note 42, at 257.

178. Slattery, *supra* note 42, at 257.

In the following years, to address the regulatory uncertainty surrounding P2P lending platforms, the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act¹⁷⁹ called for a government study, which resulted in a 2011 report published by the Government Accountability Office (GAO).¹⁸⁰ The GAO report offered two different approaches to regulating this rapidly growing market,¹⁸¹ which differed primarily with regard to lender protection: “protecting lenders through securities regulators and borrowers primarily through financial services regulators, which will include the newly formed CFPB [Consumer Financial Protection Bureau] or . . . consolidating borrower and lender protection under a single federal regulator, such as CFPB.”¹⁸² The conclusion drawn by GAO’s was that neither of the approaches was entirely suitable for regulating the P2P lending market. Instead, it suggested a wait-and-see approach,¹⁸³ and consequently, the status quo remained unchanged.¹⁸⁴

1. *Lenders’ protection and platform requirements*

Under the status quo, lenders participating in P2P lending platforms are protected by the SEC at the federal level, as well as by state-level security regulators. The SEC has clarified that the products issued by P2P lending platforms are securities under the broad definition of the Securities Act of 1933,¹⁸⁵ and consequently, that the offering of these products must be registered pursuant to Part 5 of said act. Effectively, this means that platforms are required to be registered with the SEC; each loan originated by the platform must be registered with the SEC; and each platform is “treated like a public company, hav-

179. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

180. For a short overview of the GAO Report and on the Dodd-Frank Act that mandated it, see GAO REPORT, *supra* note 24; Chaffee & Rapp, *supra* note 120, at 525–28.

181. See GAO REPORT, *supra* note 24.

182. *Id.* at 42.

183. *Id.* (“[N]ew regulatory challenges could emerge if the person-to-person lending industry introduced new products or services or if it grew dramatically, making it difficult to predict which regulatory option would be optimal in the future.”).

184. See Slattery, *supra* note 42, at 253–54.

185. 15 U.S.C. § 77(b)(a)(1) (2018); Prosper Cease and Desist Order, *supra* note 171.

ing to fully disclose their finances, loan origination, and practices.”¹⁸⁶

The SEC’s early intervention in the P2P lending market has garnered significant attention from commentators, which begun criticizing its regulation—considered costly, complex, and time-consuming—for creating entry barriers and restricting industry growth.¹⁸⁷ To mitigate these concerns, over the years, the SEC has put in place exemptions that allow platforms to forego registration of their securities with the SEC if they meet certain criteria.¹⁸⁸ A notable example is the 2013 Rule 506(c) of Regulation D that offers an exemption from registration requirements and permits platforms to engage in general solicitation and advertising during the offering, provided that all security purchasers are accredited investors.¹⁸⁹

2. Borrowers’ protection

In addition to the SEC’s disclosure and registration requirements, which are mainly intended to protect lenders, P2P lending platforms are also subject to the Federal Deposit Insurance Corporation (FDIC), CFPB, and the Federal Trade Commission (FTC), which collectively govern their consumer protection aspects. The CFPB has both the authority to enforce federal consumer-protection laws and a rulemaking authority over consumer lending,¹⁹⁰ and over the years it has applied to P2P lending the Truth in Lending Act,¹⁹¹ which seeks “to protect the consumer against inaccurate and unfair credit

186. Kirby & Worner, *supra* note 52, at 29.

187. *See, e.g.*, Slattery, *supra* note 42, at 255–58 (arguing that the SEC forced P2P lending platforms to pay the costs associated with initial public offerings without enjoying their benefits, as the revenue from the sale of their notes went to the borrowers, and these costs are disproportional to the platforms’ revenues); Verstein, *supra* note 24, at 501–02 (describing the high compliance costs faced by P2P lending platforms).

188. *See* DAVID W. PERKINS, CONG. RESEARCH SERV., MARKETPLACE LENDING: FINTECH IN CONSUMER AND SMALL-BUSINESS LENDING 13–14 (2018); Benjamin Lo, *It Ain’t Broke: The Case for Continued SEC Regulation of P2P Lending*, 6 HARV. BUS. L. REV. ONLINE 87, 92–95 (2016).

189. Eliminating the Prohibition Against General Solicitation and General Advertising in Rule 506 and Rule 144A Offerings, 78 Fed. Reg. 44,771 (Sept. 23, 2013) (to be codified at 17 C.F.R. pts. 230, 239, 242).

190. *See* PERKINS, *supra* note 188, at 14.

191. Truth in Lending Act, 15 U.S.C. §§ 1601–67 (2018).

billing”;¹⁹² the Equal Opportunity Act,¹⁹³ which makes it “unlawful for any creditor to discriminate against any applicant, with respect to any aspect of a credit transaction”;¹⁹⁴ and the Fair Debt Collection Practices Act,¹⁹⁵ which aims to “eliminate abusive debt collection practices by debt collectors.”¹⁹⁶

The FTC also has enforcement authority over certain consumer protection laws and over the years, it has actively engaged in overseeing P2P lending platforms. For example, in 2018, it filed a complaint against Lending Club for falsely promising loans with no hidden fees.¹⁹⁷

3. *The debate over the appropriateness of the status quo*

The case of P2P lending regulation has attracted significant attention from observers, who began debating the effectiveness and efficiency of the current regulatory regime. As mentioned, opponents of the current regime tend to criticize the costly SEC’s regulation for creating entry barriers and restricting growth.¹⁹⁸ Indeed, the U.S. P2P lending market has become highly concentrated, with Lending Club and Prosper jointly responsible for over 93% of the online lending market in 2020.¹⁹⁹ Proponents, on the other hand, claim that “the SEC has expanded private placement exemptions and put in place new regulations to lower the regulatory barrier to entry, effectively exempting new P2P loan platforms from the dreaded registration burden [e.g., Rule 506(c)].”²⁰⁰

Commentators have further criticized SEC’s regulation for forcing P2P lending platforms to adopt the notary model,

192. *Id.* § 1601(a).

193. Equal Credit Opportunity Act, 15 U.S.C. § 1691 (2018).

194. *Id.* § 1691(a).

195. Fair Debt Collection Practices Act, 15 U.S.C. §§ 1692–92p (2018).

196. *Id.* § 1692(e). For a discussion on the effectiveness of these laws in mitigating flaws in credit scoring in the era of big data, see Hurley & Adebayo, *supra* note 124.

197. *See FTC Amends Complaint Against Lending Club*, FED. TRADE COMM’N (Nov. 29, 2018), <https://www.ftc.gov/news-events/press-releases/2018/11/ftc-amends-complaint-against-lending-club>.

198. *See, e.g.*, Verstein, *supra* note 24, at 501–02; Slattery, *supra* note 42, at 255–57.

199. *See P2P Lending & Equity in the US (USD)*, P2PMARKETDATA, <https://p2pmarketdata.com/p2p-lending-funding-volume-usa/> (last updated March 31, 2020).

200. Lo, *supra* note 188, at 92.

in which lenders are exposed to credit risks from the platforms themselves. Under the SEC's regulation, P2P lending platforms are forbidden from "crediting the borrower's loan directly to the lender."²⁰¹ Instead, a partner bank originates the loan from the platform to borrowers, and the platform then issues security debts to lenders, who become creditors of the platform.²⁰² As a result, lenders, who have previously been exposed only to the credit risk involving borrowers, now face higher credit risks as unsecured creditors of P2P lending platforms.²⁰³ Advocates, on the other hand, claim that the fact that P2P lending platforms have effectively become lenders also has its advantages. "Because the lending platform has legal status as the lender, it is responsible for adhering to laws stipulating clear and fair disclosure of the terms of the loan to borrowers, explanations to those who are declined credit, and preventing unfair debt collection practices. This is preferable because the platform is better placed than individuals to ensure compliance with these regulations, and enforcement of this legislation is made easier."²⁰⁴

Finally, some commentators have claimed that SEC disclosure requirements do not suit P2P lenders' needs. Verstein, for example, argued that lenders are often unable to price the risk and make a rational investment decision, given the "avalanche of trivial information"²⁰⁵ that P2P platforms are required to disclose under the SEC regulations. This information overload imposed by the SEC makes it more difficult for consumers to identify relevant information,²⁰⁶ and some have suggested that ironically, it may help platforms "bury the truth or confuse those unaccustomed to reading capital markets documents."²⁰⁷

201. Naoko Nemoto, David Storey & Bihong Huang, *Optimal Regulation of P2P Lending for Small and Medium-Sized Enterprises* 4 (Asian Dev. Bank Inst. Working Paper Series, Paper No. 912, 2019), <https://www.adb.org/sites/default/files/publication/478611/adbi-wp912.pdf>.

202. See Verstein, *supra* note 24, at 477.

203. See *id.* at 489.

204. Nemoto, Storey & Huang, *supra* note 201, at 4 (citing Lo, *supra* note 188, at 95–96).

205. Verstein, *supra* note 24, at 503 (internal quotation marks omitted) (quoting *TSC Indus. Inc., v. Northway, Inc.*, 426 U.S. 438, 448–49 (1976)).

206. Macchiavello, *supra* note 74, at 559–60.

207. Verstein, *supra* note 24, at 502; see also Macchiavello, *supra* note 74, at 559–60.

B. *The U.K.*

The U.K. is an interesting comparative case for two reasons. First, it is the birthplace of P2P lending platforms and the largest market in Europe in terms of market volume, with the U.K. alternative financial market accounting for 68% of all European market volume in 2017.²⁰⁸ Second, a recent survey conducted by the Cambridge Centre for Alternative Finance found that in 2016 (2017), 88% (83%) of the platforms surveyed viewed its regulatory regime as “adequate and appropriate.”²⁰⁹ This indicates a much higher level of satisfaction compared to the regulatory framework in the United States, where only 42% (59%) in 2016 (2017) of platforms surveyed viewed the regulatory regime as “adequate and appropriate.”²¹⁰

Until 2014, P2P lending platforms were regulated in the U.K. by the Office of Fair Trade (OFT). Thereafter, the FCA assumed responsibility,²¹¹ defining a new regulated activity of “operating an electronic system in relation to lending,” which came into force under the Financial Services and Markets Act 2000 (Regulated Activities) Order 2001.²¹² The authority granted to the FCA over P2P lending platform is broader than that of the SEC: while the SEC is responsible for lender protection through disclosure requirements and the CFPB is responsible for borrower protection, the FCA is responsible for both.

208. Cf. TANIA ZIEGLER ET AL., CAMBRIDGE CTR. FOR ALT. FIN., SHIFTING PARADIGMS: THE 4TH EUROPEAN ALTERNATIVE FINANCE BENCHMARKING REPORT 22 (2019), <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/shifting-paradigms/>.

209. See CCAF, 5TH UK ALTERNATIVE FINANCE INDUSTRY REPORT, *supra* note 58, at 9.

210. See CCAF, 3RD AMERICAS ALTERNATIVE FINANCE INDUSTRY REPORT, *supra* note 27, at 71.

211. See FIN. CONDUCT AUTH., THE FCA’S REGULATORY APPROACH TO CROWDFUNDING OVER THE INTERNET, AND THE PROMOTION OF NON-READILY REALISABLE SECURITIES BY OTHER MEDIA: FEEDBACK TO CP13/13 AND FINAL RULES app. at 6 [hereinafter FCA, PS14/4].

212. *Id.* app. at 3 (“operating an electronic system in relation to lending (article 36H) but only in relation to facilitating a person becoming a lender under a P2P agreement and in relation to the supplemental activities in article 36H(3) (a), (b) and (d)”); see also Ding Chen, Anil Savio Kavuri & Alistair Milne, Growing Pains: The Changing Regulation of Alternative Lending Platforms 23 (Jan. 26, 2019) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3315738.

1. *A dialogue-based regulatory approach*

Unlike the United States, wherein the SEC intervened in the early days of the market and required P2P lending platforms to comply with existing securities laws, in the U.K., the FCA adopted a dialogue-based approach and intervened gradually. Since 2014, it has (1) initiated various informal guidelines (statements, discussion, and consultation papers) on P2P lending platforms to inform market participants with respect to potential benefits, risks, and applicable regulations; (2) provided feedback to market participants with respect to the regulatory implications of their businesses models; and (3) operated regulatory sandboxes, allowing selected platforms to test their new models on the market.²¹³

2. *Platform requirements*

The FCA initiated an authorization regime, requiring every new platform entering the market after 1 April 2014 to receive full authorization and to have a minimum capital of £50k.²¹⁴ The minimum capital requirement was designed to ensure that platforms behave “prudently in monitoring and managing business and financial risks.”²¹⁵ In addition to prudential requirements, the FCA imposed mandatory financial reporting requirements on authorized P2P lending platforms, requiring them to report “either quarterly, 6-monthly or annually depending on the nature and size of your business,”²¹⁶ on their financial position, client money holdings, and loans they have arranged.²¹⁷ The goal of these reporting requirements is to provide the FCA with information required to identify and monitor risks and trends in P2P lending.

3. *Lenders’ protection*

Like the SEC, the FCA protects lenders participating in P2P lending mainly through initial and ongoing disclosure requirements aimed at ensuring that lenders-investors have suffi-

213. Nemoto, Storey & Huang, *supra* note 201, at 4.

214. See FCA, PS14/4, *supra* note 211, app. at 9.

215. *Id.* at 8.

216. *Consumer Credit Reporting*, FIN. CONDUCT AUTH. (May 11, 2015), <https://www.fca.org.uk/firms/regulatory-reporting/consumer-credit-reporting>.

217. FCA, CP18/20, *supra* note 56, at 12.

cient information to make informed investment decisions. To this end, the FCA has imposed general disclosure obligations, requiring platforms to disclose information about their business, service, past performance, etc.²¹⁸ Over the years, the FCA has recognized new trends in the market and begun modifying the disclosure requirements accordingly. There are three notable examples in that regard.

First, the FCA raised concerns about platforms that offer a target rate of return, claiming that investors may see this offering as more akin to a structured product.²¹⁹ To mitigate this concern, it has proposed that platforms “should have a risk management framework that allows them to conclude with reasonable certainty that investors can achieve the advertised return within the advertised risk parameters.”²²⁰ Second, the FCA raised concerns about platforms that offer contingency funds, designed to provide investors with guarantees in the event of loan default. It stated that although these funds are intended to protect investors, they potentially could lead investors to believe that their investment has a fixed rate and that it is unlikely to be impacted in the event of default. Hence, it proposed to impose increased disclosure requirements in relation to these funds.²²¹ Finally, The FCA raised concern that platforms’ ongoing disclosure is insufficient, with investors that might be unaware that loans within their portfolio have defaulted. Thus, to ensure that at any point in time investors can receive sufficient amount of information for each P2P agreement they have entered into, in a 2018 consultation paper, it proposed enhancing and modifying ongoing disclosure requirements.²²²

218. FIN. CONDUCT AUTH., THE FCA’S REGULATORY APPROACH TO CROWDFUNDING (AND SIMILAR ACTIVITIES), <https://www.fca.org.uk/publication/consultation/cp13-13.pdf>.

219. FCA, CP18/20, *supra* note 56, at 16–17; Vanessa Walters & Kate Troup, *FCA Proposing to Tighten up Rules for Loan-Based Crowdfunding Platforms*, CHARLES RUSSELL SPEECHLYS (Jan. 4, 2019), <https://www.charlesrussellspeechlys.com/en/news-and-insights/insights/financial-services/2019/fca-proposing-to-tighten-up-rules-for-loan-based-crowdfunding-platforms/>.

220. FIN. CONDUCT AUTH., LOAN-BASED (‘PEER-TO-PEER’) AND INVESTMENT-BASED CROWDFUNDING PLATFORMS: FEEDBACK TO CP18/20 AND FINAL RULES 10 (Policy Statement PS19/14, June 2019), <https://www.fca.org.uk/publication/policy/ps19-14.pdf> [hereinafter: FCA, PS19/14].

221. *Id.* at 31–32.

222. FCA, CP18/20, *supra* note 56, at 49.

Apart from disclosure requirements, the FCA also protects lenders by imposing client money rules, according to which lenders' funds held by a P2P lending platform in relation to P2P lending agreements must be segregated from the firm's own funds.²²³ Effectively, these rules force platforms in the U.K. (e.g., Zopa and Funding Circle) to adopt the segregated account model. The FCA further imposed marketing restrictions that currently apply to investment-based platforms on P2P lending platforms, to ensure that retail investors "who are new to the asset class do not over-expose themselves to risk";²²⁴ a requirement to implement "an appropriateness assessment, to check an investor's knowledge and experience of the asset class prior to investment (where the investor has not received advice)";²²⁵ and an investment cap of 10% of investible assets for retail investors who are new to this market segment.²²⁶

4. Borrowers' protection

Although the FCA focuses on lenders' protection, it also took some measures to ensure borrowers' protection. For example, it stated that the existing rules aimed at protecting borrowers in the Consumer Credit sourcebook applied to P2P lending platforms.²²⁷ This required P2P lending platforms, *inter alia*, to make reasonable credit assessments that took into account borrowers' "ability to repay affordably and without this significantly affecting their wider financial situation," to provide a clear explanation regarding the loan agreements, and to provide notices to borrowers in arrears or default.²²⁸ Combined, these provisions aimed at minimizing the risk of financial distress to borrowers.

223. FIN. CONDUCT AUTH., LOAN-BASED CROWDFUNDING PLATFORMS AND SEGREGATION OF CLIENT MONEY 7 (Consultation Paper CP16/4, June 2016), <https://www.fca.org.uk/publication/consultation/cp16-04.pdf>.

224. FCA, PS19/14, *supra* note 220, at 17; FCA, CP18/20, *supra* note 56, at 41–42.

225. FCA, PS19/14, *supra* note 220, at 17.

226. Investors can re-classify as sophisticated investors (thereby removing the 10% investment limit) if they have made two or more P2P investments in the past two years. FCA, PS19/14, *supra* note 220, at 18 & n.2.

227. See FIN. CONDUCT AUTH., ASSESSING CREDITWORTHINESS IN CONSUMER CREDIT: FEEDBACK ON CP17/27 AND FINAL RULES AND GUIDANCE, <https://www.fca.org.uk/publication/policy/ps18-19.pdf>.

228. *Id.* at 4.

C. China

1. *A laissez-faire approach*

Another interesting comparative case is China. In contrast with the United States, China has adopted a laissez-faire approach and left the P2P lending platforms unregulated until 2015. The lack of a comprehensive regulatory framework for P2P lending enabled rapid market growth, and China quickly became the largest market in the world in terms of number of platforms and loan volume.²²⁹ However, the unregulated environment also gave rise to significant concerns about mismanagement and bad practices.²³⁰

According to the 2016 Blue Book of Internet Finance, 896 P2P platforms got into trouble in 2015, with more than half involved in fraud.²³¹ A notable example is Ezubao, once the largest platform in China. The platform, which has collected over \$9 billion from over 900,000 lenders, turned out to be a Ponzi scheme and reportedly faked 95% of its online loans, leaving retail investors with substantial damages.²³² Other companies launched P2P lending platforms to fund their own businesses. For example, a founder of a real estate company in China allegedly attracted over 1 billion RMB through P2P platforms that she had set up.²³³

Against that background, in 2015, the People's Bank of China issued a regulatory document titled "Guiding Opinions on Promoting the Healthy Development of Internet Finance," providing general guidance for the fintech industry, but not concrete rules to regulate the P2P lending industry.²³⁴ Later,

229. CCAF, 3RD ASIA PACIFIC REGION ALTERNATIVE FINANCE REPORT, *supra* note 58. For an analysis of the key drivers of the P2P lending market in China, see Huang, *supra* note 5, at 65–69.

230. Nemoto, Storey & Huang, *supra* note 201, at 6.

231. See Sidney Leng, *One Third of China's 3,000 Peer-to-Peer Lending Platforms 'Problematic': New Report*, SOUTH CHINA MORNING POST (Sept. 24, 2016), <https://www.scmp.com/news/hong-kong/economy/article/2022317/one-third-chinas-3000-peer-peer-lending-platforms-problematic>.

232. See Matthew Miller, *Leader of China's \$9 Billion Ezubao Online Scam Gets Life; 26 Jailed*, REUTERS (Sept. 12, 2017), <https://www.reuters.com/article/us-china-fraud/leader-of-chinas-9-billion-ezubao-online-scam-gets-life-26-jailed-idUSKCN1BN0J6>.

233. See Leng, *supra* note 231.

234. Nemoto, Storey & Huang, *supra* note 201, at 6; Huang, *supra* note 5, at 80.

in August 2016, the China Banking Regulatory Commission (CBRC) enacted “The Interim Administrative Measures for the Business Activities of P2P Lending Information Intermediaries” (Interim Measures), which contain 47 articles that govern several aspects of the P2P lending market.²³⁵

In November 2019, China expanded its regulatory efforts further and launched a transition plan for P2P lending platforms, requiring all existing platforms to become small loan providers within two years. According to Reuters report, this plan is “an active approach to resolve risks contained in the existing business of online lenders” aimed to “reduce the loss of creditors, maintain social stability and prompt orderly development of inclusive finance.”²³⁶

2. *Platforms’ requirements and restrictions*

As a preliminary matter, The Interim Measures require P2P lending platforms to act as information intermediaries, which provide only information-related services (e.g., credit rating and matching services), rather than as credit intermediaries.²³⁷ The Interim Measures further impose restrictions on P2P lending including, inter alia, a prohibition on pooling lenders’ funds;²³⁸ on promising guaranteed principal and interest to lenders;²³⁹ and on undertaking asset securitization business.²⁴⁰ Collectively, these provisions restrict the diversity of P2P lending in China and force platforms to adopt the segregated account model.²⁴¹ To minimize the risks posed by P2P lending platforms to the broad financial system, the CBRC also imposed borrowing caps, allowing individuals

235. Chuanman You, *Recent Development of FinTech Regulation in China: A Focus on the New Regulatory Regime for the P2P Lending (Loan-based Crowdfunding) Market*, 13 *CAP. MKTS. L.J.* 85, 98 (2018). For a comprehensive analysis of the main elements of the Interim Measures, see Huang, *supra* note 5, at 70–76.

236. See Leng & Tham, *supra* note 85.

237. See Interim Administrative Measures for the Administration of the Business Activities of Online Lending Information Intermediary Institutions art. 10 (promulgated by the China Banking Reg. Comm., Aug. 17, 2016, effective Aug. 17, 2016), CLI.4.278756(EN) (Lawinfochina) [hereinafter Interim Measures]; You, *supra* note 235, at 99–100.

238. Interim Measures, *supra* note 237, art. 10(2).

239. *Id.* art. 10(3).

240. *Id.* art. 10(8).

241. See Huang, *supra* note 5, at 72.

(companies) to borrow a maximum of 1 (5) million yuan from P2P platforms, including a maximum of RMB 200,000 (1 million) from any one platform.²⁴²

The Interim Measures further imposed a three-step registration procedure on all P2P lending platforms. First, P2P lending platforms have to obtain a business license. Second, platforms need to conduct recordation and registration with the local financial regulatory authority. Third, platforms need to apply for a relevant telecommunications business permit from the competent communications agency.²⁴³ The CBRC, jointly with the State Administration of Industry and Commerce, issued an additional guideline, which provides details in relation to platforms' registration process.²⁴⁴

Finally, according to the 2019 transition plan, all existing platforms in China must become small loan providers within two years. Effectively, this means that platforms need to "to meet a capital requirement of no less than 50 million yuan to turn into a regional small loan company, and no less than 1 billion yuan to transition into a small loan lender qualified to operate nationally."²⁴⁵

3. *Lenders' protection*

Similar to the United States, the focus of the Interim Measures is on lenders' protections; however, the motives are different. First, unlike the U.S. market, the Chinese P2P market is dominated by retail rather than institutional investors.²⁴⁶ Second, it was largely unregulated for eight years, during which several platforms collapsed, causing retail investors substantial losses.²⁴⁷ These reasons led the Chinese government to impose significant protections for lenders. Their approach to

242. See Interim Measures, *supra* note 237, art. 17; Xie Yu & Jennifer Li, *China Imposes Cap on Peer-to-peer Loans to Rein in Runaway 'Shadow Banking' Scams*, SOUTH CHINA MORNING POST (Aug. 24, 2016), <https://www.scmp.com/business/banking-finance/article/2008552/china-imposes-cap-peer-peer-loans-rein-runaway-shadow>.

243. See Interim Measures, *supra* note 237, art. 5; Chen, Kavuri & Milne, *supra* note 212, at 16; Huang, *supra* note 5, at 73.

244. Huang, *supra* note 5, at 73 & n.37 (named "Guideline on the Administration of Recordation and Registration of Online Lending Information Intermediary Institutions").

245. See Leng & Tham, *supra* note 85.

246. See Chen, Kavuri & Milne, *supra* note 212, at 18.

247. See *id.* at 13.

protecting lenders is reflected in two key elements: the custodian requirement and strengthening information disclosure.²⁴⁸

First, the Interim Measures state that lenders and borrowers' funds must be in the custody of a qualified financial institution.²⁴⁹ Second, the Interim Measures issued an exclusive chapter devoted solely to P2P platforms' disclosure,²⁵⁰ under which platforms are required to disclose information such as borrowers' private and financial information, and possible risks.²⁵¹ To ensure the accuracy of disclosure, the Interim Measures further mandate that third-party intermediaries—e.g., accounting firms and law firms—will be recruited by the platforms to periodically audit their disclosures.²⁵²

4. Borrowers' protection

The Interim Measures also devoted a chapter to the "Protection of Borrowers and Lenders," though it provides relatively little by way of borrowers' protections. It includes a provision to ensure the information of borrowers is safely stored and properly used, but not much else.²⁵³ Other complementary laws impose restrictions on the interest rates on P2P lending, but overall borrower's protection issues are not well addressed in China.²⁵⁴ Table 3 below summarizes the regulatory provisions discussed in this Part.²⁵⁵

248. *Id.* at 19.

249. Interim Measures *supra* note 237, art. 28. For a short overview of the custodian scheme, see You, *supra* note 235, at 109–10; Huang, *supra* note 5, at 74–75.

250. See Interim Measures, *supra* note 237, ch. 5.

251. See Interim Measures, *supra* note 237, art. 30; Huang, *supra* note 5, at 75.

252. Interim Measures, *supra* note 237, art. 31. See Huang, *supra* note 5, at 75; You, *supra* note 235, at 107; Chen, Kavuri & Milne, *supra* note 212, at 20.

253. Interim Measures, *supra* note 237, art. 27; see Chen, Kavuri & Milne, *supra* note 212, at 17.

254. See Chen, Kavuri & Milne, *supra* note 212, at 18.

255. Cf. Nemoto, Storey & Huang, *supra* note 201, at 3 (outlining comparative practices and regulatory regimes of P2P in the U.S., U.K., China, and Japan).

TABLE 3: P2P LENDING REGULATION²⁵⁶

	US	China	UK
Lead Regulator	SEC oversees lending; CFPB, FDIC, & FTC govern borrowing	CBRC (the securities regulator is not involved)	FCA
Regulatory Approach	Early intervention and a relatively straighten regulatory regime	Laissez-faire approach until 2015, and then a tailored regulatory framework	An adaptive approach, in which rules are modified over time according to consultation papers' conclusions
Platforms' Requirements	Platforms (1) need to get a license from the SEC and from state governments; (2) are subject to financial reporting requirements; and (3) are, effectively, forced to adopt the notary model	Platforms need to (1) get a business license, register with the local financial regulatory authority at the place where it is based, and get a relevant telecommunications business permit; (2) are forced to act as pure information intermediators; (3) are subject to a list of twelve restrictions (e.g. a prohibition on pooling lenders' funds; on promising guaranteed principal and interest to lenders; and on undertaking asset securitization business); and (4) are subject to minimum capital requirements (under the 2019 transition plan)	Platforms (1) need to get a full authorization from the FCA; (2) are subject to minimum capital requirement of £50k; and (3) need to comply with initial and ongoing financial reporting requirements

256. The data about "Perceptions towards Regulation" is taken from: CCAF, 3RD AMERICAS ALTERNATIVE FINANCE INDUSTRY REPORT, *supra* note 27, at 71; CCAF, 3RD ASIA PACIFIC REGION ALTERNATIVE FINANCE REPORT, *supra* note 58, at 57; CCAF, 5TH UK ALTERNATIVE FINANCE INDUSTRY REPORT, *supra* note 58, at 30.

	US	China	UK
Lenders' Protection	The SEC protects lenders mainly through initial and ongoing disclosure requirements and marketing restrictions	The CBRC protects lenders mainly through initial and ongoing disclosure requirements and segregation of lenders and borrowers' funds from platforms' funds	The FCA protects lenders mainly through Initial and ongoing disclosure requirements; loan cap requirements; marketing restrictions; and segregation of lenders funds from platforms' funds
Borrowers' Protection	Borrowers are protected by the FTC and the CFPB, which applied laws intended to prevent inaccurate, unfair, discriminatory, and abusive credit practices (and by additional state-level consumer protection laws)	The Interim Measures impose provisions aimed at minimizing borrowers' privacy risks and complementary laws set a limit to the interest rate charged in P2P lending platforms	The FCA imposes provisions aimed at minimizing the risk of financial distress to borrowers (e.g., platforms are required to make reasonable credit assessments and to provide a clear explanation regarding loan agreements)
Perceptions towards Regulation	59% (18%) of all surveyed platforms view existing regulations as "Adequate & Appropriate" ("Excessive & Too Strict")	62% (3%) of all surveyed platforms view existing regulations as "Adequate & Appropriate" ("Excessive & Too Strict")	83% (4%) of all surveyed platforms view existing regulations as "Adequate & Appropriate" ("Excessive & Too Strict")

V. POLICY IMPLICATIONS

The previous Parts provided a descriptive overview of the of the P2P lending market from four different perspectives: (1) the new financial intermediary role of P2P lending platforms; (2) the characteristics of P2P lending markets; (3) the risks and benefits associated with P2P lending platforms from borrowers and lenders' perspectives, as well as from a market perspective; and (4) the different regulatory approaches to P2P lending regulation. This Part discusses the policy implications of these evaluations and proposes potential regulatory responses. It is organized as follows. Section V.A discusses the re-intermediation of P2P lending platforms and claims that P2P lending regulation should be modified to better suit the new financial intermediary role of these platforms. Section V.B discusses the disclosure of P2P lending platforms and proposes tailored disclosure requirements. Section V.C discusses the entrance of institutional lenders to the market and outlines the main regulatory concerns related to it.

A. *Adjusting Regulations to the Re-Intermediation of P2P Lending Platforms*

This Section argues that the regulation of P2P lending platforms should be modified to better suit their new financial intermediary role. The previous Parts showed that while P2P lending platforms were originally designed to act as online marketplaces that only matched lenders with borrowers, they evolved over time into new financial intermediaries that performed various brokerage activities (e.g., loan screening and pricing services) and provided tools intended to help lenders manage their credit risks (e.g., internal secondary markets, contingency funds, and auto-investment tools).²⁵⁷ This change in the financial intermediary role of P2P lending platforms affected the risk allocation between the parties involved in P2P lending transactions and hence it should be considered when discussing the optimal regulatory framework. This Section focuses on three specific aspects of re-intermediation: the delegation of loan screening and pricing to platforms, the develop-

257. See Balyuk & Davydenko, *supra* note 4, at 14.

ment of contingency funds, and the development of secondary markets.

To begin with, the P2P lending market is associated with high informational asymmetries between lenders and borrowers that can result in credit rationing, whereby lenders are unwilling to fund loans at any rate due to concerns about borrowers' hidden riskiness.²⁵⁸ In the early days of the market, to overcome these information asymmetries, most P2P lenders performed their own credit assessments based on information provided by the platforms. Over time, however, lenders gradually began delegating all tasks related to the evaluation of loan applications to the platforms.²⁵⁹ Nowadays, most platforms collect information on borrowers, verify it, perform pre-screening—i.e., assess the creditworthiness of borrowers' and decide whether to accept or reject its application—and price loan applications for lenders.

The delegation of credit evaluation tasks to platforms reduces lenders' transaction costs, and platforms are arguably placed at a better position to perform these tasks (since they are skilled and have informational advantage), and hence can produce better outcomes. On the other hand, however, most platforms bear little to no credit risk with relation to the loans they help originate, and thus have little to no incentive to maximize loan quality. The reason for this is that platforms' revenues come mainly from origination fees, which are paid at the time of loan origination, rather than servicing fees, which are paid during loan reimbursement, and thus have little to no "skin in the game" with relation to the loans they help originate.²⁶⁰ This means that under the new market conditions—the re-intermediation of platforms—and the current fee structure of platforms, the misalignment between lenders and platforms' incentives is exacerbated: platforms perform essentially all tasks related to the evaluation of loans but lenders absorb (almost) all the credit risk associated with these loans.

258. See *id.*; see generally Stiglitz & Weiss, *supra* note 47.

259. See generally Vallée & Zeng, *supra* note 6 (presenting a theoretical model rationalizing the increase in prescreening intensity by lending platforms).

260. See generally Hayne E. Leland & David H. Pyle, *Informational Asymmetries, Financial Structure, and Financial Intermediation*, 32 J. FIN. 371 (1977); Adair Morse, *Peer-to-Peer Crowdfunding: Information and the Potential for Disruption in Consumer Lending*, 7 ANN. REV. FIN. ECON. 463, 468 (2015).

The delegation of credit assessment tasks to platforms also exacerbates the misalignment between lenders and platforms' incentives in a less visible way, through the delegation of loan pricing to platforms. Empirical evidence suggests that as time goes by the reverse auction model is gradually being replaced by a fixed interest rate model, in which the platform sets a fixed interest rate in advance for each risk category.²⁶¹ That is, lenders gradually delegate the mission of loan pricing to platforms. An empirical study analyzed the consequence of this change using data from Prosper and found that under the fixed interest rate model, the platform assigns higher interest rates—which, in line with past theoretical predictions, lead to higher default rates (all else being equal)²⁶²—and loans are more likely to be funded and are funded more quickly (compared to the auction model).²⁶³ The study suggested that, in the short term, this change benefits lenders and borrowers, since loans are more likely to be funded and are funded more quickly, but in the long term, it reduces lenders' overall return on investment, due to the higher default rates. When looking from the platform's perspective, the study argued that since platform revenues come mainly from origination fees, "it is in their best interest to ensure a higher funding probability in the short term."²⁶⁴ To put it differently, the shift towards a fixed interest rate model reduces lenders' welfare in the long run, but increases platforms' welfare in the short run; and since platforms' revenues are largely from origination fees, this shift is beneficial from the platform's perspective. This empirical evidence thus provides another perspective on the exacerbated misalignment between lenders and platforms' incentives under the re-intermediation of platforms.

Under the status quo, to overcome the misalignment of lenders and platforms' incentives, regulators require platforms to disclose potential conflicts of interest and take appropriate

261. See Balyuk & Davydenko, *supra* note 4, at 18–19.

262. Zaiyan Wei & Mingfeng Lin, *Market Mechanisms in Online Peer-to-Peer Lending*, 63 MGMT. SCI. 4236, 4237 (2016) (first citing Stiglitz & Weiss, *supra* note 47; then citing Helmut Bester, *Screening vs. Rationing in Credit Markets with Imperfect Information*, 75 AM. ECON. REV. 850 (1985)).

263. See *id.* at 4237.

264. *Id.* at 4254.

steps to prevent them.²⁶⁵ These provisions were important and could be efficient in the early days of the market, when most platforms were simply marketplaces that facilitate loans. Under the new market conditions, however, this Article argues that such provisions might be too vague and not effective enough in mitigating the exacerbated misalignment of incentives between the platforms and lenders. It claims that regulators should consider taking further measures to ensure the quality of the loan assessments provided by platforms and provide platforms with more specific guidelines on how to reduce the misalignment between lenders and themselves.

One possible way to ensure that platforms are appropriately incentivized to act in the interest of lenders is to increase their “skin in the game” by imposing an appropriate fee structure.²⁶⁶ Nowadays, platforms’ revenues come mainly from origination fees, which are paid at the time of loan origination, and servicing fees, which are paid during loan reimbursement.²⁶⁷ Under this fee structure, platforms have a strong incentive to maximize loan origination volume but little incentive to maximize loan quality. Regulators should consider incentivizing platforms to change this structure in a way that platform revenues depend “more on the loan performance (servicing fee) and less on the volume of originated loans (origination fee),”²⁶⁸ thereby incentivizing platforms to act in the interest of lenders.

Against that suggestion, however, one can argue that regulatory intervention is not required with relation to the exacerbated misalignment of interests, since the competitive forces of economy will eventually drive platforms to act in the interest of lenders to promote long-term success.²⁶⁹ This argument can be further supported by the fact that the market is constantly growing and platforms are gradually transforming into public companies, with long-term interests.²⁷⁰ On the other hand, this position is arguably of limited application in the U.S. context, since the U.S. P2P lending market is highly concentrated.

265. *E.g.*, FCA, CP18/20, *supra* note 56, at 39–40; FCA, PS19/14, *supra* note 220, at 14.

266. *See* Havrylchuk & Verdier, *supra* note 44, at 126–27.

267. *See* Balyuk & Davydenko, *supra* note 4, at 33.

268. Havrylchuk & Verdier, *supra* note 44, at 128.

269. *See* Wei & Lin, *supra* note 262, at 4255.

270. *See id.*

Considering both arguments, the Article takes a cautious approach and argues that regulators should pay close attention to the misalignment between lenders' and platforms' incentives—that has been exacerbated due to the re-intermediation of platforms—and that measures to ensure the quality of the loan assessments provided by platforms should be considered. It further suggests that regulators reduce this misalignment by incentivizing platforms to switch to a different fee structure. Due to lack of sufficient research and evidence with relation to this matter, however, the Article *does not* argue that regulators should presently impose a specific fee structure on platforms.

Other regulatory concerns related to the re-intermediation of platforms concern the tools that platforms provide to help lenders manage their credit risks. To begin with, some P2P platforms offer contingency funds designed to cover losses for lenders in the event of default.²⁷¹ The contingency funds “may be funded by borrowers, investors or in some cases using the platform’s own money (including money the platform would otherwise take as profit if no default occurs),”²⁷² and serve as an additional tool to reduce lenders’ credit risk. These contingency funds create a few concerns that should be weighted when discussing the optimal regulation. For example, commentators have asserted that these funds can “create a false sense of security. . . [leading] investors to believe that platforms are providing a guaranteed rate of return on the loans they facilitate.”²⁷³ The FCA, for example, observed platforms that made statements such as “no investor has ever lost any money.”²⁷⁴ Such statements might be misleading—implying that there have been no defaults—and may provide lenders with a negative incentive to reduce their risk when choosing loans.²⁷⁵ To mitigate these concerns, regulators should impose specific disclosure requirements with relation to these funds, such as the terms of the funds, how the platform decides whether to pay out money from the fund, and about past

271. See Havrylchuk & Verdier, *supra* note 41, at 123–24; FCA, CP18/20, *supra* note 56, at 18.

272. FCA, CP18/20, *supra* note 56, at 18.

273. *Id.*

274. *Id.* at 31.

275. See *id.*; Nemoto, Storey & Huang, *supra* note 201, at 5.

performance of the fund,²⁷⁶ to ensure lenders utilize this tool appropriately.

Another development that should be considered when discussing the optimal regulatory framework is the growing number of secondary markets for P2P loans. This development improves lenders' liquidity, and thus is essential for the development of the market. On the other hand, it creates a few regulatory concerns. First, commentators in the United States and the U.K. claimed that the existing secondary markets are still limited in size and may create false perceptions about liquidity and investors' ability to exit.²⁷⁷ Therefore, one focus of regulators should be an appropriate disclosure with relation to the conditions of these secondary markets. Second, observers claimed that the existence of secondary markets might create concerns "about insider trading and market abuse (when loans are traded with discounts and premiums)."²⁷⁸ Regulators should thus pay close attention to the development of secondary markets for P2P loans and make efforts to ensure that there exist appropriate mechanisms to prevent and detect market manipulation practices.²⁷⁹

To conclude, the point of this Section is that P2P lending regulation should be modified in accordance with the re-intermediation of the platforms. To demonstrate this point, it analyzed three aspects of the re-intermediation and showed that in order to ensure that these developments benefit market participants, appropriate regulatory guidelines and incentives should be put in place.

B. *Imposing Tailored Disclosure Requirements*

P2P lending platforms are subject to extensive initial and ongoing disclosure provisions, requiring them to disclose information about their business, service, past performance, etc.²⁸⁰ These heavy disclosure requirements are aimed at en-

276. Such suggestions have been made by the FCA in a 2018 consultation paper and have been approved in a 2019 policy statement. See FCA, CP18/20, *supra* note 56, at 50–51; FCA, PS19/14, *supra* note 220.

277. See FCA, CP18/20, *supra* note 56, at 32; U.S. DEP'T OF THE TREASURY, *supra* note 91, at 25–26.

278. See Havrylchyk, *Regulatory Framework*, *supra* note 11, at 21.

279. See generally *id.* at 22.

280. For an overview of disclosure requirements of P2P lending platforms in the United States, the U.K., and China, see *supra* Part IV. For an overview

sureing that investors have enough information to make informed investment decisions and that they fully understand the risks and benefits involved in their investments. Nevertheless, especially in the United States, under the SEC, commentators and policy makers seem to be dissatisfied with the level of transparency in the market and tend to highlight the need for more effective disclosure.²⁸¹ This Section suggests that regulators should make disclosure requirements more useful to investors by imposing tailored and consistent disclosure standards.

A specific concern in relation to the disclosures of P2P lending platforms regards the accuracy and consistency of loan origination and past performance data. Policy makers in both the United States and the U.K. have observed that clear and systematic disclosure with relation to origination data and past performance of the platforms is often lacking,²⁸² making it difficult for investors to evaluate the risk profiles of platforms and make effective comparisons between different types of platforms. To mitigate these concerns and promote transparency in the market, the Article suggests that consistent and tailored disclosure be imposed. Prominent examples of tailored disclosure provisions required to assess the risk profiles of platforms include information about the financial intermediary of the platforms;²⁸³ loans/portfolios that the platforms facilitate (e.g., the price, maturity, frequency and amounts of repayments); fee structure; the availability and terms of auto-bidding tools, contingency funds, secondary markets, and whole loan channels for institutional lenders; and past performance of the platform (e.g., default rates, returns, and loan origination data).

For these disclosure requirements to be of greater use to investors, the Article makes two more suggestions. First, it suggests promoting consistent disclosure standards, especially for

of disclosure requirements of platforms operating in Europe, see Havrylchuk, *Regulatory Framework*, *supra* note 11.

281. See, e.g., Verstein, *supra* note 24, at 502; Macchiavello, *supra* note 74, at 559; U.S. DEP'T OF THE TREASURY, *supra* note 91, at 29; FCA, CP18/20, *supra* note 56, at 24–25.

282. See U.S. DEP'T OF THE TREASURY, *supra* note 91, at 29; FCA, CP18/20, *supra* note 56, at 24–25; Havrylchuk, *Regulatory Framework*, *supra* note 11, at 28–29.

283. For a similar suggestion, see FCA, CP18/20, *supra* note 56, at 45–46.

platforms' past performance data.²⁸⁴ Possible ways to do so are creating a "private sector driven registry for tracking data on transactions," like the U.S. Treasury Department has suggested²⁸⁵, or establishing a standard definition or formula for calculating platforms' default rate, as the FCA and the French regulator provided²⁸⁶ The idea here is to ensure that the information provided about platforms is accurate and to allow investors to effectively compare risk profiles of platforms.

Second, the Article suggests imposing different disclosure requirements tailored to the characteristics of different types of platforms. Different platforms provide different types of loans, determine the interest rates differently, and perform the financing process differently, depending on the business model chosen. These differences affect the risks and returns involved in the P2P lending transaction, and the Article thus argues that in order for the disclosure requirements to be maximally useful for investors, these differences should be considered. The prominent considerations here should be (1) the types of loans (consumer, business, real-estate, or micro-finance) that the platform facilitates, which may differ in terms of maturity, risk (partially because certain types of loans are secured whereas others are not), and returns, and thus create different expectations among lenders; (2) the lending options provided by the platforms (e.g., manually bidding on individual loans or investing in loan portfolio with auto-bidding);²⁸⁷ (3) the involvement of institutional lenders and the availability

284. For a similar suggestion, see Havrylchuk, *Regulatory Framework*, *supra* note 11, at 28–29.

285. U.S. DEP'T OF THE TREASURY, *supra* note 91, at 29.

286. See FCA, CP18/20, *supra* note 56, at 50; FCA, PS19/14, *supra* note 220, at 28–29; Havrylchuk, *Regulatory Framework*, *supra* note 11, at 45.

287. In auto-bidding, lenders invest in a portfolio, rather than an individual loan, and hence portfolio-oriented information is required (e.g., "the minimum and maximum interest rate that will be payable [and] the minimum and maximum maturity date of any P2P agreement that may be facilitated for the investor"). These disclosure requirements were proposed by the FCA. See FCA, CP18/20, *supra* note 56, at 48. Platforms that offer manual bidding, by contrast, should disclose loan-oriented details, such as details of the price of each loan, the maturity of the loan, "the frequency of and amounts of the repayments to be made by the borrower, [and] the total amount to be paid by the borrower." *Id.* Such platforms should further emphasize the risk of lack of diversification, which is partially mitigated when investing with auto-bidding tools.

of whole loan channels; and (4) the pricing mechanism adopted by the platform (e.g., auction or fixed interest rate), which affects the interest and default rates in the platform.²⁸⁸ Disclosure requirements that take these characteristics into account may provide lenders with more relevant information about the risks and benefits involved in the transaction, thereby allowing them to make better-informed investment decisions.

A possible justification for imposing these tailored and consistent disclosure standards—apart from allowing investors to make better informed investment decisions—is to promote market discipline, and thereby incentivize platforms to avoid excessive risk-taking behavior (i.e., to avoid choosing loans with higher default risk).²⁸⁹ The idea is that imposing tailored and consistent disclosure requirements will allow investors to assess the risk profile of platforms more accurately, and hence improve their ability to “punish” platforms for choosing loans with higher default risk.²⁹⁰ Therefore, tailoring disclosure requirements for the characteristics of P2P lending platforms and providing consistent disclosure standards is essential, not only to ensure that investors have the required information to make informed investment decisions, but also to incentivize platforms to maintain adequate risk standards.

C. *Monitoring the Entrance of the Intuitional Lenders*

P2P lending platforms were originally designed to serve retail lenders only, but they increasingly opened to institutional lenders such as banks, hedge funds, and pension

288. See, e.g., Wei & Lin, *supra* note 262, at 31–32.

289. “Market discipline refers to a market-based incentive scheme in which investors in bank liabilities, such as subordinated debt or uninsured deposits, ‘punish’ banks for greater risk-taking by demanding higher yields on those liabilities.” Erlend Nier & Ursel Baumann, *Market Discipline, Disclosure and Moral Hazard in Banking*, 15 J. FIN. INTERMEDIATION 332, 333 (2006); see also Havrylchyk, *Regulatory Framework*, *supra* note 11, at 29.

290. See Nier & Baumann, *supra* note 289, at 337. Theoretical models and empirical evidence confirmed the effectiveness of market discipline in mitigating excessive risk-taking behavior of banks, showing that banks that disclose more information about their risk profile limit the risk of insolvency. See, e.g., *id.*; Tito Cordella & Eduardo Levy Yeyati, *Public Disclosure and Bank Failures*, 45 STAFF PAPERS (INT’L MONETARY FUND) 110, 125 (1998). Although P2P lending platforms are different from banks, the logic that underlies the model seems applicable.

funds.²⁹¹ Institutional lenders are often referred to as “smart money”, in the sense that their expertise and adequate source of capital enables them to choose investments that yield, on average, higher returns.²⁹² Their entrance increases the heterogeneity of lenders, affects retail lenders’ behavior, and reshapes platforms’ incentives. This Section claims that regulators should pay close attention to the increasing involvement of institutional lenders and outlines potential regulatory concerns.

To begin with, an empirical study by Vallée and Zeng found that while the participation of institutional lenders improves platforms’ screening outcomes, the increasing heterogeneity in lenders’ sophistication also creates adverse selection problem among lenders;²⁹³ because institutional lenders can typically identify and finance good loans before retail investors, institutional lenders’ participation may lower the average quality of loans available for retail lenders.²⁹⁴ The study suggested that platforms are thus face a trade-off between the positive and negative effects caused by the participation of institutional lenders.²⁹⁵ In light of these findings, the Article claims that regulators should pay close attention to the increasing involvement of institutional lenders and to the way platforms manage their increasing involvement, ensuring fair treatment for both retail and institutional lenders.

Another concern with the increasing involvement of institutional lenders in P2P lending platforms is that it increases the exposure of the general financial system to P2P lending, thereby creating financial stability concerns. The idea is that as the linkage between institutional lenders and P2P lending platforms intensifies, the effect of the failure of P2P lending platforms on the broad financial system is likely to become greater and spread more rapidly. To mitigate this concern, commentators suggest that regulators pay close attention to the development of the market and monitor the entrance of the institutional lenders, ensuring that platforms do not be-

291. See Balyuk & Davydenko, *supra* note 4, at 11; Käfer, *supra* note 25, at 25–28.

292. See *supra* note 86 and accompanying text.

293. Vallée & Zeng, *supra* note 6, at 1941.

294. *Id.*

295. *Id.*

come too big or too interconnected to fail and that appropriate resolution plans are in place.²⁹⁶

While the Article endorses these general suggestions, it argues that the financial stability risk and contagion concerns posed by P2P lending should be interpreted in the appropriate perspective. First, in many jurisdictions, P2P lenders and borrowers' funds are managed in segregated client accounts, separated from platforms' balance sheets.²⁹⁷ Hence, in the event of insolvency, lender returns should not be affected. Second, most P2P loans (in the United States) have a maturity of more than one year.²⁹⁸ This means that unlike banks—which provide short-term loans used to support liquidity—P2P lending platforms provide mainly long-term loans that are more akin to security investments.²⁹⁹ Thus, the effect on the economy of a P2P lending platform failure is likely to be more limited than the effect of a bank failure.³⁰⁰ Third, P2P lending platforms, in contrast to banks, do not take deposits or perform maturity transformation; rather, the liability of borrowers in P2P lending platforms has the same maturity as the lenders' assets.³⁰¹ The absence of maturity transformation services prevents the risk of a bank run.³⁰² Collectively, these points imply that the financial stability risk that potentially could be posed by P2P lending platforms—albeit in need of consideration when discussing the optimal regulatory framework—is limited and should not be compared to the financial stability risk posed by banks. Therefore, while regulators should pay attention to potential financial stability risks, the Article does not propose any specific regulatory action on this matter.

296. Havrylchuk, *Regulatory Framework*, *supra* note 11, at 26.

297. *Id.* (shows that in some jurisdictions (e.g., Israel and Mexico) “clients’ money should be held in a special trust account” and in most jurisdictions “platforms do not even have the right to handle clients’ money and should rely on a payment institution or obtain a license of a payment institution to do this”).

298. *See supra* note 162.

299. *See OXERA*, *supra* note 163, at 60.

300. *See id.*

301. Käfer, *supra* note 25, at 23–24.

302. *See Diamond & Dybvig*, *supra* note 51, at 402–03.

CONCLUSION

P2P lending emerged a little over a decade ago and quickly evolved into a global industry. This market segment originally designed to match retail lenders with borrowers, without the involvement of traditional intermediaries like banks, providing an alternative source of credit to individuals and SMEs, and a new asset class to lenders. For years, commentators viewed this industry as an ultimate example of disintermediation³⁰³ and emphasized its potential to democratize financial markets and reduce the dominance of institutional actors.

This Article analyzed the current state of the P2P lending market and showed that much of these views, with relation to the characteristics of the P2P lending market, do not hold. First, P2P lending platforms are no longer simple marketplaces that only match lenders with borrowers. Far from it; over the years they gradually evolved into new financial intermediaries that perform various brokerage activities, ranging from loan screening and pricing to operating internal secondary markets and contingency funds. Second, while P2P lending platforms were originally designed to serve retail lenders, they increasingly opened to institutional lenders who currently finance most of their loans (in the United States). Finally, the P2P lending industry became more complex, with increasingly diverse types of business models, each involves different risks and challenges.

While observers and policymakers have recently started paying attention to these changes in the market, corresponding changes in applicable regulations have not yet been made. This is where the Article's main contribution comes into play, through its analysis of the regulatory implications associated with these new conditions of the market, setting forth potential regulatory responses that better correspond to current market conditions.

303. See Verstein, *supra* note 24, at 529.