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# Systemic risk in Indonesia's Peer-to-Peer Lending (P2PL) regulation: Financial sectors at risk of market meltdowns

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## Abstract

Peer to Peer Lending (P2PL) has evolved to not only be a mere platform for lenders and borrowers but has increase its ability in facilitating transactions between lenders and borrowers through credit ratings of potential borrowers creating a high level of lenders' dependence to P2PL platforms. However, we found that P2PL platform has no natural economic incentives to give lenders the best possible loan as P2PL platform is incentivized to push for loan quantity rather than loan quality. In reaching the said findings, we use a comparative normative research method on Indonesia, China, and the United States' regulation on P2PL platforms with a heavy emphasis on Indonesian law. Through our findings, we recommend a two-step regulatory approach by imposing a public governance duty and a stronger disclosure mechanism towards P2PL platforms.



## Introduction

Peer to Peer Lending (P2PL) provides a variety of options to lend to individuals who want to open a business and cannot get loans from financial institutions such as banks. P2PL provides simplicity like conventional financial institutions because people can get loans from anywhere and anytime as long as they have smartphones and bank accounts. There are several reasons for the development of P2PL (Pascalis, 2021); first, the wave of regulatory reforms triggered by the 2007–2009 financial crisis affected the structure and business operations of banks and other financial institutions and, second, advances in technology allow the development of technology-driven financial service providers in addition to traditional participants.

These disruptions are not absent of effects, especially within P2PL. While P2PL attempts to replace financial intermediaries such as banks, ironically, it has also become an intermediary. Specifically, P2PL platform has become an "information intermediary" where it can match lenders and borrowers through the power of data and information. As an information intermediary, P2PL plaform disseminates lending information and matching lenders and borrowers (Amartha, 2022). To facilitate transactions, as an information intermediary, P2PL platform offers services such as loan rating, borrowers' creditworthiness assessment, offering investment advice,

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and managing repayment. In the context of Indonesia, OJKR 10 2022 only realizes two services that P2PL platform may offer to the public, being loan rating and borrowers' creditworthiness assessment.

The term "information intermediary" had classically been used within securities law (Armour et.al, 2016). Within securities market, the price of a security incorporates new information within its fluctuations in price (Armour et.al, 2016). Evidently, as informed market participants have to get information before they trade, sources of financial information to help them trade in the most profitable manner may be said to be "information intermediary" (Armour et.al, 2016). Contextualizing, P2PL platform is classified as an information intermediary as it offers financial information within the form of its capacity to assess borrowers' creditworthiness and loan rating under Indonesian law.

There are two cumulative negative impacts that have happened due to the transformation of P2PL platforms as information intermediaries. First, while P2PL services have helped to increase the access and supply of credit, the comfort and fast provision of loans attracts borrowers of weak solvency (Eickstadt & Horsch, 2021). In addition, borrowers' level of weak solvency might not be revealed sufficiently to the lenders as the P2PL platforms do not have the incentive to be transparent as P2PL platforms profit from the quantity of loans not the quality of loans (Balyuk & Davydenko, 2019). However, once revealed, lenders' trust to the platform will decrease dramatically, as P2PL has failed to perform its protection to the lenders' resulting in capital flight (Thakor & Merton, 2018). Second, if said failure happens on a mass scale, there is mass distrust to the P2PL platform. As will be shown later, this mass of distrust may and had undermined the systemic stability of a financial system. Accordingly, regulators must be able to realize the power along with the position of P2PL platform as an information intermediary and thus regulate accordingly to prevent the negative impacts in question.

### *The Relationship between P2PL Lender-Borrower Agreements and Its Role as an Information Intermediary*

To navigate the role of P2PL platforms within lenders' decision to invest within a loan, a legal relationship between P2PL platform and lenders must firstly be settled. Legally, the relationship between P2PL platforms and lenders is within a principal-agent relationship, where P2PL platforms are being trusted by their lenders as their intermediary within an online platform to facilitate lenders in connecting them with potential borrowers (Hartanto & Ramli, 2018). As P2PL platforms and investor agreements works under a principle-agent relationship, there are legal duties that investors as principal and P2P platforms as agents in a principal-agent agreement (*lastgeving*) consisting of a range of duties pursuant to Article 1792–Article 1819 of the Indonesian Civil Code, both for the principal and agent (Hartanto & Ramli, 2018):

Elaborating on the agent, duties specified to the agent are to be executed upon the given authorities as perfectly as possible in accordance with the given authorization (*volmacht)* that were given by the principal. It must be mentioned that Hartanto and Ramli (2018) emphasized the need to corroborate the definition for "substitutional authority" given by the agent from the principal within agreements made by lenders and platforms to ensure that platforms work to the best interest of the investor. Presently, said substitutional authority has been extended to facilitating value added services such credit scoring. In the same light, this raises the need for further clarity on the extent of said "substitutional authorities" to protect lenders P2PL platform from abuse in its role as an information intermediary by aggressively increasing loan supply.

Conclusively, as P2PL platforms value-added services loan rating and borrowers' creditworthiness assessment have the ability to affect the lenders' decision in giving a loan to a borrower as an information intermediary, there must be further clarity upon the extent of P2PL platforms' substitutional authorities in giving value added services to lenders.

### *The Threats of an Unregulated Information Intermediary*

To assess the level of intervention made by P2PL platforms on lenders decision, there needs to be a firm understanding on the P2PL business model. In accordance to Kirby and Worner (2014), there are two prevalent business models of P2PL, being; the client segregated account model and the notary model. Within the first model, an individual lender is matched to an individual borrower through an intermediary platform, where a contract is set up between the individuals with little contribution by the intermediary platform. The platform is rewarded through a fee paid from both lender and the borrower (Kirby & Worner, 2014). An example of this model is within the Indonesia and Chinese P2PL business model and how it is being regulated (Hartanto & Ramli, 2017; Huang, 2017). Second, under a notary model, the platform acts as an intermediary between the lender and the borrower; however, under this model, the bank originates a loan rather than the platform, where then the platform issues a note to the lender for the value of their contribution to the loan (Kirby & Worner, 2014). The note is considered by many jurisdictions to be a security. However, in regards to the fee, the structure is similar to that in client segregated account model (Kirby & Worner, 2014). An example of this model is within the United States P2PL business model and how it is being currently regulated (Verstein, 2011).

However, there exists a central problem in both models being information asymmetry. I as an information intermediary, P2PL platform has a better understanding over the borrowers' data and the risk at hand (Balyuk & Davydenko, 2019). Conversely, an incentive analysis over the relationship of P2PL platform and lenders shows that P2PL platform has the incentive to not uphold a good assessment over the quality of loans rather than to just focus upon the quantity of loans. Contextualizing to prevalent business models, neither the notary nor the client separate account P2PL platform profit out of the fees of every loan made and not to the quality of loans. P2PL platforms are prone to the risk of lax screening in borrowers' loans that are being distributed to the lenders, focusing upon quantity of loans rather than the quality of loans (Goldstein et al., 2019; Verstein, 2011).

### *Reasons for Indonesia to Regulate P2PL Platforms as Information Intermediaries*

Having mentioned the risk of conflicting incentives between platforms and lenders, the Indonesian government must realize the significant role of P2PL platforms as information intermediary in order to regulate P2PL platforms and safeguard lenders' trust based on two main reasons. Firstly, in principle, Indonesia, OJK in specific, has the obligation to correct said conflicting incentive as it classifies as a market failure. Under the Public Interest Theory of Regulation, the regulation of firms or other economic actors contributes to the promotion of the public interest. Public interest will be defined as the best possible allocation of scarce resources for individual and collective good (Hertog, 2010); (Posner, 1974). The inability to attain public interest might be examined by identifying, for instance, market failure. Market failure may be defined as a situation where scarce resources are not put to their highest valued use (Hertog, 2010). Consequently, OJK as a regulator, has the obligation to correct any market failures present for the sake of public interest through government regulation.

Acting as an information intermediary, P2PL's platform idleness in mitigating risks of market failure will result in the risks of market failures which undermine systemic stability. In accordance with Schwarcz, conflicting incentives between the P2PL platform and lenders is classified as a principal-agent failure. Said failure is defined as an agent, such as financial managers, sacrificing a firms' long-term interest to make short term personal gains (Schwarcz, 2016). While principal-agent failure may be solved through legal solutions such as requiring firms to pay managers under longer term compensation arrangements, said solution is plagued with problems if heavy information asymmetries exist between the principal and the agents that they are responsible for (Schwarcz, 2016). Thus, realizing P2PL platform's role as an information intermediary will be an important first step in correcting said market failure.

Second, not realizing P2PL platforms as information intermediaries will increase systemic risk. Systemic risk is defined as a trigger event, such as economic shock or institutional failure, which causes a chain of bad economic consequences that ultimately lead to a chain of financial institutions and/or market failures (Schwarcz, 2008). In accordance with Schwarz (2008), systemic risk may rise from inevitable market failures that impair efficiency, such as a principal-agent failure may increase systemic risk. The P2PL business model may act as an amplifier to systemic risk as it may, over time, introduce macro-financial risks that could amplify shocks to the financial system and may raise the likelihood of financial stability (Financial Stability Board, 2017). As the P2PL business model comes under the principal-agent relationship and has potential for systemic risk, critiques on correcting principal-agent failures that may lead to systemic failures is essential. Realizing P2PL platform's role as an information intermediary is the first step in preventing principal-agent failures that could cause systemic risk.

### *Controlling Conflicting Incentives in Preventing Systemic Risks*

Indonesia has currently regulated the P2PL business model under *Otoritas Jasa Keuangan* Regulation Number 10 Year 2022 regarding Technological Based Crowdfunding Service (OJKR 10 2022), that leaves the role of P2PL platforms as an information intermediary relatively unchecked. Exemplifying, value added facilities such as credit scoring by P2PL platforms falls under the ambit of Article 35 paragraph (4a) of OJKR 10 2022, which regulates the obligation for platforms to mitigate risk for lenders and borrowers. However, within the original interpretation of Article 35 paragraph (4a) of OJKR 10 2022, OJK vaguely prohibits platforms to lead the lenders decision in giving the loans and only allows platforms to set a pool of "adequate borrowers." This rule is problematic as what constitutes as a pool is uncertain. Under the current rule, a pool of two borrowers will be sufficient in defining a pool of borrowers. Under such circumstances, it could not be said that the platform does not lead the lenders to a certain level of decision making.

This uncertainty left Indonesia's financial regulators susceptible to principal-agent failures caused by P2PL platform conflicting incentives combined with its role as an information intermediary. There are two underlying urgencies. First, conflicting incentives of P2PL platforms will incentivize P2PL platforms in using said legal uncertainty to push the supply of loans to lenders regardless of its quality. Second, if left unchecked, oversupply of insolvent loans may act as amplifiers that may lead to systemic shocks. While *ex ante* legal protections exist in Indonesia under civil and administrative law, such protections only exist after losses have incurred. From a systemic perspective, such protections are meaningless as the damage has been done to the public at large. Efforts to curb P2PL platforms from principal-agency failures is essential for Indonesia's protection from systemic failures. In order to do this, creating limits in the ability for P2PL platforms in credit scoring borrowers' loans is essential not only for lenders' protection but also from risks of systemic failures (Schwarcz, 2015; Sunstein, 2003). Understanding these urgencies, our objective for this paper is to deliberate the problems of OJKR 10 2022 along with its systemic consequences. Adding to that, we will also deliberate legal models to solve the said problems.

## Methodology

In conducting this research, the complex and dynamic nature of literary works involved in understanding how regulations should realize P2PL platforms as information intermediary along with the risk of principal and agency failure, required the authors to evaluate theoretical works in the interplay of how P2PL platform acts as an information intermediary along with its risk of a principal-agent failures. By adopting a normative approach to assess how legal uncertainties may support excessive risk taking which presents a systemic risk, this approach involved a combination of the following steps:

1. Identify key articles in OJKR 10 2022 that gives P2PL platforms facilities to be information intermediaries; and
2. Presenting potential legal solutions to regulate P2PL platforms in being information intermediaries that presents risks for principal-agent failures.

This research employed current Indonesian regulations, such as OJKR 10 2022 and capital market regulations, to illustrate the importance of regulating the powers to credit score by P2PL platforms. As a working model, we will also use Chinese regulations on P2PL as the Chinese government, which has regulated the powers of P2PL Platform as information intermediaries, has the powers to credit score and borrower's creditworthiness assessment. The authors use cases of market crashes due to the lack of trust in P2PL platform's ability to score credit, especially the United States' 2016 P2PL market crash (Balyuk & Davydenko, 2016) to reflect the possibility of market crashes of P2PL platforms due to principal-agent failure with the result of the fall of 83 percent on loan volume for Prosper. On the other hand, the authors will use existing Indonesian regulation on credit scoring within capital market regulations to present a potential solution for curbing excessive risk taking by P2PL platforms.

## Results and Discussion

This paper discusses current legal gaps of platform risk benchmarking under OJK Regulation No. 10/POJK.05/2022 concerning Informational Technology Based Cooperative Financing Services (OJKR 10 2022) and its consequences. In addition, the paper will discuss the possible need for a centralized supervision upon the making of regulatory sandboxes to supervise financial technologies companies due to existing legal gaps. In deliberating this, we separate this paper into two parts; P2PL Platform Credit Scoring and its Relation to Systemic Risks; Indonesian Legal Gaps in Regulating P2PL Platforms Credit Scoring to Prevent Systemic Risk; and Potential Legal Solutions to Curb Systemic Risk

### *The Obligation to Intermediate and Lack of Oversight*

In disseminating over the role of P2PL platform as information intermediary, there needs to be a firm base over the definition of P2PL platform under OJKR 10 2022. In accordance to Article 1 paragraph 1 of OJKR 10 2022, it describes P2PL as:

> *"The facilitation of financial service in order to match a lender with a borrower in providing a conventional financing or syariah based financing within a direct manner through electronic systems by virtue of the internet."*

From the said definition, it is evident that the function of P2PL platforms is to become a facilitator in "*matching*" the lender and the borrower. The function of P2PL platforms in matching borrowers and lenders has become the main gateway for P2PL platforms to become information intermediaries. This is certainly the case in China, in accordance with Article 2 of 2016 Interim Measures for the Administration of the Business Activities of Online Lending Information Intermediary Institutions (2016 Information Intermediary Law). P2PL or online lending is defined to mean direct lending made among individuals through the internet platform (Huang, 2017). Further, it is heavily emphasized that the role of the internet platform is restricted to be just an information intermediary institution, whose function is to provide information related services, such as information, information release, credit rating, information exchange, and credit matching. Essentially OJKR 10 2022 allows financial services to match with borrower and not providing risk information.

However, OJKR 10 2022 does not regulate the role of P2PL platforms having the ability to be information intermediaries in detail and can be seen particularly in Article 35 of OJKR 10 2022. Pursuant to Article 35 paragraph (4a) of OJKR 10 2022, the platform has the obligation to mitigate risks by analyzing borrowers' credit risk, giving it the facilities of an information intermediary. Continuing, under the original explanation for Article 35 paragraph (4a) within OJKR 10 2022, it is further explained about the platforms' inability to lead lenders to decide on loan decisions. While regulated as such, within the original interpretation within Article 35 paragraph (4a) of OJKR 22 2022, P2PL platforms are still allowed to rate a pool of borrowers who are deemed to be creditworthy to be presented to the lenders. It is not further explained on the quantity of what can be considered a "pool." From the said rule, it seems that more than one borrower will constitute a pool. Thus, P2PL platforms acting as information intermediaries may assess the credit of borrowers and then pool borrowers to be presented to the lender. Thus, normatively, OJKR 10 2022 obligates platforms to give lenders a credit assessment over the borrower pool which potential lenders are exposed to before they make an agreement with the borrowers.

Thus, absent of prior knowledge or information, the first information in which lenders are exposed to will be the platforms' credit assessment over the borrower (Balyuk & Davydenko, 2019). However, the undetailed manner of this rule creates a lot of problems for two main reasons; first, under this rule, platforms are able to guide lenders in making a decision to agree upon a loan, and, second, liability is impossible to be imposed as no benchmark exists to gauge the accuracy of borrowers' credit assessment by the platform.

Regarding the first problem, it can be seen within the normative construction of Article 35 of OJKR 10 2022 along with its original interpretation that P2PL platforms may assess the creditworthiness of a pool of borrowers to be presented to the lenders. However, the methods of borrowers' creditworthiness assessment or the information that needs to be used in assessing creditworthiness is not governed specifically in OJKR 10 2022. As an information intermediary which provides financial information to its lenders, P2PL platforms lack of regulation within its conduct in assessing credit and borrower creditworthiness is highly risky to its lenders. Contextualizing to conflicting incentives between P2PL platforms and lenders, this rule effectively opens up the possibility for P2PL platforms to mislead lenders in investing in weak solvency borrowers. Thus, being an information intermediary, the ability for P2PL platform to direct lenders to weak solvency borrowers are left unchecked.

Regarding the second problem of liability, from a liability perspective, it is hard to imagine P2PL platforms to be held accountable even if it misleads the accuracy of borrower's credit risk assessment pursuant to Article 35 of OJKR 10 2022. There are at least two legal liabilities relevant for discussion, namely; civil, and administrative legal liabilities for the platforms. From an administrative perspective, pursuant to Article 41 of OJKR 10 2022, failure to comply with Article 35 of OJKR 10 2022 concerning risk mitigation would be enough for administrative sanctions, consisting of a written notice, restrictions on business activities, and/or retraction of permits. From a civil law perspective, misleading information may lead to a breach of contract due to imperfect consent (*wilsgebreke*) due to mistake (*dwaling*), compulsion (*dwang*), and fraud (*bedrog*) on what he or she thought as an economic benefit, pursuant to Article 1322, Article 1323–1327, and Article 1328 of the Indonesian Civil Code (Subekti, 1979). Further, a tort suit may also be submitted under the grounds of breaching Article 35 of OJKR 10 2022.

However, without a benchmark on what constitutes an accurate or a "margin of safety" for an accurate assessment of credit scores, it is hard to prove any liability to the platforms in taking excessive risk to lead the lenders to give loans to borrowers of weak solvency (Schwarcz, 2015; Sunstein, 2003). As has been explained by Schwarcz (2016), what constitutes as "excessive risk" will depend on the observer's standpoint if it has a negative expected value to that observer. Contextualizing, within the P2PL business model, P2PL platforms as information intermediaries would not see the push for expansions towards risky borrowers as "excessive" due to imperfect collection incentives. Conversely, lenders will see the expansion as an excessive risk as borrowers with weak solvency will hurt upon their returns. Consequently, with no standards or a margin of safety, it is hard to pinpoint when P2PL platforms judgement has become too risky for the lenders.

As no grounds are given to hold platforms liable for not correctly rating the ratings, it is very unlikely that OJK would have the grounds to apply such administrative sanction in the likelihood of platform failures in correctly rating the quality of borrower loans. Further, it will be almost impossible for OJK to detect when P2PL platforms are taking excessive risk in its judgement of borrowers' solvency as there is no specific disclosure requirements to OJK in regards to P2PL platforms that relates to its judgement of borrowers' solvency. While Article 45 of OJKR 10 2022 governs the obligation for P2PL platforms to have complete historical data of its activities within its electronic system, pursuant to Chapter IX of OJKR 10 2022 regarding reports to OJK, there are no reporting nor disclosure requirements in regards to the judgement of borrowers' solvency. The closest report relating to P2PL platforms borrowers' solvency will be an incidental report to OJK pursuant to Article 65 paragraph (3) of OJKR 10 2022 that OJK may ask to P2PL platforms if needed to. However, as noted by Balyuk and Davydenko (2019), P2PL loan quality needs sufficient discovery time to reveal its quality, thus, it is unlikely OJK realizes mass failure is likely to happen before it has happened making it almost impossible for OJK to make any preventive sanctions to prevent market failures or systemic failures.

Similarly, under civil law, it will be extremely difficult to prove that the P2PL platform did mislead the lenders due to the absence of standards within Article 35 of OJKR 10 2022. In relation to systemic risk, these legal gaps intensify existing conflicting incentives between P2PL platform as an agent to the lenders by leaving them unchecked. Thus, P2PL platforms as information intermediary can exploit their information prowess to mislead lenders to weak solvent borrowers. If being done in mass, in the case of mass defaults due to P2PL platforms lax lending standards in vetting borrowers, systemic stability may be undermined due to mass capital flight by lenders resembling the United States P2PL market crash in 2016 and the 2008 financial crisis (Balyuk & Davydenko, 2019; Financial Stability Board, 2017; Goldstein et al., 2019; Pascalis, 2021). In conclusion, due to the existing problems, the very first information which the lenders will depend upon, namely, the platforms' credit assessment accuracy, will be left unchecked and impossible to be liable for its mistakes.

### *The Impacts of Principal-Agency Failure between P2PL Platforms and Lenders: A Case Study of the United States 2016 P2PL Crash and Indonesian Fraudulent Online Lending*

As deliberated prior, it is evident that the normative construction of P2PL ability in assessing credit risk has rendered the risk for the P2PL platform to mislead the lenders. If left unchecked, failures by P2PL platforms in disseminating quality information to its lenders have created intense capital flight from the P2PL market due to loss of trust by lenders (Financial Stability Board, 2017; Pascalis, 2021). In accordance with Thakor and Merton (2018), trust is crucial within a P2PL market as differing from banks, which have other functions to gain funding such as deposits, P2PL are all equity financed, thus, in the case where lenders lose trust in P2PL platforms on a large scale, it is significantly harder for platforms to gain trust back to the P2PL market creating market failures, and such could lead to systemic levels (Balyuk & Davydenko, 2019).

A case study worth mentioning on how lenders react to perceive or actual large failures is the United States' 2016 P2PL market crash. While the United States works under the notary model, the following case illustrates the effects of information asymmetry in relation to trust within P2PL platforms through lenders (Verstein, 2011). On February 11, 2016, Moody's placed Citibank's securitizations of Prosper loans under review for downgrade and revised upwards its loss expectations for Blackrock's securitizations. Despite Prosper's best efforts to raise interest rates to increase lenders confidence, loan volume continued to drop until mid-July of 2016, when Moody's finally decided against the downgrade (Balyuk & Davydenko, 2019). This case demonstrates that the P2PL model depends on lenders' trust to create market stability within a P2PL business model.

Moreover, it also shows even a well-equipped disclosure regulation on P2PL does not guarantee market stability. On November 24, 2008, The United States' Securities and Exchange Commission (SEC) issued a Cease-and-Desist Order to Prosper, which argued that Prosper was selling securities as defined in section 2 (a) (1) of the Securities Act. From said Cease-and-Desist Order, it is apparent that the SEC saw the notary model of P2PL as securities which needed to sell its notes through a prospectus from a public company (Verstein, 2011). By the same token, it also needed to comply with disclosure obligations through the said prospectus and continuous disclosure obligations as a public company (Verstein, 2011). Conclusively, market instability may still arise under stringent disclosure obligations imposed on P2PL platforms due to information asymmetry, which raises the question for countries like Indonesia, which has not applied stringent disclosure obligations to its P2PL platforms.

In regards to trust, the main concern within P2PL platforms in Indonesia is mainly of fraudulent practices by unregistered P2PL platforms. The newest case was the case of a fraudulent platform that tricked 311 students of IPB University to lend their money to a borrower with the goal of establishing a company (Bestari, 2022). In exchange, these students were supposed to get products from the newly established company, which they never did, thus, constituting fraud (Bestari, 2022). That case demonstrates the need for lenders' trusts to be protected in order to invest safely within ventures they are able to safely gauge for risk.

Contextualizing to systemic risk, these cases constitute a market failure in the form of principal-agent failure. This failure is defined as a failure of an agent in sacrificing a firms' long-term interest for short-term gains (Schwarcz, 2016). In the context of P2PL, as platforms are lax in their lending standards to push for loan quantity, lenders will lose trust of the platform and will initiate a capital flight as had happened in the United States 2016 P2PL market crash. This will certainly have the potential to amplify systemic risks as P2PL market failure may result in loss of confidence towards other financial markets (Financial Stability Board, 2017) (Pascalis, 2021). In relation to P2PL platform's ability to credit score in its role as an information intermediary, it is evident that its function to credit score must be done transparently to keep lenders trust as in the absence of trust, lenders will not be able to safely invest in P2PL platforms or the market and such will undermine systemic stability. Evidently, P2PL platforms must show that it is credit scoring of borrowers in good faith and not influenced through conflict of interest due to imperfect collection incentives.

### *Potential Legal Solutions to Curb Systemic Risk*

As has been deliberated, it is evident that Indonesia's regulation on P2PL has been insufficient in curbing systemic risk that may rise from P2PL markets due to the lack of standards in regulating P2PL platform's ability to mislead lenders to invest in weak solvency borrowers, which has been sourced to the gap presented within OJKR 10 2022 to realize P2PL as information intermediaries that may direct lenders to a certain decision. Ultimately, to prevent any fraud, misleading information, or other forms of market misconduct, further information disclosure by P2PL platform is needed. However, to settle for stronger regime information disclosure, there must be a strong philosophical ground for doing so. Philosophically, as P2PL platform has the possibility to undermine systemic stability, it is important to balance public costs and private benefits that is instilled within its action as a profit seeking agent (Schwarcz, 2015). There are two cumulative ways to solve this problem through legal solutions, namely, instilling a public governance duty and creating a stronger information disclosure mechanism in relation to P2PL platform's ability to credit scoring borrowers.

First, instilling a public governance duty to P2PL platforms is aimed at incentivizing platforms to be prudent in its actions that may create costs to the public. A public governance duty means that P2PL platforms would not only have a private corporate governance duty to investors but also a public governance duty to the public in its actions to prevent systemic risk (Schwarcz, 2015). How should P2PL platforms value their decisions cost to the public in the context of systemic risk? It could be answered with the following equation (Schwarcz, 2015).

### *Expected Value of the Loans' Systemic Cost*

*(1 − X% Chance of loans being unsuccessful) x F% chance of firm failing as a result of the loans being unsuccessful x $Z resulting systemic costs*

P2PL platforms can gauge this information as they should have more than sufficient information than third parties to gauge the numerical value X percent chance of loans being unsuccessful and F percent of the chance of firms failing as a result of the failures of loans relative to OJK (Schwarcz, 2015). Conversely, OJK has a better ability in valuing the numerical value of *$Z* of systemic costs if the loans fail as government financial regulators (Schwarcz, 2015). Thus, there needs to be more data given to OJK to build its capacity to gauge any systemic risks within the P2PL market to prevent systemic risks. As a strong philosophical base, setting a heavier information disclosure mechanism for P2PL platform in its ability to credit score and assess borrower's creditworthiness becomes important. There are at least two working models for setting this obligation, namely, the 2016 Information Intermediary Law and securities law.

First, the 2016 Information Intermediary Law in China may work as a working model of disclosure mechanism in preventing systemic risk. In China, in preventing market misconduct, the 2016 Information Intermediary Law has regulated P2PL platforms to disclose to the lender's, borrowers' basic information, basic information on projects needing funding, risk assessment, and possible risk, utilization of funds in matched but unexpired projects and other relevant information similar to Indonesia (Huang, 2017). However, the main difference between Indonesia's regulation with China's regulation on P2PL is China's emphasis is on the accuracy of the information disclosed. In China, information intermediaries are introduced to act as gatekeepers to the market thus the intermediaries introduce an obligation for the P2PL platform to be audited by an accounting firm, a law firm, an information system security assessment and/or any other third-party institution to assess the regulatory compliance and soundness of the P2PL platform (Huang, 2017). Further, the National Internet Finance Associate of China (NIFAC) has released standards on information disclosure which includes information that needs to be disclosed relating to project seeking funds, basic information of the borrower and the information about the project (Huang, 2017). In Indonesia, not only do P2PL platform information disclosure standards remain vague under OJKR 10 2022, but emphasis on information accuracy is also not as urgent as in China's 2016 Information Intermediary Law.

Second, in regards to credit scoring, securities regulation has regulated misleading information within its laws (Nasarudin, 2004). In light of the said concern, the government of Indonesia has regulated the said rule under Article 80 of Law No.8 Year 1995 concerning Capital Market. Further, in light of the 2008 crisis, regulators have a more stringent approach to regulate the making of ratings by rating agencies, for example, in accordance to OJK Regulation Number 24 Year 2021 concerning the Guidelines for Rating Companies (OJKR 24 2021), there are specific documents which rating agencies must publicized along with their published ratings, namely; every rating result, including updates or retraction of rating result, interpretation of every category of rating result including the definition of default, publication date of the result of ratings and date of updated rating result publication, key elements which act as basis for rating result, including first publication of results or update for rating result, financial report which includes important financial ratios that acted as grounds for rating publication; and information regarding any affiliations of rated parties, parties whose securities are being rated, or any third party in the Rating Process.

Having mentioned the above, it is pertinently clear that rating companies are strictly regulated to their published rating. In addition to that, in accordance with Article 16 of OJKR 24 2021, rating agencies are only allowed to be involved in rating activities and no other business activities without permission from OJK. Continuing, in the same article, rating agencies are not allowed to be involved in business activities in which conflict of interests are present. Failure in doing so will amount to administrative, criminal, and civil violation under OJKR 24 2021. Said model may be used to create a more stringent approach to P2PL platform ability to credit score, where in its publication for credit score will also include the methods of P2PL platform in scoring credit and also any conflict of interest that may arise from said publication of credit rating.

## Recommendation

From the deliberation above, it may be concluded that current regulations on P2PL platform under OJKR 10 2022 have not been sufficient to regulate this trust due to weak disclosure requirements by P2PL platforms relating to their judgement on borrowers' solvency. This legal gap has opened the risk for P2PL platforms lax lending standards in order to gain more profits. Ultimately, this practice can undermine systemic stability. Conclusively, there needs to be a reassessment on disclosure standards for P2PL platforms to prevent systemic failures.

We recommend a two-step approach in reassessing disclosure standards for P2PL Platforms to prevent systemic failures. First, instilling a public governance duty to P2PL platforms to ensure the obligation for P2PL platforms and regulators alike in preventing systemic risks that may be amplified or caused by P2PL platforms. We argue that the imposition of a public governance duty towards P2PL platforms will result in a heightened awareness in mitigating systemic risks that may be amplified by subpar risk mitigation. Second, a heavier information disclosure standard such as the ones existing under securities law and the 2016 Information Intermediary Law. The second step will essentially act as a complimentary step to the imposition of a public governance duty through exposing P2PL platforms to legal liabilities. Further elaborating, we argue that the imposition of disclosure standards will enable OJK to gauge P2PL platforms' efforts to mitigate risk. In the case

P2PL platforms' fail to disclose in accordance to existing disclosure standards, such platforms may be exposed to legal liabilities thus incentivizing P2PL platforms to comply.

## Conclusion

In light of recent developments, P2PL has become the ideal platform for unbankable parts of society. It has also helped the lives of small-time lenders in the hopes of gaining profit through a relatively small amount of investments. But with these privileges, risks remain. In particular, the possibility of platforms misleading lenders to profit over fees. As lenders are not sophisticated nor familiar with credit risk assessment, they are susceptible to being misled by platforms. One way platforms do this is by misleading lenders through the creation of ratings that favors quantity of borrowers and not upon the quality of said borrowers. P2PL platforms are incentivize to mislead lenders due to conflicting incentives between P2PL platforms and lenders, which stems from P2PL platforms profits from loans made and not the quality of loans. However, if done in mass, a failure of judgment by P2PL platforms in screening its borrowers can undermine systemic stability. As lending standards depreciates, loan failures are more likely to occur, which damages the lenders' profitability and breaches the lenders trust to the platforms. As the trust is breached, capital flight will ensue, which undermines and amplifies existing systemic stability and risk.

To mitigate said systemic risk, we present a two-step regulatory recommendation by imposing a public governance duty and disclosure standards. Through imposing these regulatory steps, we believe that P2PL platforms will be incentivized to increase their efforts in mitigating possible systemic risk.

## Conflict of Interest

The authors declare that there is no conflict of interest

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## References

Armour, J., Awrey, D., Davies, P. L., Enriques, L., Gordon, J. N., Mayer, C. P., & Payne, J. (2016). *Principles of financial regulation*. Oxford University Press.

Amartha. (2022, December 4). *Pendanaan bermakna lebih* [Collective financing means more]. Amartha. https://amartha.com/id_ID/pendanaan/

Balyuk, T., & Davydenko, S. A. (2018). *Reintermediation in Fintech: Evidence from online lending*. 31st Australasian Finance and Banking Conference 2018. https://doi.org/10.2139/ssrn.3189236

Bestari, N. P. (2022). *Cerita Mahasiswa IPB terjera pinjol 650 juta* [Story of IPB student trapped in loans of 650 million]. https://www.cnbcindonesia.com/tech/20221219185849-37-398275/cerita-ratusan-mahasiswa-ipb-terjerat-pinjol-rp-650-juta

Eickstadt, A., & Horsch, A. (2021). Financial technologies and systemic risk: Some general economic observations. In *Routledge Handbook of Financial Technology and Law* (pp. 96–115). Routledge.

Financial Stability Board. (2017). *Financial stability implications from Fintech: Supervisory and regulatory issues that merit authorities' attention*. https://www.fsb.org/wp-content/uploads/R270617.pdf

Goldstein, I., Jiang, W., & Karolyi, G. A. (2019). To fintech and beyond. *The Review of Financial Studies*, 32(5), 1648–1660. https://doi.org/10.1093/rfs/hhz025

Hartanto, R., & Ramli, J. P. (2018). Hubungan hukum para pihak dalam peer to peer lending [The legal relationship between parties in peer to peer lending]. *Jurnal Hukum Ius Quia Iustum*, 25(2), 320–338. https://doi.org/10.20885/iustum.vol25.iss2.art6

Hertog, J. D. (2010). Review of economic theories regulation. *Tjalling C. Koopmans Research Institute Discussion Paper Series*, *10–18*, 1–58. http:// www.uu.nl/rebo/economie/discussionpaper

Huang, R. H. (2017). Online P2P lending and regulatory responses in China: Opportunities and challenges. *Centre for Financial Regulation and Economic Development*, *19*(1), 63–92. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2991993

Kirby, E., & Worner, S. (2014). Crowd-funding: An infant industry growing fast. *Staff Working Paper: (SWP3/2014)*. https://www.iosco.org/research/pdf/swp/Crowd-funding-An-Infant-Industry-Growing-Fast.pdf

Nasarudin, M. I. (2004). *Aspek hukum pasar modal Indonesia* [Legal aspects within Indonesian capital market]. Kencana.

Otoritas Jasa Keuangan Regulation No. 10 Year 2022 on Layanan Pendanaan Bersama Berbasis teknologi informasi [Technological based crowfunding services] (2022). https://ojk.go.id/id/regulasi/Documents/Pages/Layanan-Pendanaan-Bersama-Berbasis-Teknologi-Informasi/POJK%2010%20-%2005%20-%202022.pdf

Otoritas Jasa Keuangan Regulation No. 24 Year 2021 on Pedoman Kegiatan Perusahaan Pemeringkat Efek [The Guidelines for Rating Companies] (2021). https://pasarmodal.ojk.go.id/Regulation/Detail/61647b00-c8cc-4e85-af15-49ba293b32aa

Pascalis, F. D. (2021). FinTech credit firms: Prospects and uncertainties. In *Routledge Handbook of Financial Technology and Law* (pp. 119–137). Routledge.

Posner, R. A. (1974). Theories of economic regulation. *The Bell Journal of Economics and Management Science*, *5*(2), 335–358. https://doi.org/10.3386/w0041

Subekti. (2005). *Hukum perjanjian* [Agreement laws] (21st ed.). Intermasa.

Schwarcz, S. L. (2008). Systemic risk. *Duke Law School Legal Studies: Research Paper Series*, *97*(1), 194–247. http://ssrn.com/abstract=1008326

Schwarcz, S. L. (2015). Keynote reflections: The public governance duty. *Georgia Law Review*, *50*(1), 1–15. https://scholarship.law.duke.edu/faculty_scholarship/3440/

Schwarcz, S. L. (2016). Perspectives on regulating systemic risk. In *Systemic Risk, Institutional Design, and the Regulation of Financial Markets* (pp. 39–59). Oxford University Press.

Sunstein, C. R. (2003). Beyond the precautionary principle. *The University of Pennsylvania Law Review*, 151(3), 1003–1058. https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=3241&context=penn_law_review

TaniFund. (2022, 4 December). *TnC borrower and TnC lender?*. Term and condition borrower and term and conditions lender. https://tanifund.com

Thakor, R. T., & Merton, R. C. (2018). Trust in lending. *NBER Working Paper Series*, *24778*, 1–59. https://www.nber.org/system/files/working_papers/w24778/w24778.pdf

Verstein, A. (2011). The Misregulation of person-to-person lending. *UC Davis Law Review*, *45*(2), 445–529. https://core.ac.uk/download/pdf/72832957.pdf