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Online Fundraising Through the Lenses of Law, Economics, and Sociology: Examples from American P2P Lending and Thai Rotating Savings and Credit Association

by

Poomsiri Dumrongvute

A dissertation submitted as part of the requirements for the degree of

Doctor of the Science of Law

of the

University of California, Berkeley

Committee in charge:

Professor Prasad Krishnamurthy, Chair Professor Robert Bartlett Assistant Professor Andreea Gorbatâi

Summer 2019

Copyright 2019 Poomsiri Dumrongvute All Rights Reserved Essays on Online Fundraising Through the Lenses of Law, Economics, and Sociology: Examples from American P2P Lending and Thai Rotating Savings and Credit Association

By

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Doctor of the Science of Law University of California, Berkeley

Professor Prasad Krishnamurthy, Chair

In recent years, online lending has become a new method of financing that allows people to lend and borrow anywhere anytime. Yet, due to its complex and wide-ranging operation, the online lending phenomena has become one of the most buzzing regulatory concerns. Online lending not only challenges incumbent loan providers like commercial banks by providing loans to unserved borrowers at attractive rates, it also presents unprecedented investment opportunities for individual lenders who are often referred to as 'peer' or 'crowd' to lend out their money commercially. In this dissertation, I explore how two different online lending methods help individual lenders who often lack financial sophistication to make safe investment and how laws and regulations may affect online lending businesses and their consumers.

This dissertation includes two essays that examine two examples of online lending practices: peer-to-peer (P2P) lending in the United States and online rotating savings and credit association (ROSCA) in Thailand. The first essay argues P2P lending platforms originally endorsed interpersonal relationships in lending and adopted many peer-to-peer features, such as social networks, personal profiles and group affiliations because interpersonal relationships are valuable and imperative for individual lenders and borrowers on P2P lending platforms. Nevertheless, the laws and regulations on P2P lending in the United States have caused P2P lending platforms to relinquish their commitments to utilize interpersonal relationships. The disappearance of interpersonal relationship on P2P lending platforms results in worse economic and sociological outcomes for individual lenders.

The second essay argues that interpersonal relationship is paramount to the success of ROSCAs in Thailand. Traditionally, ROSCA participants rely on their interpersonal relationships to lend and borrow from each other. Recently, an online form of ROSCAs has emerged and spread. Online ROSCAs allow strangers, who have no interpersonal relationship to easily create a virtual ROSCA. Such a risk alarms the financial regulators, lawmakers, and the public. Nevertheless, the current regulatory landscape on ROSCAs have also been developed based on a

long concern of frauds created by informal fundraising methods. While the current regulatory regime aims to ban and restrict ROSCAs which are operate beyond a local and personal level, the regulations effectively deem the whole category of online ROSCAs illegal and drove them to operate outside to the formal financial system.

Both P2P lending in the United States and ROSCAs in Thailand utilize interpersonal relationships among parties of lending transaction to address four fundamental concerns in lending: uncertainty, information asymmetry, interpersonal trust, and institutional trust. From an economic perspective, Ronald Coase's proposition suggests that personal relationships may help reduce uncertainty and information asymmetry in economic transactions including lending. From a sociological perspective, Francis Fukuyama and Linda Molm acknowledge the importance of interpersonal trust and institutional trust within financial exchanges. Interpersonal relationships among actors of a financial transaction can build and maintain interpersonal trust and institutional trust. This dissertation also applies both the economic and sociological perspectives to understand how laws and regulations might affect P2P lending platforms, and traditional and online ROSCAs. The studies of P2P lending platforms and online ROSCAs exemplify how the current laws and regulations which were developed based on more traditional financial methods can shift new financial services, particularly online lending, into a worse position.

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Essay I

Online Fundraising Through the Lenses of Law, Economics, and Sociology: An Example from American P2P Lending

Peer-to-peer (P2P) lending is a relatively new lending method; yet, P2P lending platforms are commonly regarded as a daunting contender that has successfully challenged traditional institutional lenders such as banks, credit unions, and loan companies. P2P lending platforms not only provide loans at more attractive rates to a broader base of borrowers, but they also present unprecedented investment opportunities for individual lenders who are often referred to as peer or crowd. This essay explores how P2P lending helps individual lenders who often lack financial sophistication and resources to make a safe investment by relying on peer-to-peer features, and how laws and regulations may affect P2P lending platforms and platform lenders and borrowers. In particular, this essay draws an example from the P2P lending industry in the United States. This essay argues that interpersonal relationships embedded in peer-to-peer features are valuable and imperative for individual lenders and borrowers on American P2P lending platforms. Mainly, interpersonal relationships improve four fundamentals of lending including uncertainty, information asymmetry, interpersonal trust, and institutional trust. Nevertheless, laws and regulations on P2P lending in the United States have caused P2P platforms to relinquish their commitments to utilize interpersonal relationships among peers they had promoted via peer-topeer features. The absence of interpersonal relationship on P2P lending platforms could result in worse economic and sociological outcomes for lenders and borrowers on P2P lending platforms.

I. Introducing P2P Lending

In the United States, personal loans have made a comeback surging a record last year and are currently the fastest-growing type of lending. Outstanding volumes of personal loans rose more than 18 percent reaching \$120 billion in 2018. Unsurprisingly, the majority of personal loans or about 36 percent were made through online lending, particularly peer-to-peer (P2P) lending platforms. Before P2P began its journey, the personal loan market in the United States was already developed and saturated. From commercial banks, credit unions to payday lenders, American borrows have various alternatives to obtain personal loans at different rates and terms. To compete in such a saturated market, P2P lending rose with a new business strategy to offer a novel lending method never been offered by institutional lenders. The P2P lending industry discovered that by using information technology and personal relationship among the 'peers,' P2P lending platforms could raise capital from investors including individual lenders and lend it out to individual borrowers. With this new method of lending, P2P lending platforms promise to offer cheaper, safer, and faster personal loans to more people.

P2P lending not only reduces the costs and increase access to personal loans across the loan market but also create a new investment opportunity for individual lenders. At first glance, the availability of online personal loans provides a new path for fundraising by individuals and small businesses to smoothen income and expand business opportunities. P2P lending also helps millions of borrowers consolidate and refinance the debts they had with traditional banks. Loan refinancing significantly reduces interest burdens and improve credit scores. At the same time, P2P lending increases access to affordable loans for individuals and small businesses who were formerly offered unreasonably high rates or rejections by traditional banks. A survey conducted by the Australian Securities and Investment Commission reveals that P2P lending borrowers reported lowering their interest rates by over 30 percent, resulting in savings of more than \$1000 compared to traditional bank loans.

From the lenders' perspective, P2P lending offers relatively good returns. While P2P lending stared from the peer-to-peer concept, there are currently various types of lenders on P2P lending platforms ranging from individual lenders to institutional lenders such as mutual funds, pension funds, and endowment funds. On average, P2P loans have consistently generated strong annualized returns of about 7% over the past eight years.³ While safe investment options like holding bank deposits or corporate bonds cannot generate the same level of return, P2P lending becomes an excellent alternative for individual lenders who are looking to a reliable investment option.

In particular, peer-to-peer (P2P) lending is online market service that matches and service loans among borrowing and lending members without the presence of a creditor bank. The term "peer-to-peer" clearly suggests that capital comes and goes among "peers" or individuals. P2P lending operators could only adopt this new lending method because of the development of communication technology, particularly the internet. The internet supports infrastructure for peer-to-peer interactions and provides administration of loans. From the start of the loan requesting to matching with lenders until the loan is repaid and matured, everything is done on

¹ Bloomberg, *Personal Loans Have Surged to a Record \$120 Billion High*, Finance and Debt http://fortune.com/2018/07/03/us-personal-loan-debt-2018/ (Last visited Nov. 1, 2018).

² See id.

³Oliver Garnet, Forbes, The 4 Best P2P Lending Platforms For Investors In 2017 -- Detailed Analysis, https://www.forbes.com/sites/oliviergarret/2017/01/29/the-4-best-p2p-lending-platforms-for-investors-in-2017-detailed-analysis/#41fde9d52abb (Last visited Jan. 3, 2019).

the internet. Since there is no need for physical branches, peer to peer lending platforms operate at much lower costs, and thus P2P lending platforms can sustain much lower margins. A portion of the saving goes to borrowers and lenders as the borrowers get desirable rates and the lenders get higher returns, while the remaining goes to platforms in forms of service fees deducted from both borrowers and lenders.

P2P lending is also playing an increasingly vital role for a new breed of borrowers and lenders who prefer the digital ecosystem. The Office of the Comptroller of the Currency has recently noted that one of the most critical changes in the United States involves the millennial generation accounting nearly 80 million people. Millennials have most of their financial lives ahead of them, and they have demonstrated high receptivity to technical innovation in financial services. Therefore, online financing like P2P lending could be the future of mainstream financing.

While P2P lending only contributed to less than 1 percent of the American personal loan market in 2010,⁶ P2P lending industry has expanded exponentially. Most P2P lending platforms have aggressively expanded to include marketplace lenders who are financial institutions looking to invest in P2P loans to diversify their broad investment portfolios. As such, marketplace lending became a more precise terminology to refer to the current operation of P2P lending noting that institutional lenders begin to dominate P2P lending. Nevertheless, the terms "peer-to-peer" and "P2P" are still widely used as they are catchier and emphasize on the enthusiastic characteristics of the industry. In the following sections, will discuss the early history that gave rise the current P2P lending business and the basic operation of P2P lending.

A. The Dawn of P2P Lending

The internet has penetrated everyday life at an increasing rate. Internet of things became a new paradigm. Not only the internet enables physical objects around us to connect and exchange information, but it also challenges the way we provide services including financial services like payment system, financial advisory, capital formation, and lending. More and more online financial services have begun to compete with brick-and-mortar institutions which rely heavily on physical presence and physical contacts between financial institutions and financial consumers.

Among new financial technology services, P2P lending has so far been the biggest and most prominent. Generally, P2P lending platforms link individual lenders with individual borrowers and service the loans until their maturity. P2P lending platforms can be distinguished from traditional lenders like banks, savings and loan associations, credit unions, and payday lenders for their comparative advantages like speed, efficiency, and accessibility. Unlike traditional lenders, P2P lending platforms can instantly offer price-competitive personal loans to borrowers including those who have less-than-perfect records for traditional bank loans. Such a business model requires them to quickly process a high volume of small loans at low costs. P2P lending was first founded in the early 2000s and has since proliferated. Circle Lending was the first platform which was found in 2002. The earliest form of P2P lending dealt with lending exclusively among friends and family members. In other words, Circle Lending was a pure facilitator of transactions which would have occurred among known participants. Kiva was a

⁴ Office of the Comptroller of the Currency, Supporting Responsible Innovation in the Federal Banking System: An OCC Perspective https://occ.gov/publications/publications-by-type/other-publications-reports/pub-responsible-innovation-banking-system-occ-perspective.pdf. (

⁵ See id.

⁶ See id.

second major P2P lending platform. It was founded in 2005 as a non-profit organization which allows people to do charity by lending money at zero interest to low-income entrepreneurs and students in more than 80 low-income countries. Zopa also entered the UK online peer-to-peer lending market in 2005. It is currently the largest peer-to-peer lending platform in the UK and Europe. In the United States, Prosper Marketplace and Lending Club started their services in 2006 and 2007 respectively. Currently, Lending Club and Prosper are the largest and the second largest peer-to-peer lending platforms in the world. Zopa, Prosper Marketplace, and Lending Club take the same business model called 'marketplace lending' where lenders lend money at given interest rates to unknown borrowers online.

Marketplace lending is also distinguished from the previous model of peer-to-peer lending because a large portion of funds in the marketplace comes from institutional lenders such as traditional banks, hedge funds, and pension funds, rather than individual investors. Prosper Marketplace and Lending Club have survived and dominated American P2P lending market. Online marketplace lending platforms are by far the most common model for P2P lending in the US and many other countries. The term P2P lending mentioned in this paper also refers to P2P lending under the marketplace-style P2P lending.

P2P lending also has a robust global presence. The global volume of the online lending market reached \$34.5 billion in 2016.⁷ About 60 percent of this volume or \$21.1 billion belongs to the marketplace or P2P lending which is by far the most dominant model for alternative financing business today.⁸ In the UK where P2P lending first started, the volume of P2P loans was \$4.7 billion in 2016.⁹ While catching up a few years after the US and the UK, Asia Pacific has become the most thriving market for P2P lending industry. China is the world most significant player in P2P lending with a large volume of 200 billion from more than 5,000 P2P lending platforms.¹⁰ Just 2016 alone, Chinese P2P lending loans reached an unprecedented volume of \$60 billion.¹¹ New Zealand, Australia, Singapore, Hong Kong, and South Korea also have flourishing P2P lending industry with a large number of platforms.¹² Nevertheless, the United States has remained the biggest P2P lending market with Lending Club and Prosper Marketplace as the world's largest and second largest P2P lending platforms by loan volume.¹³ Therefore, American P2P lending industry is still at the forefront appearing as an important precedent for P2P lending industries in other countries.

B. The Basic Operation of P2P Lending

This section will summarize the basic operation of American P2P lending platforms, notably Lending Club and Prosper Marketplace. Lending transactions on P2P lending platforms occur anonymously between borrowers and lenders who can only see one another by screen names. Loans are not collateralized or guaranteed, and thus lenders are exposed to unmitigated default risks. While some details may vary across different platforms, P2P lending operations are

⁷ Stijn Claessens, Jon Frost, Grant Turner & Feng Zhu, *Fintech credit markets around the world: size, drivers and policy issues*, BIS Quarterly Review (2018).

⁸ See id.

⁹ See id.

¹⁰ See id.

¹¹The Cambridge Centre for Alternative Finance (CCAF), The 3rd Asia Pacific Region Alternative Finance Industry Report November 2018, https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2018-3rd-asia-pacific-alternative-finance-industry-report.pdf (Last visited Jan. 12, 2019). ¹² See id.

¹³ See *supra* note 3.

very similar among most P2P lending platforms in the United States, particularly between Lending Club and Prosper Marketplace.

For the early days of P2P lending, both borrowers and lenders were almost exclusively individual persons. Borrowers and lenders must register with a P2P lending platform and agree to terms and conditions such as consent to the receipt of disclosures electronically, authorization to obtain a credit report, and the platform's right to verify the information and cancel fund. Borrowers and lenders must also provide their name, address and an email address to the platform. Yet, personal information will not appear to anyone besides the platform. Instead, registrants create their screen names which will be seen by other members of the platform. While such practice protects the privacy of P2P lending users, it could hinder the ability of lenders and borrowers to know each other.

1. Borrowing

Usually, the requirements for borrowers are more extensive than those of lenders. Borrowers must be at least 18 years old, establish residency in the state where the platform loans are available and have a bank account and social security number. ¹⁴ Borrowers must also agree to let P2P lending platforms obtain their financial reports. With the financial reports, platforms can utilize financial data such as credit score, delinquency history, number of credit lines, credit line utilization, and other pertinent information. These data are important inputs for the credit model of P2P lending platforms. Most P2P lending platforms also request additional information such as income, place, and position of employment and marital and homeownership status. Generally, P2P lending platforms offer an option for borrowers to specify their loan purposes.

Borrowers submit their loan requests specifying how much they need to borrow and how long they will pay their loans off. Typically, the average loan amount is within \$30,000 rage. The most common lending period is three years. Once this information is submitted, some P2P lending platforms will start identity verification and anti-fraud procedures. Nonetheless, many platforms will not initiate such procedures until the associating loan listing 15is fully funded by platform lenders. All P2P lending platforms also have a policy which reserves their right to cancel funded loan listing if they can identify identity theft or inaccurate information.

P2P lending platforms use their proprietary algorithm to analyze various types of data include information provided borrowers, credit reports on borrowing members from the consumer reporting agency, and their own historical data and determine a loan grade and an interest rate for each loan. ¹⁶ Most platforms obtain credit reports by employing a soft credit check. This means that although platforms obtain and check credit reports from a reporting agency, such record of credit activity will only visible to the holder of such credit account. ¹⁷ At

¹⁴ Platform loans may not be not available in every state. For example, Lending Club loans are not available for borrowers who reside in Iowa and West Virginia. Prosper Marketplace does not lend to residents of Iowa, North Dakota, and West Virginia.

¹⁵ The loan listings contain information such as the requested amount, loan grade, interest rate of investment (yield), loan status, predicted loan performance, and borrower's credit profile.

¹⁶ Most platforms still have a credit model which utilize financial inputs. Yet, newer platforms like upstart begin to use non-financial indicators such as educational level, area of study, and reputation of school lenders attended to determine loan rates.

¹⁷ LendingClub, Soft vs. Hard Credit Inquiries, https://blog.lendingclub.com/soft-vs-hard-credit-inquiries/ (Last visited Nov. 1, 2018). Lending Club confirms that potential borrowers can check your.... rate with us as many times as you'd.... like, with no impact to your credit score. Moreover, only the potential borrowers will be able to see the soft inquiries on your credit report—no one else.

this point, most platforms treat loan applications as soft credit inquiry that is inquiry will be recorded, yet not visible in the credit history.

P2P lending platforms only do a hard credit check when the loan and approved, and the borrower receives the loan proceed. P2P lending platforms then assign a loan grade and fixed interest rates (less often, the rates will be determined by an auction process.) ¹⁸ If a loan is determined to be riskier, it will be assigned to a lower grade, have a higher interest rate and origination fee rate. For instance, Lending Club has as many as 30 loan grades, and each grade comes with its associated interest rate ranging from 5.31-27.66%. ¹⁹ P2P lending platforms set up many loan grades so that lenders can distinguish particular loans they want from other loans. Moreover, within a loan grade, interest rates for different loans can be different.

P2P lending platforms will inform borrowing applicants about the decision and allow borrowing applicants to accept the loan offer and associated terms. If borrowing applicants accept loans based on the platform's terms, the loans will be published as loan listings. The loan listings contain information such as the requested amount, loan grade, interest rate of investment (yield), loan status, ²⁰ predicted loan performance²¹ and borrower's credit profile. Generally, credit profiles include FICO score range and other self-report information such as income, occupation, delinquencies, and mortgage status. Loan listings are designed to be not personally identifiable and can be seen by lending members. While protecting the privacy of P2P lending platform users are important and beneficial to the users themselves, privacy comes at a cost. P2P lending users, especially the lenders, will not have access to personal information of the borrowers, whereas this information can be valuable. The discussion about the value of personal information and interpersonal relationships between lenders and borrowers will continue throughout this essay.

2. Lending

While P2P lending platforms accept capitals from a wide range of lenders including individual lenders (or retail investors), high net worth lenders (or sophisticated investors), and financial institutions, the public seems to have the impression that P2P lending platforms, especially Lending Club and Prosper Marketplace, are matching an average-person borrower with their peers who are also average people.²² In fact, on their websites, both Lending Club and

¹⁸ Lending Club has assigned interest rate for each loan since the beginning of its operation. On the other hand, Prosper Marketplace allowed lenders to auction for best rates until it retired its auction feature in 2007. Prosper Marketplace since then has assigned a fixed rate for each loan. Funding Circle once offered the rate auction feature; it then switched to a fixed rate system as well.

¹⁹ LendingClub, Rates and Fees, https://www.lendingclub.com/public/rates-and-fees.action (Last visited Nov. 1, 2018).

²⁰ The loan status includes the amount and percentage of which the loan has been funded and when the listing starts and will expire.

²¹Predicted loan performance can include metrics like effective yield, estimate loss, and estimated return. These estimates are based on the historical performance of the P2P lending platform's dataset. The calculations of Effective yield, Estimated loss and Estimated return require are different among different platforms. Most P2P lending platforms also state that such estimates are assumptions and might not be accurate.

²² Millennium Trust Company, Trend in Marketplace Lending: An Overview, https://www.mtrustcompany.com/sites/default/files/uploads/docs/Marketplace-Lending-Whitepaper.pdf (Last visited Nov. 1, 2018); Business Wire, Institutional Investors Taking Leap Into Marketplace Lending Second Annual Survey by Richards Kibbe & Orbe and Wharton FinTech Reveals Rising Optimism, Participation in Emerging Industry, https://www.businesswire.com/news/home/20160411005338/en/Institutional-Investors-Leap-Marketplace-Lending (Last visited Nov. 1, 2018). In fact, the proportion of institutional investors has increased significantly over the past few years. P2P Lending platforms also design financial products tailored to fit the needs

Prosper Marketplace mainly focus their attention on individual lenders whom they refer to as retail investors. Information and contacts for institutional investors are apparently buried in small-text links at the bottom of both platform websites. While acknowledging institutional lenders, this essay also focuses on individual lenders. In fact, this section will refer to individual lenders and lenders interchangeably unless specified differently.

Like borrowers, lenders must also register with the platform as platform members and agree to the terms and conditions of the P2P lending platform. Lending members do not need to provide credit information, but they must be at least 18 years old and hold a residency of the state where platform notes are available.²³ Lenders are also required to provide a social security number for tax purposes. P2P lending platforms set some minimum financial suitability standards.²⁴ Most platforms do not set maximum investment limits. Before funding any loan, lenders must transfer money to account maintained by the platform generally under an escrow account. This account is called a funding account; it holds funds to be distributed to lenders and all payments from borrowers payable to the lender.

Lending members can browse through all loan listings available on the platform. Both Lending Club and Prosper Marketplace also offer to sort and filtering tools based on criteria such as loan grades, loan sizes, and loan purposes. In addition to having access to loan listings, potential lenders can also examine, and download data of past loans directly from most platform websites including both Lending Club and Prosper Marketplace. Some platforms also offer tools to query statistics and allow third-party application program interfaces (APIs) to collect and process these data at requests of potential lenders. In fact, such historical statistics are not limited to only platform members; the public also has some access to the historical loan data via third party websites which collect, curate and analyze information extracted from major P2P lending platforms' database. Interviews conducted at The Prosper Conference in 2008 suggested that both retail and institutional lenders were well aware of the loan data and its value and intended to track and make use of the data over time.²⁵ Most issued loan data has been broadly collected and processed by lenders, especially institutional investors who have resources and expertise to generate their own meaningful outcomes from raw financial data.²⁶ In contrast, because most individual lenders do not have the capability to comprehend and analyze the massive volume of financial information, most individual lenders only rely on sorting and filtering tools provided by the platforms or pay additional fees to third-party APIs to obtain data processing services.

and interest of high net worth and institutional investors such as whole loan assignment, trust, and partnership. These financial products are not usually advertised or available to the public.

Not all states all their residents to invest with MLPs. Some states also require investors to meet suitability condition such as having income or net worth more than the specific amounts. For example, to invest in Notes through the LendingClub platform, you must reside in one of the following and the District of Columbia and meet that state's financial suitability conditions: Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Dakota, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

²⁵ Seth Freedman & Ginger Zhe Jin, *Do Social Networks Solve Information Problems for Peer-to-Peer Lending? Evidence from Prosper.Com*, 8 NET Institute Working Paper (43) 6, (2008).

²⁶ Jeremy Todd, An Overview of Marketplace Lending and the Best Practices for Investing in the Asset Class, https://www.orchardplatform.com/blog/an-overview-of-marketplace-lending-and-the-best-practices-for-investing-in-the-asset-class/ (Last visited Nov. 3, 2018)

By Browsing through loan listings and historical statistics of issued loans, lending members can choose to fund any available listing. Typically, lenders can fund as many loans as they would like to. In fact, most P2P lending platforms encourage lenders to take on many loans as a diversification strategy. Lending Club asks lenders to not to put their eggs in one basket by building their portfolio of 100 or more notes of relatively equal size.²⁷ Nonetheless, most P2P lending platforms set a minimum amount of funding increment. For example, Lending Club and Prosper Marketplace both set the minimum increment at \$25 for each loan. Lenders on Lending Club and Prosper Marketplace are free to fund each loan in multiple of \$25.²⁸ A lender who has an investment budget of \$1000 could only invest as many as 40 loans which are far less than the recommendation. Therefore, because of the arbitrary minimum increment, individual lenders who have less capital may still not be able to diversify their investment adequately.

3. Funding a Loan

When a loan listing is fully funded, the funding bank partner originates the loan to the borrower. The borrower receives the requested amount net origination fee. The net amount is transferred electronically through the escrow account the borrower set up with the P2P lending platform. A borrower only pays an origination fee only when he or she successfully obtains the loan. The origination fee varies depending on grades or quality of loans determined by the platform. Origination fee can be in the rage of 1% to 5% of the loan value.²⁹ The whole process of lending from registration to transferring of the fund generally takes less than three days which is significantly faster than obtaining loan from traditional banks which can take weeks or months.³⁰

Generally, within a few days of the origination, the funding bank will assign the loan or sell the notes evidencing the loan to the P2P lending platform. Funding banks are FDIC-insured financial institutions located in non-usury states. Due to their FDIC-insured status, funding banks can charge loan interest at a rate above a state usury limit. This effectively allows platforms to charge interest at uniform rates across the country, even if some states enact usury limit statutes. For the case of Lending Club and Prosper Marketplace, the funding bank of both platforms is WebBank, an FDIC-insure Utah bank. Because Utah law does not set any usury limit on personal loans, WebBank can fund platform loans at interest rates as much as 32% across most states in the United States. The flexibility of interest rates allows P2P lending platforms like Lending Club and Prosper Marketplace to offer loans to lower-grade or higher-risk borrowers where traditional lenders like banks are not able to do so. P2P lending platforms subsequently buy the issued loans from the funding bank using funds they received from platform lenders. P2P lending platforms then issue platform notes which are notes evidencing the issued loans funded by the platform lenders and assign the notes to the platform lenders in consideration of the funds the platform lenders have funded the loan listings.

4. Loan Servicing

After the successful transfers of money to the borrowers and platform notes to the lenders, P2P lending platforms service ongoing loans by collecting repayments from borrowers

²⁷ LendingClub, *Diversification 101 in Marketplace Lending*, https://blog.lendingclub.com/diversification-101-marketplace-lending/ (Last visited Nov. 3, 2018).

²⁸ See id.

²⁹ Form 10k Lending Club and Prosper Marketplace, EDGAR Company Filings https://www.sec.gov/edgar/searchedgar/companysearch.html (Last visited Nov. 3, 2018).

³⁰ Obtaining a loan from a traditional bank usually takes many weeks or months. Borrowers need to complete many steps such as obtaining a prequalification letter, getting a preapproval and getting final approval.

based on agreed terms. Platforms then transfer the amount net service fee to the lenders who own the promissory notes corresponding to the loans. Typically, the service fee is at an annualized rate of 1% of the outstanding principal balance. In effect, the service fee will reduce the effective yield by 1%. P2P lending platforms also charge other fees such as non-sufficient funds fees, late payment fees, collection charges, and other loan modification fees. Nevertheless, most platforms do not charge a prepayment penalty fee. Therefore, the fee structure would encourage the borrowers to pay their loans off as fast as possible. This makes good business sense because the majority of the revenue of P2P lending platforms comes from the origination fees. The fast repayment rate may also reduce the likelihood of defaults.

5. Delinquency, Default, Collection, and Recovery

Usually, a monthly repayment will be withdrawn automatically from borrowers' bank accounts linked with the P2P lending platform. Yet, if a borrower's bank account has an insufficient fund for 15 days after the repayment dues, P2P lending platforms will charge a late fee to the borrower³¹ and pass the late fee on to the lenders. When P2P lending platforms are not able to collect a monthly repayment on the outstanding loans, P2P lending platforms will also stop passing on any payment to the lenders who hold the platform notes.³² In fact, P2P lending platforms also reserve any right to pursue repayment against both the platforms and borrowing members. Specifically, the right of lenders to receive repayments with respect to their platform notes is limited to the pro rata portion of the repayment received by P2P lending.

Therefore, platform lenders have no other mean but to rely on P2P lending platforms to collect default or delinquent notes and pass whatever the platforms can recover net collection fee back to lenders. The collection fee can be as high as 40% when the collection involves lawsuits.³³ Most P2P lending platforms refer debt collection to third-party collection services such as professional collection agencies and debt buyers. When collection agencies recover some money, P2P lending platforms will charge collection fee from the recovered amount and pass on the remaining amount back to the lenders.³⁴ Most P2P lending platforms also stipulate that they have a duty to return recovered funds to lenders only within two years after the date of default. This means that even though P2P lending platforms can recover some money after the two years have passed, the P2P lending platforms will no longer have an obligation to pay anything back to the platform lenders.

While P2P lending platforms charge debt collection fees, platform lenders will only have to pay the collection fees when the platforms can recover something. In other words, the risk of recovering nothing after spending time and resources falls entirely on the P2P lending platforms. Such a risk could be one of the factors that P2P lending platforms put minimal effort on debt collecting.³⁵ In fact, instead of relying on their internal collection department or professional

³¹. Generally, a late fee is charged in a fixed amount. Both Lending Club and Prosper Marketplace charge \$15 for each late payment.

³² One platform (in the UK) start to offer insurance to make sure that lenders will be guaranteed to receive payments despite the platform not being able to collect payment from borrowers.

³³ https://www.lendacademy.com/an-in-depth-look-at-investor-service-fees/

³⁴ Usually, collection fees are charged in the percentage of the recovered amount. For example, Lending Club charges investors one of the following collection fees, which is deducted from any amount recovered: 1) Up to 35% of the amount recovered if a collection action must be taken with respect to a loan and no litigation is involved, or 2) 30% of hourly attorneys' fees, plus costs, if litigation is involved. Lending Club does not charge a collection fee if no payments are collected, and no collection fee will be charged more than the amount recovered.

³⁵ Peter Renton, The Collection Practices at Lending Club, https://www.lendacademy.com/the-collection-practices-at-lending-club/ (Last visit Dec. 10, 2018).

third-party debt collectors, many platforms now bundle delinquent and default loans together and sell large portfolios of default and charge-off loans to third-party debt buyers. The platforms retain some of debt sale proceeds as collection fees before passing the remaining money to the lending members.

Besides, when delinquencies, charge-off or defaults occur, P2P lending platforms report the incidences to consumer reporting agencies (CRAs). The default and delinquency reports may be seen on the borrowers' consumer report accounts and may also affect the borrowers' credit scores, making it more difficult for the borrower to obtain additional credits or refinance their loans. P2P lending platforms also disclose the statistics of repayment performance, including delinquencies and defaults at a different stage of loans, on their websites accessible to any registered members and the public. The default and delinquent reports on P2P lending platforms' websites are not personally identifiable meaning that the lender will not be able to identify borrowers who fail to pay them beyond screen names and account numbers. Moreover, P2P lending platforms ban default borrowers from obtaining an additional loan on the platform. Yet, such borrowers can still seek loans from other P2P lending platforms.

6. Secondary Market for Platform Notes

While most P2P lending platforms expect the lenders to hold on platform notes until the maturity, some P2P lending platforms allow lenders who hold the notes to transfer their premature notes to other lenders through a registered broker-dealer licensed entity that the P2P lending platforms approve. Nevertheless, no P2P lending platforms guarantee that lenders will be able to make sell off or transfer their notes before maturity. P2P lending platforms do not collect any fee for the premature transfer, but lenders are required to pay a service fee of 1% of the transaction value to the broker-dealer servicer. FOLIOfn investment Inc. which is a registered broker and dealer has been the only trading platform for Prosper Marketplace and Lending Club. However, Prosper Marketplace closed down its secondary market in October 2016 leaving Lending Club the only P2P lending platform that offers a secondary market for platform notes holders. Yet, the sales and transferred of platform notes are still restricted under various conditions such as holder's qualifications and holding periods. Therefore, platform notes is not a liquid class of asset and should be seen as a long-term investment.

II. Interpersonal Relationships in P2P lending

There is no conclusive answer as to why P2P lending has become a major provider of personal loans in the saturated market that has long been dominated by institutional lenders like commercial banks, credit unions, and loan companies. It could be the progress of technology that makes lending accessible, efficient and cost-effective. It could be because of an unexpected incident like the 2008 financial crisis that caused regulators to tighten credits offered by traditional lenders. It could be the rising demand for personal loans. It could be an ever increasing of digital natives who are comfortable with online financial services. It could be the internet that allows borrowers to compare among different lenders to get the best possible rate. It could also be countless other reasons or combination of reasons that caused the rise of P2P lending in the United States and many other countries in the past decade.

While there is no way to pinpoint such definitive factors that give rise to success of the P2P lending industry, an effective way to discern right answers from many possibilities is to look

³⁶ Folio Investing, Notes Trading Platform, https://www.lendingclub.com/foliofn/aboutTrading.action (Last visited Nov. 3, 2018).

into how P2P lending platforms differentiate themselves from predecessors who also offer personal loans to retail borrowers. One of the promising characteristics that make P2P lending different from lending services provided institutional lenders is the concept of the interpersonal relationship which is embedded in the origin of P2P lending.

While Part I already shown that P2P lending platforms provide solutions to unmet demands for personal loans by offering cheaper loans, having a wider reach, creating opportunities for individual lenders to invest in personal loans as a class of investment like never before, this Part will focus on the concept of interpersonal relationship which is another main component that distinguish P2P lending from the preceding institutional lenders. I will discuss the online relationship and peer-to-peer features including social networks, personal profiles, and group affiliations. Moreover, this section will provide an analysis of P2P lending encompassing these peer-to-peer features based on economic and sociological perspectives.

A. Online relationships: The Basis for P2P lending

The internet enables individual borrowers and lenders to communicate and exchange information through online transmissions. Therefore, with internet access, interpersonal relationships are no longer constrained by physical proximity. The internet has reached almost every corner of the world allowing internet users to communicate with their family, friends, or even the public effortlessly. Networks or communities of internet users have also immensely expanded. An internet user in Melbourne can easily meet and talk to a stranger from Paris on an internet forum or an online community just because they both share an interest in Harry Potter. At the same time, P2P lending platforms use the internet to match lenders with borrowers and allow them to communicate and exchange information and money over the online platform.

Financial technology companies greatly benefit from the internet. P2P lending is widely regarded as the most successful financial technology. P2P lending is an online market service that matches and services loans among borrowers and lenders without the presence of institutional lenders. The internet supports infrastructure for peer-to-peer interactions and provides administration of loans. From registering borrowers and lending, matching with lenders, to repaying loans, everything is done on the internet. Since there is no need for physical branches, P2P lending platforms operate at much lower costs. Thanks to the low cost of operation, P2P lending platforms can sustain much lower margins and pass on the saving to both borrowers and lenders on the platforms. A portion of the saving goes to borrowers and lenders as the borrowers get desirable rates and the lenders get higher returns, while the remaining goes to P2P lending platforms in forms of service fees deducted from both borrowers and lenders.

B. Peer-to-peer Features

At the early beginning, most P2P lending platforms were identified as and emphasized on "peer-to-peer" transactions as if they were pure online intermediaries. In other words, money was exclusively borrowed from and lent to individual lenders and borrowers respectively. Peer-to-peer features facilitated these peer-to-peer transactions. In fact, peer-to-peer features have been widely employed by microfinance organizations such as Grameen Bank, Kiva, and FINCA. Use of peer-to-peer features was also ubiquitous. For example, Circle Lending began its online lending platform by solely facilitating lending among friends and family. Lending Club started operating as an application exclusively on Facebook which is one of the most popular social network sites. Lending Club matched borrowers with lenders based on common criteria on Facebook such as shared location, mutual friends, and common workplace or school. Yet, among the early P2P lending platforms, Prosper Marketplace was a platform that utilized most of the peer-to-peer features focusing on personal relationships and personal interaction among

borrowers and lenders. The main peer-to-peer features used by Lending Club and Prosper Marketplace included social network platforms, personal profiles, and group affiliations.

1. Social Networks

Right after its launch, Lending Club did not have its platform or website but ran as an application on Facebook, the world renown social network with millions of users who communicated and shared information every second. Lending Club believed that the social networking aspect of Facebook would allow its P2P lending business to leverage trust from the network of connections and relationships between Facebook users.³⁷ The launch positioning of Lending Club was novel and trendy. For Lending Club users, lending transactions were no longer limited to the transactions between friends or family members who already established relationships, nor the transaction between strangers like lending from traditional lenders such as banks, credit unions, and loan companies. Lending Club's loans happened between people who share the same networks or mutual friends on Facebook. Lending Club used "Lending Match" technology to a pair a borrower and a lender who shared some network connections such as shared schools or groups, geography, or mutual friends. Therefore, Lending Club's lenders and borrowers had indirect interpersonal relationships with each other.

Researchers explain the roles of social network on P2P lending platform as indirect interpersonal relationships where friends or family members who are familiar with the borrower may have personal information about the borrower and can recommend the borrower to the lender. For instance, a mutual friend from college can verify borrower's education. The mutual friend can also monitor the borrower by imposing social sanctions like shame or shunning. In addition, social networks like Facebook may facilitate intra-network bonding. For example, a lender may lend the money to an intra-network borrower for non-financial gains such as status or satisfaction. Hence, these examples help conclude that social networks can facilitate lending, especially when both borrowers and lenders are individuals.

Nevertheless, while Lending Club founders aimed to allow lenders and borrowers to control and tailor how the other party could view their personal information shared on Facebook's profiles, the original operation of Lending Club on Facebook still retracted lenders from communicating or seeing their borrowers directly. Unfortunately, Lending Club abandoned its Facebook Application with the first year of its operation and launched its platform website as it is today.

2. Personal Profiles

Most P2P lending platforms attempted to distinguish themselves from traditional lenders by providing borrowers the opportunity to provide additional soft data or personal information like descriptive background, educational and professional qualification, sex, loan purpose, or even portrait photo. Researchers find that individual lenders seriously consider this soft data as part of their evaluation for borrower's creditworthiness.⁴¹ In fact, one research study argues that personal information available on P2P lending platforms was the essential factor influencing

³⁷ LendingClub, *Lending Club: Our first day on Facebook!*, https://blog.lendingclub.com/lending-club-our-first-day-on-facebook/ (Last visited Nov. 3, 2018).

³⁸ S. Freedman & G. Z. Jin, Do social networks solve information problems for peer-to-peer lending? Evidence from Prosper.com. *NET Institute Working Paper no. 08-43* (2008).

³⁹ See id.

⁴⁰ See id.

⁴¹ S. Pötzsch, S & R Böhme, The role of soft information in trust building: Evidence from online social lending. In *International Conference on Trust and Trustworthy Computing* 381-395 (2010).

lender's confidence and trust in borrowers.⁴² Nevertheless, hard data or financial information is still the main part of loan listings. P2P lending platforms determine loan grades based exclusively on financial information financial metrics such as credit score, delinquency history, number of credit lines, and credit line utilization. While financial information has the strongest influences on loan evaluation and lending decision, personal information is useful to individual lenders and can complement financial information especially when borrowers have no or weak credit profiles.

Yet, the implementation of soft data on P2P lending platform is not always useful. A research study finds that while borrowers who look beautiful have 1.59% higher probability of obtaining a loan, the default risk is identical across beautiful lenders and controlled lenders. ⁴³ In addition, because personal information is mostly qualitative, borrowers can overemphasize or exaggerate their desirable quality without objective supports like financial information. Due to such subjective nature of personal information, P2P lending platforms do not verify nor guarantee the accuracy of personal profiles. In fact, after 2010, both Lending Club and Prosper Marketplace have continuously cut down various types of personal information that appear on their platforms. Currently, lenders are not able to see information like personal stories, education or professional backgrounds, or profile pictures anymore.

3. Group Affiliations

Prosper Marketplace was well-known as a P2P lending platform that incorporated the group feature where lenders and borrowers could join and be endorsed by the group or group members. From the beginning until 2013, Prosper Marketplace allowed a non-borrowing member to become a group leader by creating a group, recruiting borrowers into the group, advising borrowers on listing loans, and monitoring the performance of the group's listings.⁴⁴ While there was no requirement that a borrower must join a group, the group was created to foster a community or network where borrowing members feel social pressure to pay the loan on time. A group leader received a small fee from lending members of the group for his or her services. As groups were based on a community model, group leaders often linked group affiliations with existing networks people had already belong such as colleges, workplaces, occupations, or residential areas. There was also an endorsement feature where Prosper Marketplace would show that group leader and group members endorsed a member's listing by writing a public message or bidding on the group's member loans. This group feature is similar to group feature used by most microfinances where group leaders monitor loans to improve repayment rate by using relying on social network qualities such as friendship, endorsement, group membership, and group rating. ⁴⁵ For P2P lending, these qualities should be regarded as social capital which signifies the connections among individuals, social networks, and the norms of reciprocity and trustworthiness.⁴⁶ Therefore, borrowers who can garner more social capital are considered more trustworthy. In other words, interpersonal relationship within affiliation groups

⁴² Qin Yang & Young-Chan Lee, Influencing Factors on the lending intention of online peer-to-peer lending: Lessons from Renrendai.com. THE JOURNAL OF INFORMATION SYSTEMS, 25(2), 79-110 (2016).

⁴³ Enrichetta Ravina, LOVE & LOANS: THE EFFECT OF BEAUTY AND PERSONAL CHARACTERISTICS IN CREDIT MARKETS. Mimeo Columbia University, 1-79 (2012).

⁴⁴ Prosper, Group Leader Registration Agreement, https://www.prosper.com/plp/group-leader-registration-agreement/ (Last visited Nov. 3, 2018).

⁴⁵ Craig R. Everett, Group membership, relationship banking and loan default risk: The case of online social lending. BANKING AND FINANCE REVIEW, 7(2), 15-54 (2015).

⁴⁶ Robert D. Putnam, Bowling alone: America's declining social capital. JOURNAL OF DEMOCRACY, *6*(1), 65-78 (1995).

on P2P lending platforms give a positive signal for credit quality and individual lenders adopted such signal into their lending decisions.⁴⁷ In fact, a research study finds that the most favorable form of interpersonal relationships on Prosper Marketplace is social capital like the endorsement for borrowers and suggested that intra-group social networks played a role in conveying information for financial interest.⁴⁸ Such evidence suggests the strong value of group affiliation in P2P lending.

C. Interpersonal Relationships and the Fundamental Concerns of P2P Lending

The long-lasting and widespread success of P2P lending reflects that P2P lending effectively fulfills the needs of many financial consumers. The aforementioned peer-to-peer features are tools that P2P lending platforms in their early days used to address fundamental concerns of lending from both the economic and the sociological perspectives. From the economic perspective, Ronald Coase's proposition suggests that personal relationships may help reduce uncertainty and information asymmetry in economic transactions including lending. From the sociological perspective, literatures on trust offers another different lens to see the impact of interpersonal relationship on lending. Particularly, Francis Fukuyama and Linda Molm, acknowledge the importance of interpersonal trust and institutional trust within financial exchanges like lending. The section will examine fundamental concerns of P2P lending from the economic and sociological perspective respectively.

1. The Economic Perspective

Peer-to-peer features like a social network, personal information, and group affiliation are not new in lending, microfinance institutions have extensively used similar methods like relationship-based or group-based banking model for a long time. ⁴⁹ Microfinance's group lending allows small groups to borrow collectively in order to improve information asymmetry. This is because lending groups hold personal and publicly unavailable information of individual group members. ⁵⁰ Accordingly, lending groups are in a better position to screen, monitor, and encourage their members to repay. ⁵¹ Microfinance institutions also integrate new schemes such as staggered lending, ⁵² progressive lending ⁵³, and routine group meetings to overcome information asymmetry and monitoring problems. ⁵⁴ Thanks to these lending techniques, microfinance institutions significantly help unbanked or underbanked borrowers raise funds from their peers at affordable rates.

While economists have broadly studied microfinance's lending techniques, peer-to-peer features employed by P2P lending platforms are less understood. There are three economic

⁴⁷ Seth Freedman & Ginger Zhe Jin, Do social networks solve information problems for peer-to-peer lending? Evidence from Prosper.com. NET Institute Working Paper no. 08-43 (2008).

⁴⁸ Seth Freedman & Ginger Zhe Jin, Do The information value of online social networks: Lessons for peer-to-peer lending. International Journal of Industrial Organization, 51, 185-222 (2017).

⁴⁹ Emily Breza, Peer Effect, and Loan Repayment: Evidence from the Krishna Default Crisis, Working Paper (2012). ⁵⁰ *See id*, at 3.

⁵¹ See id.

⁵² Staggered lending is a setup where borrowers in a lending group receive their loans successively so that their loans will not be due at the same time. Group members who have yet received loans will monitor those who already received loans because if anything goes wrong in the group, their pending loans might not be released.

⁵³ Progressive lending is a setup where a lending group initially received small size loans. The size of the loans will be increased over time if group members pay back their loans on time. This mechanism incentivizes group members who wish to obtain larger-size loan to select trustworthy group members and monitor ongoing loans.

⁵⁴ Arvind Ashta & Djamchid Assadi, Do Social Cause and Social Technology Meet? Impact of Web 2.0 Technologies on Peer-to-Peer Lending Transactions, 29 Cahiers du CEREN, 177, 192 (2009).

research studies directly investigate the impact of group affiliation on Prosper Marketplace. The first study finds convincing evidence showing that the monitoring on social networks of people on a P2P lending platform provides a stronger incentive to pay off loans. ⁵⁵ Particularly, loans with endorsements have fewer defaults and delinquencies than other loans. ⁵⁶ The second study finds that group affiliation significantly reduces the risk of default if groups are based on real-life personal connections such as employees of the same workplace or alumni of the same school and university. ⁵⁷ The third research study finds that group leaders act as information intermediaries and significantly improve borrowers' credit conditions by reducing information asymmetries, especially for borrowers who have less attractive risk characteristics. ⁵⁸ These empirical studies seem to support a proposition that peer-to-peer features used by P2P lending platforms provide added benefits that institutional lenders like banks, credit unions and loan companies do not offer.

To better understand P2P lending from the economic perspective, this essay uses Ronald Coase's economic framework to describe the impact of interpersonal relationship on uncertainty and information asymmetry.⁵⁹ Coase's framework can provide the key toto understand the impact of interpersonal relationship on P2P lending. In particular, Coase's framework may predict that interpersonal relationship based on the peer-to-peer features could reduce uncertainty and information asymmetry, especially for individual lenders who mostly employ their interpersonal relationship as a risk-mitigation tool for lending. This section will explore the concepts of uncertainty and information asymmetry in lending respectively.

a) Uncertainty

Uncertainty in lending refers to a probability that borrowers fail to repay their loans whereas lenders do not see it coming. Unsecured loans, either from friends and family, banks, or platform lenders are subjects to a high degree of uncertainty because lenders do not hold any assurance to ensure that they will recover in the event of default. Collateral is among one of the most common assurances used to secure a loan. In particular, collateral is a pledge of specific borrower's asset to the lender to secure loan repayments. Therefore, the collateral function as a lender's protection against uncertainty in a case that the borrower fails to pay back under the agreed rates or terms. If a borrower defaults on a personal loan, the lender cannot seize the collateral.

P2P lending is uncertain because they are not secured by collateral. Lenders on P2P lending platforms like Lending Club and Prosper Marketplace do not have any contractual relationship with borrowers, and the lender's claim is only limited to a portion of payments made by borrowers. Once platform loans are determined default, platform lenders have minimal options. Platform lenders can only rely on the platform to collect default or delinquent debts for them.⁶⁰ In particular, because platform lenders generally do not know the identity of their borrowers, they cannot commence the collection process, report the defaults to the credit

⁵⁵ See supra note 47 (Freeman -2017)

⁵⁶ See id.

⁵⁷ Craig R. Everett, Membership, Relationship Banking and Default Risk: The Case of Online Social Lending, & Banking and Finance (2) (2015).

⁵⁸ Sven C. Berger & Fabian Gleisner, Emergence of Financial Intermediaries in Electronic Markets: The Case of Online P2P Lending, 2 BuR Business Research Journal (1) (2009).

⁵⁹Ronald H. Coase, The Nature of the Firm: Influence, 4 JOURNAL OF LAW, ECONOMICS, AND ORGANIZATION 33, 47 (1988).

⁶⁰ See supra, Section I.B.

bureaus, or file a lawsuit against the borrower. Besides because platform lenders do not have security interests in thein loans, the lenders are subjected to any risks created by platforms. For instance, the P2P lending platform may become insolvent or sell the loans to loan buyers making platform lenders subordinate to other lenders. Often, P2P lending platforms give up on collecting default loans and write them off as charged-off. In this case, while P2P lending platforms do not suffer any consequence, all loss falls onto platform lenders. The indirect lending structure unique to P2P lending seems to suggest that P2P lending could be even more uncertain for lenders even more than lending directly to a borrower.

At first glance, it is unclear how peer-to-peer features will affect uncertainty in P2P lending. Therefore, it might be useful to identify and examine each specific feature that contributes tote uncertainty in P2P lending. The group affiliation feature seems to be the most relevant feature of uncertainty in P2P lending. As mentioned earlier, group affiliations can exert social sanctions and enhance monitoring ability. Group leaders can vet and directly contact lending members to reinforce value, norm, or expectation of the group. In particular, group leaders can make phone calls, text, or communicate directly with borrowers who wish to join the group. Group leaders also have the authority to approve loans before being listed as part of the group. Once the loans have been funded, group leaders can still directly communicate with the borrowers to check and encourage or compel them to make payments.

The screening and monitoring efforts by group leaders clearly differentiate P2P lending from other traditional lending operations that offer personal loans. Social connections and group norms exerted and enforced by group leaders create social pressure which compels borrowers to behave up to the group's expectation. Indeed, social pressure may lower default rates of borrowers who have affiliation with groups. Social pressure works because the borrowers are compelled to align themselves with conformity and norm of the group. Therefore, the more close-knit the group are the more social pressure the groups can exert. Accordingly, the group affiliation feature which involves real-life personal connection like a common workplace, school, and college can generate more social pressure on lenders and compel them to pay back their loans on time.

In addition to group affiliation, another peer-to-peer feature like the social network feature may also reduce uncertainty in P2P lending. While P2P lending platforms do not necessarily match the borrower and the lender who have an existing personal relationship, P2P lending platforms employ existing social network in place of direct personal relationships. For instance, Lending Club's original application on Facebook matched lenders and borrowers who share some existing social networks such as high school, college, workplace, or mutual friends. The more networks lenders and borrowers share the more likely they will be matched. Facebook as the biggest online social networking platform in the world allow people to link to others whom they have no existing relationships. Therefore, social networks existing on Facebook significantly increases the chance that a person will be able to create interpersonal relationships including lending transactions with other Facebook users.

Social networks on Facebook may reduce uncertainty in P2P lending as lenders can exert social sanctions directly on borrowers or borrowers' networks by posting, tagging, or sending messages describing lenders' negative and shameful behaviors. Even though P2P lending platforms like Lending Club do not reveal the identity of platform borrowers, lenders might still

⁶¹ See supra, Section I.B.

⁶² Craig R. Everett, Group membership, relationship banking and loan default risk: The case of online social lending. *Banking and Finance Review*, *7*(2), 15-54 (2015).

be able to track down borrowers' identity from listing information such as personal description or pictures shared on Facebook or other lending platform's sites. Either sharing messages on their own timeline, sending direct messages or posting messages on social networks' pages. Such messages would typically be seen by mutual friends who share the same networks. The lenders can also make their messages public to allow access to all internet users whether or not they have a Facebook account. In fact, online social networks like Facebook have become an influential broadcast that can spread good or bad words to almost everyone. For instance, people often found their lost pets or belongings because their friends, friends of friends, friends of friends of friends, and so on help them share and distribute the messages. The negativity or shame caused by such messages can force the borrower to pay out of the fear that he or she might lose trust and respect with the networks. In addition, as Facebook has become another important community where people socialize or even do business, the negative and shameful messages can be a convincing and effective deterring tool for the lenders. Having a social network platform like Facebook as a broadcasting tool on their hands, lenders can be more certain that the loans they made will be paid back.

Similarly, the personal profile feature which may include the identity or trace to identity of platform lenders like portrait photo or personal description may also persuade borrowers to repay their loans out of a concern that lenders will track down their identity and expose them within the group. Yet, the impact of personal profile feature seems to be less effective because most P2P lending platforms do not include identifiable information on borrowers' profile. Besides, most P2P lending platforms do not allow both lenders and borrowers to communicate with anyone on the platform directly. Therefore, the group affiliation and the social network feature seems to be the two main peer-to-peer features that reduce the uncertainty in P2P lending.

b) Information Asymmetry

Besides uncertainty, loans are often made in the presence of information asymmetry problems. In fact, information asymmetry problems can become particularly severe for personal loans because of their unsecured nature. George Akerlof uses the Market of Lemons or the market for used cars to examine information symmetry. 63 Information asymmetry arises when one party of a transaction has relevant information, while the other does not. For some transactions where the relevant information is readily observable, both parties can generally negotiate for a fair deal. For example, a shopper who is looking to buy some apples at a farmer market, she can carefully check the apples' physical appearance or ask to sample some of the apples, so she knows exactly what she is getting before she buys them. Yet, not all material information is readily observable like taste and freshness of apples. For instance, the quality of a used car might be unobservable until the buyer owns and drives the car for months. At that point, the buyer can change her mind and negotiate for a fair price. Since used car buyers are not able to distinguish low-quality from high-quality cars, the sellers of low-quality cars have every incentive to pass their cars as high-quality and sell them at higher prices. Akerlof suggests that buyers cannot distinguish high-quality cars and a low-quality car; hence buyer will only pay an average price.⁶⁴ Given that the average price is lower than the value of a high-quality car, a seller will only be willing to sell if the car is a low-quality car. This so-called 'adverse selection' drives

⁶³ George A Akerlof, The Market for 'Lemons': Quality Uncertainty and the Market Mechanism". Quarterly Journal of Economics. The MIT Press. 84 (3): 488–500 (1970).

⁶⁴ See supra, note 7.

away seller of high-quality products creating the Market of Lemons which is full of low-quality products.

In the context of lending, a lender can be seen as a buyer wishes to buy debts, while a borrower is a seller who is looking to sell the debt. The quality of the debt is the borrower's ability to pay it back. While borrowers certainly have information to evaluate their own ability to make repayments, lenders have to guess from relevant clues how likely each debt will be repaid. Usually, institutional lenders take financial clues like current and historical credit accounts, credit inquiries, income per debt ratio, past bankruptcies, and homeownership. Although financial information is available at most credit report agencies, such information can often be inaccurate or might not necessarily accurately predict the borrowers' ability to repay. Borrowers also have the incentive to fake or exaggerate their financial credentials and conceal information which can be seen as indicators of risks.

Information asymmetry problems are also common in P2P lending. Information asymmetry problems often happen because platform lenders have very little information about lenders and their ability to pay back loans. Generally, information about borrowers is only available on platform websites. The available information is mostly financial information such as credit score, delinquency history, number of credit lines, and credit line utilization. Nevertheless, individual lenders on P2P lending platforms might not have skills or expertise to analyze risks based on financial information.

Even when some individual lenders are financially literate enough to interpret the financial risks, it is still very costly and time-consuming for individual lenders who invest a relatively small amount in one loan to spend time and effort to understand and interpret the information. Other than the information provided by P2P lending platforms, platform lender cannot acquire additional information directly from borrowers despite such information being useful or necessary for lenders to make their lending decisions. This is because the identity of borrowers on P2P lending platforms is strictly anonymous and lenders are not permitted to communicate with borrowers. Accordingly, P2P lending platforms can be seen as an additional layer that prevents further transmission of information from borrowers to lenders.

While the rigidness of information transmission on P2P lending platform creates information asymmetry problems, P2P lending's peer-to-peer features like the personal profile feature, the group affiliation feature, and the social network feature may be able to mitigate information asymmetry problem. First, personal profiles on P2P lending platforms provide information that could be useful, especially for individual lenders. While institutional lenders are often limited to make underwriting decisions based on objective criteria like financial information, individual lenders on P2P lending platforms are more open to subjective information like personal descriptions about borrower's life or personal purpose of the loans. Individual lenders are capable of looking into subtle tones, narratives, and personal messages. Personal profiles convince individual lenders to have positive impressions about each individual borrower and help individual lenders make judgments about the quality of the loans based on personal information about the borrowers. For example, one research study finds that more descriptive descriptions about the products on eBay correlated with an increased number of bids and higher selling prices on eBay.⁶⁵ Moreover, companies are increasingly concerned about the tones of communication with consumers because tones can reflect the culture and values of the

⁶⁵ Andrew J. Flanagin, *Commercial markets as communication markets: Uncertainty reduction through mediated information exchange in online auctions*, 9 New Media & Society, (3) 401, 423 (2007).

companies.⁶⁶ Therefore, personal profiles which include more personal and descriptive information can also provide lenders with added value and help mitigating information asymmetry problems in P2P lending.

Second, group leaders on P2P lending platforms can effectively facilitate the flow of information from borrowers to lenders. As mentioned earlier, group leaders have the ability to get the additional information and communicate with the borrowers directly In the beginning, group leaders screen borrowers by interviewing and obtaining additional information other regular lenders are not able to get. For instance, many group leaders call employers of borrowers who wish to join the groups to make sure that borrowers' employment statuses are accurate and up-to-date. Since many group affiliations involve personal connections and existing social networks, group leaders often have some existing interpersonal relationship with friends, coworkers, or employers of the borrowers. With such existing connections, it is not uncommon that group leaders can seek additional information about habits, personalities or characters of borrowers from perspectives of people around the borrowers. In fact, the use or reliance on personal information is widespread in lending among friends and family members. Because of the wealth of information about the personal qualities of their friends and family members, individual lenders can make lending decisions with minimal financial information.

Third, in addition to the ability to reduce the uncertainty of P2P lending, social network platforms, especially a huge online social network like Facebook may help disseminate information across the network. As mentioned earlier, because Facebook users have abilities to post and repost messages that contain a wide variety of information. Borrowers' friends, friends of friends, or the public can help convey information from borrowers to lenders. For instance, when a loan applicant shares pictures of her luxurious beach vacation in The Maldives, her friends or friends of friends can share or react to these pictures until the pictures reach potential lenders or become publicly available. The potential lender might be able to deduct from these photos that this particular individual might use the loan to support her luxurious lifestyle instead of investing in business as she promised. The shared information can even be very personal like marital status, achievements at school or work, circumstances of life, mental health, and so. Personal information may supplement basic financial information provided by P2P lending platform and help lenders making more informed lending decisions. In fact, one research study confirms that when lenders infer creditworthiness of borrowers from personal information, it results in 45% greater accuracy in predicting default than exclusively relying on credit score.⁶⁷ Therefore, the personal information mitigates asymmetry information by helping lenders predict default accurately.

2. The Sociological Perspective

While the economic argument from the previous section sees interpersonal relationships embedded in peer-to-peer features as a tool that alleviate economic problems like uncertainty and information asymmetry, the sociological view on trust can provide another useful lens for decoding how interpersonal relationships can facilitate P2P lending transactions. From the sociological perspective, P2P lending transactions involve trust and relationships. In sociology, trust is often considered as a prerequisite of relationships and exchanges. Financial exchanges,

⁶⁶ Blake Megan, 5 Tips to Move From Transactional to Meaningful Customer Relationships, https://www.forbes.com/sites/blakemorgan/2015/01/19/moving-from-transactional-to-meaningful-customer-relationships/#4af054bb3261 (Last visited Nov. 3, 2018).

⁶⁷ Rajkamal Iye, Asim Khwaja, Erzo F.P. Luttmer & Kelly Shue, Screening peers softly: Inferring the quality of small borrowers. MANAGEMENT SCIENCE, *62*(6), 1554-1577(2016).

especially unsecured ones like a personal lending orbit around trust and relationship. Francis Fukuyama, a renown American social scientist suggests that "the communities do not require an extensive contract and legal regulation of their relations because prior moral consensus gives members of the group a basis for mutual trust." On the other hand, Fukuyama sees legal and regulatory apparatus as a substitute of trust for reducing transaction costs. As modern society has moved away from intimate relationships and strong interpersonal ties, transaction costs of exchange among people also increase. However, in the case of a personal loan where the debt is unsecured, and the lender is exposed to a plethora of risks because legal apparatus is less effective or impractical, trust has remained a dominant factor for a successful transaction.

Fukuyama's proposition encompasses two distinct concepts of trust: interpersonal trust and institutional trust. Interpersonal trust examines how relationships foster trust among individuals. Hence, trust among P2P individual lenders and individual borrowers based on their interpersonal relationships on P2P lending platform is interpersonal trust. On the other hand, institutional trust reinforce trust based on institutional mechanisms such as guarantees, safety nets, and other structures. For P2P lending, institutional trust may involve the certainty of outcome base on institutional assurances such as the laws, internal rules and their ability to uphold such rules. This section will discuss how interpersonal trust and institutional trust may help explain how interpersonal trust and institutional trust based on peer-to-peer features may help facilitate P2P lending transactions.

a) Interpersonal Trust

Sociologists generally define trust as a trustor's expectations that a trustee will behave in a benevolent way based on the observable risks and uncertainty of the situation. In the context of unsecured personal loans, borrowers have an option to repay or not to repay and suffer considerably few consequences. Therefore, repaying the loan can be seen as a benevolent behavior based on the fact that the lender holds little leverage against the borrower. Therefore, the lender would need a considerable level of trust in the borrower before a personal loan can successfully be made. James Coleman developed a useful trust concept which can be easily applied to lending transactions. Coleman defines trust through four critical characteristics. First, a trustor (referred to as Eco) must have the possibility of placing some resources at the disposal of a trustee (referred to as Alter) who then has the opportunity to accommodate or exploit the trustor. Second, the trustor will trust if she expects that the trustee will accommodate her, but will not trust if she expects that the trustee will exploit her. Third, there can be a binding agreement that can certainly prevent the trustee from exploiting the trust trustor. Fourth, there can be a time lag between the two points at which trustor and trustee make a decision.

⁶⁸ Francis Fukuyama, *Trust — The Social Virtues and the Creation of Prosperity*, New York: Free Press (1995). ⁶⁹ *See id.*

⁷⁰ Linda D. Molm, Nobuyuki Takahashi & Gretchen Peterson, *Risk and Trust in Social Exchange: An Experimental Test of a Classical Proposition* 105 AMERICAN JOURNAL OF SOCIOLOGY (5) 1396, 1427 (2000).

⁷¹ Bruce G. Carruthers & Jeong-Chul Kim, The Sociology of Finance, 37 ANNUAL REVIEW OF SOCIOLOGY 239, 259 (2011).

⁷² See id.

⁷³ See id.

⁷⁴ See id.

⁷⁵ See id.

⁷⁶ See id.

Coleman's trust framework accommodates the notion of interpersonal trust. Particularly, interpersonal trust is derived from a personal relationship between a trustor and a trustee. A trustor possesses interpersonal trust as he or she accepts vulnerability to the actions of the other party of exchange. A trustor is willing to be vulnerable to a trustee based on both the trustor's expectation that the trustee will not defect and a perception that the trustee is trustworthy. In the case of P2P lending, lenders are trustors because they accept the risk that their borrowers take the loan and will never make any payment. Borrowers are trustees because they have an option to establish trustworthiness by repaying their loans instead of running away with little consequence. Personal relationship plays a vital role in the process of building interpersonal trust because both expectations of compliance and perception of trustworthiness are derived from a personal relationship between the two parties. Personal loans made by individual lenders on P2P lending platforms epitomize how essential interpersonal trust is to individual lenders.

Interpersonal trust is correlated with the strength of interpersonal ties. ⁸⁰ Therefore, the stronger the relationship is, the more interpersonal trust trustors will have towards trustees. Specifically, a strong interpersonal relationship is a sufficient tie that binds two or more actors allowing for the reinforcement of positive expectations through social monitoring and social control. ⁸¹ Therefore, interpersonal trust is more likely to be more dominant in a relationship where actors are well-connected due to strong social interactions and personal knowledge of each other. ⁸²

On the other hand, a weak or indirect relationship can still foster some level of trust and facilitate lending. Specifically, a weak interpersonal relationship describes a relationship where the two parties do not know one another directly. Instead, there is an entity acting as an intermediary. In the context of lending, a lender might lend to a friend of a friend because the lender trusts in the mutual friend or the network where the mutual friend and the borrower belong.⁸³ Indeed, trust arising from a network of indirect interpersonal ties is crucial and sufficient to help many people find a job or even borrow money.⁸⁴

Likewise, most borrowers and lenders on P2P lending platforms do not know each other because P2P lending platforms keep borrowers anonymous and do not allow any direct communication between lenders and borrowers. P2P lending platforms also discourage any attempt to identify and to communicate with borrowers. Therefore, borrowers and lenders are not able to establish direct interpersonal relationships, nor have personal knowledge about each other. Therefore, lenders and borrowers on P2P lending platforms are not able to fora m direct interpersonal trust which is the most durable type of interpersonal trust stemming from direct interpersonal relationships.

Nevertheless, lenders and borrowers on P2P lending platforms can still form indirect interpersonal relationships through intermediaries such as group leaders, social networks, or

⁷⁷ Roger C. Mayer, James H. Davis, & F. David Schoorman, *An integrative model of organizational trust*, 20 ACADEMY OF MANAGEMENT REVIEW 709, 734 (1995).

⁷⁸ See id.

⁷⁹ See id.

⁸⁰ Ronald S. Burt & Mark Knez, *Trust and Third-Party Gossip* in Trust in Organizations: Frontiers of Theory and Research 68, 89 (1996).

⁸¹ Charles Sabel, *Studied Trust: Building New Forms of Cooperation in a Volatile Economy*, in Explorations in Economic Sociology 104, 144 (1993).

⁸² See id

⁸³ Mark Granovetter, The strength of weak ties: A network theory revisited, 1 Sociological Theory, 201, 233 (1983).

⁸⁴ See id.

personal profiles. These intermediaries not only link lenders to borrowers but they also transmit personal information from borrowers to lenders. Consequently, interpersonal relationships foster some level of trust and facilitate lending on P2P lending platforms.

Prosper Marketplace's group affiliation feature allowed group leaders can form personal relationships with both borrowers and lenders. Borrowers wishing to join a group had to convince a group leader to trust them and let them join the group. In other words, group leaders were trustors who are looking to find trustworthy borrowers to join their groups. In order to do so, group leaders screened applications that contain borrowers' personal information not available to other platform lenders. Group leaders knew the identity and had the ability to communicate with borrowers directly. Such communication could happen so often during the screening process and lasted until loans were fully paid.

It is arguable that a group leader did not establish any meaningful interpersonal relationship with the borrowers because the sole purpose that borrowers interact with the group leader was to obtain loans at the lowest rates possible. Technically, although borrowers were not friends or socialize with group leaders as such, borrowers revealed some personal information and sometimes allow group leaders communicate with members their social networks such as family, friends, coworkers, and employers. In other words, while borrowers dis not have genuine interpersonal relationships with group leaders, borrowers were incentivized by their demand for low-interest loans to interact with group leaders as if they were friends. Indeed, not all relationships between borrowers and group leaders were purely motivated by the demand for loans. Many borrowers knew group leaders or had mutual friends with group leaders. It was also possible that the borrowers and the group leader might start from for-profit relationships but later developed genuine interpersonal relationships after long counters.

From platform lenders' perspective, because of the anonymity of borrowers and lack of borrowers' personal information thereof, lenders might find that their interpersonal relationships with group leaders could help them evaluate borrowers. In other words, lenders relied on their group leader's ability and effort in bring in quality loans. Therefore, from the lenders' view, group leaders were trustees they depended on. Lenders do not need to join a group in order to invest in group-affiliated loans. Nonetheless, lenders could see if a loan was affiliated with a group or endorsed a group leaders or other group members. Since loans with group affiliations usually have lower interest rates than similar loans without a group affiliation, 85 lenders must find that the group affiliation feature was valuable enough to offset the profit from taking higher-interest-rate loans.

Lenders could look at the profile and performance of groups and group leaders. Lenders could also reach out to ask questions or directly contact group leaders when they have questions. While group leaders could not reveal borrowers' identity or personal information associated with a particular loan, group leaders could talk about their group as whole. For example, group leaders often emphasized their group's core value, their loan selection process, and how the group encouraged or disciplined its borrowing members. ⁸⁶ In fact, most lenders choose to lend to borrowers with existing interpersonal relationships with group leaders or with close ties to the social cluster that form the group. ⁸⁷ Such selection preference convincingly suggests that interpersonal trust is a relevant factor contributing to successful P2P lending. At the same time,

⁸⁵ See supra, note 48.

⁸⁶ See supra, note 13.

⁸⁷ See id.

group leaders used interpersonal relationships and interpersonal trust built around the group's past success to convince new lenders to invest with group-affiliated loans.

Lenders could also rely on interpersonal trust arising from the social network where both lenders and borrowers belong. For instance, because of borrowers' previous interpersonal relationships with classmates from their alma mater, some borrowers could perceive that people who went to the same university would be reliable. Thanks to interpersonal trust embodied in social networks, lenders would be more likely to leer to group-affiliated loans that pay less because of their expectation that group-affiliated loans would be more reliable. Therefore, the group affiliation feature and social network features could foster interpersonal trust among borrowers, lenders, and group leaders. Such a unique presence of interpersonal trust on P2P lending not only enhances confidence in the quality of group-affiliated loans, but also facilitates P2P lending transactions.

b) Institutional Trust

Apart from interpersonal trust, lending often involves institutional trust. The sociological literature describes institutional trust as trust that is generated by the situation followed by assurances that expectations will be fulfilled. 88 In the realm of institutional trust, trustors base their expectations regarding the outcome of a transaction on the quality of the institutional system. 89 An institutional trust exists because the trustor believes that proper institutional structures are in place to enable one to anticipate a successful future endeavor. 90 The institutional structures include structural assurances such as regulations, insurances and legally binding contracts, and reliable enforcement of these structural assurances. 91 Various mechanisms which are used to generate institutional trust may include impartiality and justice, mediating between actors, and penalizing unpleasant or hostile behaviors. 92 Institutional trust also encompasses exogenous elements like technological and commercial competence, its fair processes and structures. 93

Institutional trust can be clearly distinguished from the interpersonal trust. While interpersonal trust relies on relationships, interactions, or awareness of the other party of transaction, institutional trust is independent and can occur without the other party of the transaction. Accordingly, institutional trust may help two strangers to engage in a transaction which would not have happened in the first place. Institutional trust is also crucial for a transaction where people have weak interpersonal relationships. Therefore, institutional trust is central to the functioning of institutional lending modern exchanges, such as banking and online

⁸⁸ Lynne G. Zucker, Production of trust: Institutional sources of economic structure, 8 Research in Organizational Behavior, 1840-1920 53, 111 (1986).

⁸⁹ Margaret Levi, *A STATE OF TRUST*, IN TRUST AND GOVERNANCE 77, 101. New York: Russell Sage Foundation (1998).

⁹⁰ D. Harrison McKnight, Larry Cummings & Norman Chervany, Initial trust formation in new organizational relationships. 23 ACADEMY OF MANAGEMENT REVIEW (3) 473, 490 (1998).

⁹¹ See id.

⁹² See id.

⁹³ See id.

⁹⁴ Niklas Luhmann, *Familiarity, Confidence, Trust: Problems and Alternatives*, in Gambetta, Diego (ed.) TRUST: MAKING AND BREAKING COOPERATIVE RELATIONS, 94–107. Oxford and Cambridge, MA: Basil Blackwell (2000).

⁹⁵ See id.

⁹⁶ Toshio Yamagishi, Trus*t as a Form of Social Intelligence*, in K. S. Cook (ed.) TRUST IN SOCIETY, 121, 147. New York: Russell Sage Foundation (2000).

transactions which occur in a nonpersonal environment without familiarity and similarity.⁹⁷ For instance, because most deposits are guaranteed by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration (NCUA). ⁹⁸ The deposit insurances were created in response to the public distrust of banking and financial institutions after a series of bank runs during the Great Depression. FDIC and NCUA insurances successfully increase trust and confidence in the American banking system. Today, we trust banks and credit unions because ware e certain that the assurance put in place by the government will guarantee that our deposits will always be available to withdraw. Institutional lenders like banks also rely primarily on various other institutional assurances such as credit report, collection system, laws or ability to withhold collateral assets. Such institutional mechanisms create a safe environment that foster institutional trust between banks and their clients.

Institutional trust in P2P lending might not be as strong as institutional trust existing in the traditional banking industry. From lenders' or investors' perspective, lending on P2P lending platforms is very risky because their investments are not guaranteed by government agencies like the FDI and the NCUA. Instead, the only strategy P2P lending platforms recommend platform lenders to do to mitigate default risks is to diversify their lending portfolios. Because the diversification strategy is just an investment technique executed entirely by lenders, the diversification strategy cannot be considered as an institutional assurance. Also, P2P lending platforms do not hold as strict financial criteria for lending as most banks or traditional lenders. For instance, P2P lending platforms do not require collateral assets and welcome borrowers with a lower credit score. Therefore, platform lenders, especially individual lenders who lack resources and sophistication to establish their own institutional assurances, will have less institutional trust in P2P lending as compared to what they have when they deposit or invest in more traditional methods of investment. The paucity of institutional trust could also suggest that individual lenders on P2P lending platform need and re only interpersonal trust as an alternative or complementary to institutional trust to mitigate risks in lending.

III. Regulatory Influences and the Development of P2P Lending Industry

While the P2P lending has been regarded as the most prominent and the most successful fintech services, the path to today achievement has not been rosy. Regulatory hurdles have presented significant risks to P2P Lending industry from the beginning. P2P lending platforms have been struggling to comply with regulatory burdens, especially those overseen by the U.S. Securities and Exchange Commission (SEC). The SEC regulated P2P lending platforms under the securities regulation regime which was perceived as something at odd with P2P lending's core business that focuses on matching and managing personal loans.

Securities commonly refer to financial assets or financial instruments. In the United States, securities come in many forms such as bonds, stocks, and derivatives. The Securities Act of 1933 and the Securities Exchange Act of 1934 are the main driving force behind securities regulation in the United States. Under both acts, transactions qualified as investment contracts are considered securities and are subject to securities regulations. The Howey Test is the standard method for determining an investment contract. In SEC v. W.J. Howey Co., the

⁹⁷ See id.

⁹⁸ The FDIC and The NCUA insure deposits no more than \$250,000 per one ownership. In 2017, the FDIC provided deposit insurance to as many as 5,670 banks and financial institutions.

Supreme Court decided that Howey's transaction involved investment contracts because the leases offered by Howey were something more than just simple interests in land, but an opportunity to contribute funds and share profits of a large citrus enterprise.⁹⁹ The Howey Test composes of three elements including (1) an investment of money, (2) in a common enterprise, and (3) with an expectation of profits predominantly from the efforts of others.

In the case of Howey, the investors invested their money in the land transactions involving citrus enterprise with their expectation that Howey Company would make profits and return their share of profits to them. In the United States, the public offering of securities must be registered with the Securities Exchange Commission (SEC) or exempted by the SEC. State agencies, and Self-Regulatory Organizations (SROs) such as the Financial Industry Regulatory Authority (FINRA), the National Association of Securities Dealers (NASD), and stock exchanges. The SEC was the first securities regulator to came to investigate the P2P lending industry and is currently the principal regulatory agency that regulates activities and operations of P2P lending platforms. The following section will describe major structural issues Lending Club, Prosper Marketplace, and other P2P lending platforms have faced and how they have adapted to where they are today. These issues include legal battles with the SEC, changes in loan ownership structure and security interest, and the decision to go public or remain private. The SEC sees that the platform notes constitute securities because platform lenders rely on the efforts of P2P lending platforms to earn money and pay them in the form of note's interests. Therefore, the platform notes should be registered as securities with the SEC.¹⁰⁰ In 2008, the SEC began to investigate marketplace lending operations and required all P2P lending platforms that offered platform notes to the public to register as them securities according to the SEC regulation. ¹⁰¹

In addition to securities regulation, P2P lending platforms are also subject to banking regulation at both federal and states levels. The most significant hurdles in the area of banking regulation are the discrepancy in state usury limits. P2P lending platforms go around these hurdles by partnering with an FDIC-insured funding bank to originate loans in order to bypass usury laws and other banking requirements at the state level. Nevertheless, such a strategy is not a universal solution to the problem. P2P lending platform is still required many state banking regulators to obtain lending or banking licensing to operate within the state. Therefore, a national bank charter for P2P lending platforms seems to be a viable solution. Yet, the OCC specially purpose charter or 'fintech charter' introduced in July 2018 fails to address the concerns of P2P lending platforms. Indeed, no P2P lending platform or any other fintech company has applied for the new charter. I will discuss important securities and banking regulations on P2P lending platforms. Subsequently, I will explain significant adaptations that P2P lending platforms have made in order to comply with and thrive in the current regulatory landscape. Lastly, I will provide an interdisciplinary analysis of such adaptations based on economic and sociological perspectives.

A. The First Wave of Regulatory Hurdles

Since 2006, P2P lending platforms including Prosper Marketplace and Lending Club have relied on selling platform notes which were structured as borrower-dependent promissory notes. The platform notes are debt obligations that depend on the performance of the underlying loans. Generally, platform notes were offered in tranches or different loan grades based on risks.

⁹⁹ SEC v. Howey Co., 328 U.S. 293 (1946)

Prosper Marketplace, Inc. 3 S.E.C. 13296 (2008). Order Instituting cease-and-desist Proceedings according to Section 8a Of The Securities Act Of 1933, Making Findings, And Imposing A Cease-And-Desist Order.
 See id.

By 2008, there were four major platforms including Prosper Marketplace, Lending Club, Zopa, and Loanio. Together, the four major platforms lend around roughly \$150 million in 2008 which was a dramatic increase from the previous year. At this early stage, P2P lending platforms saw themselves as an online platform functioning like a lending intermediary. From this point of view, the early day of the P2P lending industry was more suitable to be regulated under the lending regulation regime instead of securities regulations. Based on the Howey Investment Contract Analysis, the SEC determined that the borrower-dependent promissory notes constituted securities because platform lenders invested their money in a P2P lending enterprise and relied on the efforts of P2P lending platforms to earn interest returns. The SEC, therefore, demanded that P2P lending platforms must register the platform notes under the SEC securities regulation regime. In 2008, the SEC began to investigate P2P lending operations actively and required P2P lending platforms offering platform notes to the public to register notes with the SEC.

Learning about the SEC investigation, Lending Club, which was the second largest P2P lending platform at the time, took a proactive approach by turning around and starting to cooperate with the SEC. Renaud Laplanche, Lending Club's founder and CEO, said: "If [Lending Club] had a clean situation to start with, we probably could have registered the new offering while our current marketplace continued." In April 2008, Lending Club stopped accepting new funds from retail lenders and started the registration process. This so-called quiet period lasted six months during which Lending Club still took loan requests and funded them by Lending Club's own money. Lending Club also continued to service originated loans according to terms and conditions the loans were made. At the time of registration, Lending Club's business model was clean and simple. Lending Club assigned fixed a fixed interest rate to each loan according to risk class based on financial evaluation such as credit history and income or salary and sold payment-dependent notes associated with platform loans to platform lenders. In fact, Lending Club itself bought about half of the issued platform notes. In October 2008, upon receiving the green light from the SEC, Lending Club emerged from its quiet period began selling platform notes to retail lenders again.

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¹⁰² Brad Stone, Lending Alternative Hits Hurdle, The New York Times,

http://www.nytimes.com/2008/10/16/technology/start-ups/16peer.html (Last visited Nov. 3, 2018).

¹⁰³ Nate Litter, INTERVIEW WITH CHRIS LARSEN OF PROSPER.COM,

https://blog.perfectspace.com/2006/10/12/interview-with-chris-larsen-of-prospercom/ According to an interview in 2006, Chris Larsen saw Prosper as an intermediary in a marketplace where people could borrow and lend directly from each other; he explained in an interview that "Prosper is a people-to-people marketplace that connects individuals seeking to borrow money and those interested in lending it. Prosper's role is to provide a safe and secure marketplace where any person can post a loan listing as long as they pass strict fraud and ID verifications and any person with as little as \$50 can lend. Because money is flowing directly between people with money and those that need it...borrowers should get more competitive rates while those lending money should receive a higher rate of return."

¹⁰⁴ Administrative Proceeding No. 3-13296, Order Instituting Cease-and-Desist Proceedings Pursuant to Section 8A of the Securities Act of 1993, Making Findings, and imposing a Cease-and-Desist Order in the Matter of Prosper Marketplace, INC (2008).

¹⁰⁵ See id

¹⁰⁶ See also, Erick Schonfeld, SEC Outlines its Reasoning for Shutting Down P2P Lender Prosper https://techcrunch.com/2008/11/26/sec-outlines-its-reasoning-for-shutting-down-p2p-lender-prosper/ (Last visited Nov. 10, 2018).

¹⁰⁷ Brad Stone, Lending Alternative Hits Hurdle, The New York Times. http://www.nytimes.com/2008/10/16/technology/start-ups/16peer.html (Last visited Nov. 10, 2018).

On the other hand, Prosper Marketplace had episodes of failed attempts to explain and defend its model of operation with the SEC. As early as 2006, Prosper requested a no-action letter, asking the SEC to assure that its structure and operation complied with SEC rules. The SEC did not offer assurance that Prosper Marketplace was not committing securities violation, nor it would not take action against such violation. In October 2007, Prosper Marketplace filed Form S-1 with the SEC, seeking to register securities consisting of "the Prosper Marketplace Lender Participant Rights and Borrower Non-Recourse Notes." Again, the SEC issued a rejection letter in response to the registration statement citing numerous material failures in respects to the Securities Act. The SEC particularly noted a failure to identify all co-registrants, a failure to include the required financial statements, and a failure to abide by the Trust Indenture Act.

Chris Larsen, Prosper Marketplace's founder, and CEO said he did not believe Prosper would need to register with SEC the same way Lending Club did, citing a different lending method in which Lending Club set the interest rates on its loans and was itself financing about half the overall loan volume on the platform. The persistent struggle with the SEC seems to suggest that Prosper Marketplace was not willing to change its structure to Lending Club's model which was approved by the SEC. In fact, Chris Larsen confirmed his conviction in the same interview that "peer-to-peer lending harked back to an age when borrowers and lenders knew one another personally." This emphasizes his vision of P2P lending being an intermediary engaging in the personal relationship among borrowers and lenders.

Nonetheless, Prosper Marketplace suddenly decided to follow Lending Club's model. It entered a quiet period and agreed to amend its filing as demanded by the SEC. By doing so, Prosper Marketplace halted its platform operation for new loans. Unlike Lending Club, Prosper Marketplace did not accept new investment from retail lenders nor new loan requests from borrowers. Nevertheless, it continued servicing existing loans. Interestingly, a month after Prosper Marketplace started its quiet period, the SEC issued a cease-and-desist letter ordering Prosper Marketplace to stop offering to sell platform notes to the public in violations of Sections 5(a) and (c) of the Securities Act.

It took Prosper Marketplace many months to get approved during which the SEC required Prosper Marketplace to amend its Form S-1 six times. Major concerns the SEC had included the inclusion of material information in the prospectus and supplements and the procedure Prosper would take to disclose such information. Finally, Prosper Marketplace's registration statement with the SEC was declared effective in July 2009; and it resumed its full operation a few days after.

The fact, the SEC issues a cease-and-desist letter against Prosper Marketplace even after the platform already halted issuing new loans seems to indicate a preference of the SEC towards Lending Club and its business model. There is no definite answer to why it is the case, but one plausible argument is that the SEC is more comfortable with a more traditional lending model purposed by Lending Club over Prosper Marketplace's novel model which incorporated many novel elements such as auction mechanism and peer-to-peer features like group affiliations and descriptive personal profiles. The SEC might also see Prosper Marketplace as a riskier lending platform for lenders because Prosper Marketplace was simultaneously challenged by upset lenders and a consumer protection organization in pending lawsuits.

B. Securities Regulation

The fallouts of the SEC's probe made on P2P lending industry suggests that the securities regulation regime seems to be the most formidable challenge faced by P2P lending platforms.

Therefore, an understanding of securities regulation and how securities regulation regime may apply to P2P lending is an essential basis for examining how P2P lending industry adapts and develops. First and foremost, platform notes have to be in compliance with securities laws and regulations. While there were disagreements over whether platform notes should be deemed securities, the SEC enforcement proceeding in 2008 determined that platform notes are investment contracts and are subject to regulation as securities. Therefore, securities laws will apply to P2P lending activities.

In the United States, securities are regulated by multiple layers of authorities. Federal, state, and self-regulatory organizations all oversee securities. The U.S. Securities and Exchange Commission (SEC) is an independent federal agency being tasked to enforce and purpose securities laws and regulate the securities industry. Primarily, the SEC enforces the Securities Act of 1933, the Securities Exchange Act of 1934, the Trust Indenture Act of 1939, the Investment Company Act of 1940, the Investment Advisor Act of 1940, the Sarbanes-Oxley Act of 2002 and other SEC regulations. The SEC operation is centered around its three-part mission: to protect investors, maintain fair, orderly and efficient markets, and facilitate capital formation. To accomplish its missions the SEC relies mainly on the disclosure regime which requires covered issuers to submit reports that contain material information and maintain these reports on a publicly accessible online database called the Electronic Data Gathering, Analysis, and Retrieval system (EDGAR).

States also regulate securities issued within their jurisdiction. States hold parallel authorities to register and supervise securities offerings, broker-dealers, and investment advisers. Nevertheless, in certain situations, state regulations are preempted by federal laws and regulations overseen by the SEC regulations. Most states have dedicated agencies to detect fraudulent activities and receive complaints regarding securities. State Regulators can also enforce criminal penalties, while the SEC is only bounded to civil and administrative actions. When the SEC encounters criminal matters, it has to refer the matters to the Justice Department. Department.

In addition to Federal and State regulations, the industry itself also establishes self-regulatory organizations (SROs) in order to set rules and best practices for its business members. The self-regulatory rules supplement Federal and State regulations voluntarily. The SEC has the responsibility and authority to supervise these SROs by evaluating and approving rules proposed by the SROs. Prominent examples of SROs include New York Stock Exchange (NYSE), Nasdaq, national securities associations, and Financial Industry Regulatory Authority (FINRA).

¹⁰⁸ See supra, note 104.

¹⁰⁹ U.S. Securities and Exchange Commission, The Role of the SEC, https://www.investor.gov/introduction-investing/basics/role-sec (Last visited Nov. 3, 2018).

¹¹⁰ Barbara D. Underwood, Investor Protection Bureau, New York State Office of Attorney General, https://ag.ny.gov/bureau/investor-protection-bureau (Last visited Nov. 3, 2018). For example, New York has the Investor Protection Bureau to enforce the New York State securities law (the Martin Act) which gives the Attorney General broad law-enforcement powers to conduct investigations of suspected fraud in the offer, sale or purchase of securities. The Bureau also protects the public from fraud by requiring brokers, dealers, securities salespersons, and investment advisers to register with the Attorney General's Office.

¹¹¹ The SEC can pursue two types of enforcement actions: it may file a civil suit in a federal court or pursue the suit in an administrative court.

¹¹² Securities Act § 20(b), 15 U.S.C. § 77t(b) (1994); Exchange Act § 21(d), 15 U.S.C. § 78u(d) (1994).

1. The Securities Act of 1933

In the United States, both federal and state securities laws rely on disclosure. ¹¹³ Unlike offer and sale of tangible goods which are governed by the principle of 'caveat emptor' or 'buyer beware,' purchasers of securities receive an additional layer of protection by the securities law's principle of the disclosure. Securities issuers need to disclose material information regarding issuing securities because purchasers cannot clearly observe the quality of a security whose value depends upon the future performance of another entity. ¹¹⁴ The Securities Exchange Commission (SEC) propagates the disclosure principle by requiring any issuer engaged in a public offering of securities to register such securities under the Securities Act of 1993 unless an exemption applies. Because the SEC has determined that offering of platform notes to individual lenders on P2P lending platforms constituted issuing of securities to the public and was not an exempted activity under the Securities Act, P2P lending platforms must register their notes under the Securities Act.

Since purchasers of securities cannot directly examine the physical elements nor can they directly ask the issuer about the securities, the Security Act aims to overcome the information asymmetry by requiring the issuer to tell prospective purchasers all material information about the security to enable a reasonable person to make an informed investment decision. The disclosed information will be publicly available on the SEC's discourse archive or the Electronic Data Gathering, Analysis, and Retrieval (EDGAR). Whether information is material depends on circumstantial facts about each security. P2P lending platforms as securities issuers are required to disclose information such as the detailed description of the issuer and securities, the analysis by the management of its financial condition and operation, and information concerning about management.

2. Registration of Platform Notes

Typically, an issuer is required to file a separate registration statement for each security before offering it to the public. This requirement makes the business of P2P lending inoperable because P2P lending platforms have to a substantial volume of small-value securities offerings to lenders every day. Precisely, each platform loan constitutes one offering. Therefore, each platform offering may worth as little as \$1000. Registering individual offerings separately would be prohibitively expensive—considering P2P lending platforms charge service fees based on the volume of each loan, but registration costs are expensive and remain fixed regardless of the volume of each loan. Costs of registering a multitude of platform notes offerings would exceed the compensation platforms can charge from each loan. In addition, the registration process of individual platform notes can take very long. P2P lending platforms which depend mainly on efficiency and swiftness of the operation would not be able to offer a fast service that fits the expectation of both borrowers and lenders. Hence, the only feasible way for P2P lending platforms to register platforms note and disclose material information is to register a series of offerings in a bundle and disclose relating material information after lenders have purchased the platform notes. The SEC allows ex-post registration in the form of shelf registration which will be discussed in the following section.

¹¹³ Washington States Department of Financial Institutions. The Role of Disclosure in a Securities Offering https://dfi.wa.gov/small-business/role-of-disclosure (Last visited Nov. 3, 2018).

¹¹⁴ Generally, the value of security depends on the performance of the company which issued it and how the market sees the company's performance. In the case of marketplace lending, the value of a security will mostly depend on the repayment made by the lender.

a) Shelf Registration

Despite not being able to separately register individual platform notes separately before offering them to platform lenders, P2P lending platforms can rely on Rule 145 of the Securities Act which allows 'shelf registration.' Generally, shelf registration allows issuers to offer and sell securities to the public without a separate registration statement for each act of offering. Under Rule 145, issuers just file one registration for a specific amount of several, undefined future offerings without having to specify interest rates, maturity dates, or other contractual and financial terms applicable to individual securities. 115 Since shelf registration can be used to offer securities for up to three years, 116 When a loan listing is fully funded, P2P lending platforms can take the corresponding amount of securities off the shelf by filing with the SEC a prospectus supplement that specifies the amount and applicable terms of offered securities. For some platform notes, the supplements may also include detailed personal descriptions such as a profile, story, and even a photo of the lender. The supplement must be filed under Rule 424(b) within two days of the supplement's first use or the determination of the offering price, whichever is earlier.¹¹⁷ Therefore, while Rule 415 enables marketplace platforms to file a bundle of securities offerings together in a more efficient and cost-effective manner, P2P lending platforms still have to separately file multiple series of prospectus supplements or listing report regularly.

b) Inaccurate Disclosure

The Securities Act also prohibits inaccurate disclosure. Any information disclosed by the company, whether voluntarily or involuntarily, must be complete, accurate and not misleading. Specifically, as securities issuers, P2P lending platforms can be liable for untrue statements of material fact and failures to state material facts necessary to prevent the statements made from being misleading under Section 12(a) of the Securities Act. 119 The SEC believes that most issuers of registered securities are in a position to verify the accuracy of the disclosed information. Accordingly, P2P lending platforms may also have liability for not only inaccurate information produced by themselves but also information submitted to them by borrowers and disclosed to the SEC and platform websites. Because P2P lending platforms do not have sufficient time or resources to verify the accuracy of self-reported information by borrowers, they must include self-reported information deemed material in their prospectus for purposes of the Securities Act. Hence, the Securities Act may effectively allow lenders who suffer losses due to relying on such information to bring claims against P2P lending platforms for inaccurate disclosure.

Nevertheless, inaccurate disclosure claims against P2P lending platforms are most likely fruitless. P2P lending platforms can argue that the information is passed on to them by individual borrowers and thus they should not be liable. Technically, the Securities Act does not impose any penalty on borrowers who submit inaccurate information, even when such inaccurate disclosures are intentional because borrowers are not issuers of securities and have no disclosure obligation under the Securities Act.

¹¹⁷ Securities Act rule 424(b)

¹¹⁵ Securities Act, Rule 145.

¹¹⁶ See id.

¹¹⁸ Roeder v. Alpha Indus., Inc., 814 F.2d 22, 26 (1st Cir. 1987).

¹¹⁹ Besides, an issuer can be held liable under Section 10(b) of the Exchange Act and Rule 10b-5 where it has either made a material misstatement or failed to disclose any material facts that are necessary in light of the circumstances to make its other statements not misleading.

¹²⁰ See supra, note 130.

In addition, P2P lending platforms normally disclaim in their prospectus and websites that self-reported information is not verified and assert that lenders assume the risk that such information will be inaccurate. With the disclaimers, courts are likely to decide that P2P lending platforms satisfied their disclosure duties under the Securities Act because they disclose the risk. Additionally, even when courts consider inaccurate disclosure claims due to inaccurate self-report information, platform loans are rather too small to practically justify the cost of legal proceedings. Until now, there has yet any inaccurate self-reported information claims reviewed by any court.

3. Private Offerings of Platform Notes

Since registration of platform notes with the SEC is costly and time-consuming, P2P lending platforms can benefit from choosing not to offer their platform notes to the public. Instead, P2P lending platforms can offer their platform notes exclusively in private placements hence being exempted from registration requirements under Section 4(a)(2) of the Securities Act. Such practice was codified as a safe harbor under Rule 506 of Regulation D. Moreover, the SEC also provides the small offering exemption which is codified in Regulation A.

a) Private Placement (Regulation D)

Regulation D articulates exemptions from the registration requirements under the Securities Act. Regulation D contains several rules prescribing the qualifications needed to satisfy exemptions from registration requirements. In general, Regulation D emphasizes on four conditions of offering and sale of securities: (1) all sale must be within a certain period of time or be treated as a single offering, (2) certain information and disclosure must be provided, (3) there must be no general solicitation or advertisement, and (4) securities being sold contain restriction on resale.

In particular, under Rule 506(b), an issuer will be exempted if it sells securities to an unlimited number of "accredited investors" and up to 35 other purchasers and does not use general solicitation or advertising to market the securities. ¹²¹ Such limitation makes it very difficult for marketplace platforms to use Rule 506 exemption because even though they intend to sell their notes to accredited investors only, marketplace platforms still rely primarily on doing business on the internet through their own platforms websites and online third-party advertising.

The JOBS Act, which was adopted in 2013, amended Rule 506 so that the issuers of offerings under Rule 506(c) can use general advertising or general solicitation if all of the securities are sold only to accredited investors provided that the issuers take reasonable steps to verify that the investors are accredited investors, which could include reviewing documentation, such as W-2s, tax returns, bank and brokerage statements, and credit reports. This verification requirement is aimed to decrease the risk that general solicitation and advertisement will cause sales of securities to non-accredited investors. While the SEC has yet required specific verification methods, the standard is that the issuer must have a reasonable belief that each accredited investor is actually accredited.

While Rule 506 allows P2P lending platforms to sell an unlimited number of notes for an unlimited amount of money to accredited investors, Rule 506 also puts some limitations and requirements on the accredited investors. The Dodd-Frank Act requires the SEC to reexamine the

¹²¹ U.S. Securities and Exchange Commission, Eliminating the Prohibition Against General Solicitation and General Advertising in Rule 506 and Rule 144A Offerings, https://www.sec.gov/info/smallbus/secg/general-solicitation-small-entity-compliance-guide.htm (Last visited Nov. 3, 2018).

¹²² See id.

definition of accredited investor every four years and thus the definition of accredited investors may change constantly. The most recent definition of accredited investor include individual who (i) individually, or with their spouse, have a net worth exceeding \$1 million exclusive of the value of the person's primary residence or (ii) individually had an income in excess of \$200,000 in each of the two preceding years, or had a joint income with spouse in excess of \$300,000 in each of those years, and have a reasonable expectation of reaching the same income level in the current year. ¹²³ In effect, Rule 506 will preclude P2P lending platforms from doing business with most individual lenders who are not accredited investors hence restricting access to investment in platform note to wealthy lenders and institutional lenders.

b) Small Offering (Regulation A)

Regulation A permits an issuer to offer securities publicly without registration provided that the issuer specified disclosure and presale filing requirements. Nevertheless, the issuer could not use Regulation A to sell more than \$5 million of securities in any twelve-month period. This makes Regulation A offering impractical for P2P lending platforms because they are in the business of issuing loans and their loan volume exceeds \$5 million in the twelve-month period.

In 2015, the JOBS Act extended the reach of small placement by amending Regulation A. The amended version is sometimes called Regulation A+. Regulation A+ permits certain issuers to publicly offer and sell up to \$50 million of their securities in any 12-month period. Regulation A+ is useful to many private companies since it allows these company to publicly raise a considerable amount of fund from both accredited and nonaccredited investors. Yet, Regulation A+ is still not suitable for P2P lending platforms because the loan volume of most P2P lending platforms is still far higher than \$50 million per 12-month period. Besides, Regulation A+ includes several restrictions and requirements that are unsuitable for most public offerings of P2P lending platforms. 124

Since P2P lending platforms are in the business of lending and significant part of their business depends on individual lenders, P2P lending platforms need to solicit and advertise their platforms to the general public. Hence, P2P lending platforms might not rely on private placement under Regulation D. In addition, P2P lending platforms' loan volumes exceed maximums allow by both Regulation A and Regulation A+. Therefore, private placement and small offering exemptions are not feasible options for P2P lending platforms. Accordingly, shelf registration is the only practical solution for P2P lending platforms to register their loan offerings. Nevertheless, as mention earlier, shelf registration is an ex-post registration that fails to disclose material information at the time of sale. In other words, shelf registration fails to further the disclosure goal of the securities regulation regime. In particular, shelf registration does not address uncertainty, information asymmetry, and trust issues.

¹²³ U.S. Securities and Exchange Commission, *The SEC's Office of Investor Education and Advocacy is issuing this Investor Bulletin to educate individual investors about what it means to be an "accredited investor.*", https://www.investor.gov/additional-resources/news-alerts/alerts-bulletins/investor-bulletin-accredited-investors (Last visited Nov. 3, 2018).

¹²⁴ Regulation A+ is divided into two tiers: Tier 1, for securities offerings of up to \$20 million, and Tier 2, for offerings of up to \$50 million. Both Tier 1 and Tier 2 issuers will be required to make specified disclosures to investors, file an offering statement with the SEC, and obtain SEC clearance before commencing sales. Each issuer must also provide investors with certain financial statements including, in the case of Tier 2 issuers, audited statements.

C. Banking Regulation

In addition to securities regulation, P2P lending platforms are also subject to banking regulation at both federal and states levels. The most significant hurdle in the area of banking regulation is the discrepancy in state usury limits. P2P lending platforms go around these hurdles by partnering with an FDIC-insured funding bank to originate loans in order to bypass usury laws and other banking requirements at the state level. Accordingly, P2P lending platforms can operate across all states under the same underwriting criteria. Moreover, there have been efforts by the federal banking agencies, particularly the Office of the Comptroller of the Currency (OCC) to simplify the complex regulatory landscape by charting the special purpose national bank charters to allow P2P lending platforms and other fintech businesses to operate nationally under a single regulation.

1. Usury Laws

In the United States, usury limits that set the maximum interest rates on consumer loans exist in many states. State regulators view that loans to residents in their state, including loans made on the internet, are covered under usury and licensing laws of states where the borrowers have residency. State regulators enforce usury limits which can sometimes result in the voiding of the entire loan. Violations of usury laws can result in various penalties from state to state, including voiding the entire loan in some states. The maximum rates not only vary from one state to another but can also take different forms such as fixed rates and floating rates. The variety of usury limits across different states makes it impractical for marketplace lending platforms to serve clients across multiple jurisdictions. Usury limits might cause less issue for low-risk loans because the reasonable interest rates for such loan are generally set below the limit anyway. In contrast, usury limits may significantly change the way platforms treat higher-risk loan. Particularly, P2P lending platforms might not be able to set interest rates high enough to compensate for the risk associated with higher-risk loans. Therefore, usury limits might actually preclude P2P lending platforms from funding higher-risk lenders in many usury states.

Nevertheless, the National Bank Act allows FDIC-insured states banks like WebBank to charge on any loan interest at a rate of 1 per centum in excess of the discount rate at the Federal reserve bank in the Federal Reserve district where the bank is located, or at the rate allowed by the laws of the state where the bank is located whichever is greater. ¹²⁶ In case of Lending Club and Prosper Marketplace, the funding bank of both P2P lending platforms is WebBank, an FDIC-insured Utah bank. Because Utah law does not set any usury on loans, WebBank can fund platform loans at interest rates as high as 35.89% and 35.99% on Lending Club and Prosper Marketplace respectively.

Although P2P lending platforms are not technically considered a bank, P2P lending platforms that partner with or provide services to banks may be subject to examination and supervision by the bank's federal banking regulators under the Bank Service Company Act. 127 Notably, the Bank Service Company Act requires banks will have to make sure that their third-party service providers are in compliance with laws and regulations applicable to the banks. In other words, marketplace lending platforms will likely be demanded by their funding banks to incur extra burdens or restriction in order to meet the bank standards. Banks raise their standards for engaging with the third-party service provider through additional programs such as

¹²⁵ Robert B. Stein, Can A Usury Savings Clause Save the Lender?, Law360 https://www.law360.com/articles/268185 (Last visiting Nov. 5, 2018).

¹²⁶ 12 U.S.C. 1831d(a)

¹²⁷ 12 U.S.C. § 1867.

conducting due diligence, setting up risk management agreements, ongoing monitoring, and auditing obligations. 128

Using funding banks can also raise a possible legal challenge relating to improper use of a bank charter to finance loans which are initiated and serviced non-bank service providers. This issue is extensively litigated in courts in cases relating to payday loans. Particularly, the improper uses of bank charter enable payday loan companies to charge high rates and fees. This alarms financial regulators and consumer protection agencies. For example, the OCC issued a warning that banks must be careful before engaging with any third-party service provider that offers products or services through fees, interest rates, or other terms that cannot be directly offered without the bank partnership.¹²⁹ The lesser degree of concern might also apply to the partnership between banks and P2P lending platforms.

2. State Licensing Requirements

While federal laws preempt and allow FDIC-insured state banks like WebBank to export interest rates and other related fees, federal laws do not prevent state banking regulators from imposing state licensing requirements on P2P lending platforms operating in their states. Different states require different licenses for different activities. Many states require a 'broker license' for persons who assist in the loan origination process or solicit loans for others. ¹³⁰ Some states require a 'lending and assignee licensee' for persons who arrange loans for others or purchase from or assign to loans others. 131 Some states require lenders who undertake collection activities for others to obtain a 'collection agent license.' These are just examples of licenses that marketplace platforms must obtain from states they wish to operate in. State licenses may also impose additional obligations such as recordkeeping, financial reporting, disclosure, minimum net worth and, surety bond. 133 It is also possible that P2P lending platforms might need to secure more than one state licenses to operate in a single state. While many states rely on a national licensing registration service that allows the use of submitted information in multiple states, marketplace platform has to check and make sure that they comply with every state licensing laws of states they are operating in. In some state, bank licenses impose limitations in interest rates and fee; and require examination by state regulators. 134 Such complicated compliance obligations can be excessively costly and time-consuming for P2P lending platforms.

3. The OCC's Fintech Charter

Lacking the national licensing regime or centralized supervision, P2P lending platforms are under a constant pressure to obtain several types of licenses and maintain compliance under not only federal regulations but also many different states regulations where the platform operates. Precisely, P2P lending platforms remain under four regulatory regimes including federal securities regulation, state securities regulation, federal bank regulation, and state bank regulation. All of which renders tremendous and complex regulatory burdens that hamper the

¹²⁸ 2017 chapman page 67

¹²⁹ Office of the Comptroller of the Currency, U.S. Department of the Treasury, "Third-Party Relationships," OCC Bulletin, OCC 2001-47 (Nov. 1, 2001).

¹³⁰ See eg. California Department of Real Estate (California), Mortgage Loan Broker Compliance Evaluation Manual (Rev. 04/19); Consumer Financial Licensing, Idaho Department of Finance, Idaho Mortgage Broker/Lender License https://mortgage.nationwidelicensingsystem.org/slr/Pages/DynamicLicenses.aspx?StateID=ID&PF=1 (Last visited Jan 20, 2019); Washington State Legislature, Mortgage Broker Practices Act 19.146 RCW.

¹³¹ See id.

¹³² See id.

¹³³ Chapman page 69

¹³⁴ See id.

development of the P2P lending industry. Therefore, a national regulation designed explicitly for P2P lending platforms can be a desirable option for both the platforms and consumers.

The most anticipated national regulation for P2P lending platforms is the special purpose national bank charter for fintech companies. The Office of the Comptroller of the Currency (OOC) has announced its interest in granting a national fintech charter in December 2016. The OCC views the fintech charter as an essential and comprehensive approach to regulate financial innovation in the federal banking system by paving a path for fintech companies in the business of banking to become a national bank under the existing bank regulation standards. 136

On July 31th, 2018, the OCC begun accepting applications for a special purpose national bank charter or 'fintech charter' from fintech companies that offer bank products and services but do not take deposit based on a condition that such chartered fintech companies must meet all of the OCC's requirements that apply to all national banks and adhere to the OCC's Supplemental Licensing Manual.¹³⁷ In other words, a fintech company with the fintech charter will be supervised on areas including capital, liquidity, and risk management, financial inclusion commitments, and contingency strategy. Since the fintech charter imposes the same standards that already applied to chartered national banks, it can provide a uniform framework of vigorous supervision to promote consistency in the application of banking regulations throughout the country and help ensure that qualified fintech companies will operate safely and soundly.

The fintech charter requires that applicants must be in the business of banking which has been previously determined by the OCC as performing a least of the three core banking functions including taking deposits, paying checks, or lending money. Since the charter expressly excludes deposit taking entities, fintech companies can only either issue checks or lend money. Therefore, only payment and lending businesses are qualified for this new charter. P2P lending business, in which its core operation is to facilitate lending between lenders and borrowers, should be able to obtain the fintech charter. Chartered P2P lending platforms are expecting to enjoy the power to operate banking activities, especially making loans at the national level. In other words, chartered P2P lending platforms would be able to free themselves from the myriad of state-by-state regulations such as usury limits, consumer protection, and different compliance burdens.

Nevertheless, the new fintech charter comes with extensive compliance burdens and is currently being sued by multiple state regulators including the New York Department of Financial Services and the Conference of State Bank Supervisors. Thus, it is not surprising that no P2P lending platform has yet applied for the special purpose national bank fintech charter. For instance, Davis Kimball, Prosper Marketplace CEO, said in an interview that Prosper

¹³⁵ https://www.occ.treas.gov/news-issuances/news-releases/2016/nr-occ-2016-152.html

¹³⁶ Office of the Comptroller of the Currency, Policy Statement on Financial Technology Companies' Eligibility to Apply for National Bank Charters (July 31, 2018) https://www.occ.treas.gov/publications/publications-by-type/other-publications-reports/pub-other-occ-policy-statement-fintech.pdf (Last visited Jan. 12, 2019).

¹³⁷ Office of the Comptroller of the Currency, Considering Charter Applications From Financial Technology Companies, Comptroller's Licensing Manual Supplement, https://www.occ.treas.gov/publications/publications-by-type/licensing-manuals/file-pub-lm-considering-charter-applications-fintech.pdf (Last visited Jan 12, 2009) As with all national banks, the OCC will consider whether a proposed bank has a reasonable chance of success, will be operated safely and soundly, will provide fair access to financial services, will treat customers fairly, and will comply with applicable laws and regulations. The OCC will also consider whether the proposed bank can reasonably be expected to achieve and maintain profitability and whether approving the charter will foster healthy competition.

¹³⁸ See 12 CFR 5.20(3)(1)(i).

Marketplace would not consider the fintech charter in the near term, but the platform already has 20 state licenses and lends in almost every state through its bank partnership with WebBank. The lack of interest in the new fintech charter seems to suggest that P2P lending platforms are not likely to change their business model which mainly relies on bank partnership and payment dependent note structure.

On the contrary, P2P lending platforms and other fintech companies are looking forward to being subject to a unitary-authority regulator which prescribes clear rules. Yet, this ideal might be hard to achieve as bank and securities regulators at federal and state levels are reluctant to relinquish their specific supervisory authority on P2P lending platforms. While the OCC's fintech charter might not be attractive enough to convince P2P lending platforms and other federal and state regulators to subscribe to the OCC's licensing and supervision, the OCC's fintech charter has paved the right path for simple and effective regulation for financial innovation.

D. P2P Lending Adapting to the Current Regulatory Landscape

While the term 'peer-to-peer' seems to suggest that it involves an individual person lending money to another individual, it is not how most P2P lending platforms actually operate. Securities and banking regulations have pushed P2P lending platforms to adopt a business model and operational structures that fit the existing regulatory frameworks. In effect, laws, and regulations seems to compel P2P lending platforms to operates more like existing institutional lenders. The two biggest P2P lending platforms—Lending Club and Prosper Marketplace, are the prime examples of how laws and regulations have changed P2P lending business. Both P2P lending platforms have adapted and survived. Yet, both P2P lending platforms had to give up their original emphasis on interpersonal relationships of peer members on the platforms. Mainly, P2P lending platforms have largely abandoned peer-to-peer features, adopted the borrower payment dependent note model, relied on shelf registration and employed a strategy to export and apply uniform interest rate nationally. The following section will examine the regulatory-induced adaptation of P2P lending industry from the economic and sociological perspectives.

1. Abandoning Peer-to-peer feature

P2P lending industry's moves to satisfy the SEC also removed most, if not all, of peer-to-peer features. After a series of heated fights with the SEC, Prosper Marketplace eventually got rid of its major group lending scheme which included group affiliations and group leaders. Lending Club also stopped operating on Facebook and moved to its own platform website before registering with the SEC. All major P2P lending platforms including Prosper Marketplace and Lending Club have also modified borrowers' profile to be more impersonal by getting rid of borrower's portrait photos, personal introductions, and replace the descriptive plea for of loans with limited categorial choices of loan purposes.

Lending Club was the first platform that moved to eliminate the peer-to-peer feature. By the time Lending Club attempted to register with the SEC, Lending Club had simplified its business model. Lending Club assigned fixed a fixed interest rate to each loan according to risk class based on financial evaluation such as credit history and income or salary and sold payment-dependent notes associated with platform loans to platform lenders. The SEC responded well with Lending Club's proactive move and approved Lending Club's registration making Lending Club the only P2P Lending Platform that operated under the SEC regulation at the time. The SEC approval obviously boosted public trust.

On the other hand, Prosper Lending Club initially insisted on keeping its business model that emphasized interpersonal relationships between peer members of the platform such as loan

auction, direct ownership, group affiliation, and extensive personal profile. Prosper requested a no-action letter, asking the SEC to assure that its structure and operation were in compliance with SEC rules. At first, the SEC did not offer assurance nor reject Prosper Marketplace's business model. Yet, once Prosper Marketplace filed the registration, the SEC promptly rejected it citing numerous material failures in respects to the Securities Act. The SEC particularly noted a failure to identify all co-registrants, a failure to include the required financial statements, and a failure to abide by the Trust Indenture Act. After a series of fights with the SEC, Prosper Marketplace decided to follow Lending Club's business model by promising to prescribe a fixed interest rate for each loan, issue borrower payment dependent, and begin the process to reduce its reliance on peer-to-peer features. Prosper Marketplace had gradually discontinued advertising about its group lending, stopped offering service fees to group leaders, stopped accepting new groups, and eventually terminated the group lending feature in 2012. Prosper Marketplace also steadily decreased the amount of personal information of borrowers on the platform. Finally, Prosper Marketplace took down all personal information on display. Today, the types and depth of information about platform loans on both Prosper Marketplace and Lending Club are practically identical.

The reason that P2P lending platforms have standardized their operation and departed from peer-to-peer features could also stem from a privacy concern towards borrowers. It is easy to see that platform borrowers might concern about their privacy because they could be tracked down, scammed, or even defrauded from their personal information available on P2P lending platforms. The reality was that borrowers had the option to present their personal information or keep themselves anonymous. Most borrowers did disclose detailed personal information because they believed they would benefit from doing so. Also, P2P lending platform could have invested in technology to strengthen information security without having to compromise with information accessibility. For example, P2P lending platforms may show some personal information such as description or social network without revealing the identity of borrowers.

2. Adopting the Borrower Payment Dependent Note Model

Before the SEC probe, Prosper Marketplace operated by selling notes and their accompanying ownership of the loan to lenders. After purchasing notes from a P2P lending platform, platform lenders owned and had security interests over the corresponding loan or portion of the loan. The lenders continued to possess all the legal rights to the loan until maturity. In particular, the lenders could seek legal remedies by themselves when the borrower failed to pay or satisfy the terms and conditions of the loan. Under the direct loan ownership model, the platform would no longer retain a lending contract with the borrower once the P2P lending platform sold platform notes to lenders. Therefore, P2P lending platforms just had contractual obligations to intermediate and service loans between borrowers and lenders.

Accordingly, it would be understandable that Prosper Marketplace saw its original business model as a lending intermediary instead of securities issuers and expected that it would be subject to lending regulation instead of securities regulation. In fact, the SEC expressly suggested that P2P lending would be in compliance and fit into existing regulations and interpretations of the SEC if direct ownership or securities interest of lenders were eliminated altogether. The SEC eventually rejected Prosper Marketplace's registration statement and pointed out in the formal rejection response that the direct loan ownership structure failed in

¹³⁹ Prosper Marketplace, Inc., Registration Statement (Form S-1) 9 (Oct. 30, 2007).

¹⁴⁰ Andrew Verstein, The Misregulation of Person-to-Person Lending 45 UC Davis (2) 492 (2011).

material respects.¹⁴¹ Subsequently, Prosper Marketplace yielded to the SEC and altered its direct ownership structure to adopt the borrower payment dependent note structure.¹⁴²

On the other hand, Lending Club has relied on the borrower payment dependent note model since the beginning. The SEC favored the model and willingly approved Lending Club's registration. A borrower payment dependent note is a debt obligation of the P2P lending platform to lenders. Yet, the obligation is not unconditional; it ties to the payments the P2P lending platform receives from the corresponding borrower. Therefore, under the borrower payment dependent note model, lenders will no longer have the right to claim payments directly from borrowers. Instead, this business model creates two separate relationships. First, a P2P lending platform lends to a borrower. The P2P lending platform thus has all the legal rights to received payments from the borrower. Second, the P2P lending platform sells promissory notes based on the loan they just made to platform lenders. Therefore, the platform has an obligation to pay a portion of the money collected from the borrower to the lenders. In other words, lenders have a contractual relationship with the platform, but not the borrowers.

Under the borrower payment dependent model, P2P lending platforms also limit their liabilities by making notes nonrecourse to any other assets of the platforms. The obligation to pay platform lenders is limited to payments received from borrowers. Therefore, P2P lending platforms have no obligation to pay for anything when they do not receive payments from borrowers. In other words, the payment dependent model significant diverges from the peer-to-peer origin because platform lenders no longer lend to borrowers. Instead, platform lenders just invest in nonrecourse promissory notes offered by P2P lending platforms. Not surprisingly, the SEC is comfortable to the borrowing payment dependent model because the model is reminiscent of traditional investment contracts. Once a P2P lending platform registers platform notes with the SEC, the mechanism works just like other securities traditionally offered by institutional issuers.

3. Relying on Shelf Registration

The borrower payment dependent note model is more favorable than the direct loan ownership model because the borrower payment dependent allows P2P lending platforms to rely on shelf registration. One difficult condition the SEC registration requires is that P2P lending platforms must list all issuers of securities within their prospectus. The Securities Act defines "an issuer" as "the person or persons performing the acts and assuming the duties of depositor or manager pursuant to the provisions of the trust or other agreement or instrument under which such securities are issued." Under the direct loan ownership model, the borrowers who have direct contractual obligations to the lenders would be deemed issuers along with the P2P lending platform. Accordingly, it is possible that the SEC would require P2P borrowers to be listed as coissuers on the registration statement for each corresponding loan. Separately listing borrowers as co-issuers means P2P lending platforms that use the direct ownership model would not have been able to rely on shelf registration because P2P lending platforms would not be able to provide specific details or even names of their co-issuers when the P2P lending platforms file the main registration statement with the SEC. Therefore, the direct ownership model would be prohibitively costly and time-consuming for P2P lending platforms. While the P2P lending's

¹⁴¹ SEC Response to Prosper Marketplace's Registration Statement on Form S-1, SEC (2007).

¹⁴² Prosper Marketplace, Inc., Amendment No. 1 to Registration Statement (Form S-1) 2 (2008).

¹⁴³ LendingClub Corporation, Annual Report Pursuant To Section 13 Or 15(D) Of The Securities Exchange Act Of 1934 (Form 10-K) (2010).

¹⁴⁴ Securities Act of 1933, § 2(a)(4), 15 U.S.C. § 77B(a)(4).

strength comes from faster and cheaper services, the costly and time-consuming registration process would force P2P lending platforms to charge higher fees and take longer to lend. Therefore, the costly and lengthy registration process could drive away most of the customers rendering the direct loan ownership model infeasible.

On the other hand, P2P lending platforms under the payment dependent model can easily rely on shelf registration because the P2P lending platforms are the sole issuer of all platform notes. Accordingly, P2P lending platforms can take the corresponding amount of securities off the shelf by filing a prospectus supplement that contains information about individual platform loans after such individual loan listings are fully funded. As mentioned earlier, because shelf registration allows P2P lending platforms to sell platform notes to finance corresponding loans then periodically file prospectus supplements with more details later, platforms can save a lot of time and money. Time and money saved by the borrower payment dependent note then passed on to consumers as faster and cheaper services.

4. Charging Uniform Interest Rates Nationally

In addition to securities regulation, state and federal bank regulators also regulate P2P lending. Bank supervision is significantly more extensive than securities regulation. The most prominent banking regulation that has significant influence P2P lending business is the usury laws enforced by many states across the United States. The discrepancy in usury rules and rates across states makes it impossible for P2P lending platforms to operate nationally. State usury laws limit the maximum interest rate a lender can charge. State regulators view that loans made by P2P lending platforms to residents of the state are covered under their usury statute. Violations of usury laws can result in various penalties from state to state, including voiding the entire loan in some states. The maximum rates not only vary from one state to another but can also take different forms such as fixed rates and floating rates.

The variety of usury limits across different states makes it impractical for P2P lending platforms to serve clients across multiple jurisdictions. Usury limits might not matter for low-risk loans, because the reasonable interest rates for low-risk loans are generally set below the usury limits anyway. Yet, usury limits matter a lot more for P2P lending platforms that offer a large number of high-risk loans Particularly P2P lending platforms might not be able to set interest rates high enough to compensate for the risks. Therefore, usury limits can practically preclude P2P lending platforms from offering higher-risk loans in usury states.

To address the usury issue, P2P lending platforms rely on 'interest exportation' strategy. Instead of directly funding lending members, P2P lending platforms partner with funding banks which are FDIC-insured state financial institutions located in non-usury states. The federal preemption allows FDIC-insured state banks like WebBank to bypass state usury limit. In case of Lending Club and Prosper Marketplace, the funding bank of both platforms is WebBank, an FDIC-insured Utah bank. Because Utah law does not set any usury on loans, WebBank can fund platform loans at interest rates up to 36% across the United States. The flexibility of interest rates allows P2P lending platforms like Lending Club and Prosper Marketplace to offer loans high-risk borrowers where traditional lenders like banks are not able to do so. P2P lending platforms subsequently buy the issued loans from the funding bank using funds they received

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¹⁴⁵ See supra, note 125 (In Texas, violation of the usury limit could lead to severe outcomes, ranging from the forfeiture of interest to the loan becoming entirely void to recovery by the borrower of up to three times the excess amount of interest. New York's usury laws provide that all usurious agreements are null and void; the lender loses all principal and interest).

^{146 12} U.S.C. 1831d(a).

from platform lenders. P2P lending platforms then issue platform notes which are notes evidencing the issued loans funded by the platform lenders and assign the notes to the platform lenders in consideration of the funds the platform lenders have funded the loan listings.

5. Commoditization of Platform Loans

While the adaptations under the current regulatory regime has pushed P2P lending platforms from their initial reliance on interpersonal relationships among individual borrowers and lenders, it is clear that the P2P lending industry has rapidly grown and been able to expend to operate at a larger scale. To scale up sustainably, P2P lending platforms seem to employ the polar opposite strategy by commoditizing P2P loans into indistinguishable platform notes within an assigned class of risk. In other words, platform notes of the same class lose their personal attributes and turn into simple commodities from lenders' perspective. Hence, lenders would be more likely to choose to lend to loans that offer the highest interest rate within the same class instead of looking into interpersonal relationships or personal attributes of particular borrowers.

The commoditization of platform loans can be easily observed through how P2P lending platforms have involved over time. P2P lending platforms which initially had different business models and features have converged to adopt the marketplace model with borrower payment dependent note structure in order to comply with the current securities regulation. Therefore, the products and services provided by different P2P lending platforms, particularly Lending Club and Prosper Marketplace, seem to be almost undistinguishable from the consumers' perspective. In addition, P2P lending platforms strongly promote automated investments where the platform will randomly select a large number of notes from different classes of risk based on a preselected strategy. Such an automated method treats a particular platform note just like a generic representation of its risk class and completely overlook its personal attributes associated interpersonal relationships and networks of the borrower.

On one hand, the commoditization of platform notes clearly shows that the American P2P lending industry have largely abandoned its reliance on interpersonal relationships. On the other hand, it can be argued that the commoditization of platform creates an operable substitute for the interpersonal relationships which have been vital to lending among the peers. The commoditization of platform loans not only allows P2P lending platforms to minimize the costs of attaining, processing, and dissimilating personal information and operate on very low margins, but it also attracts high-volume lenders, especially institutional lenders, to invest in a large portfolio of platform loans without having to rely on the interpersonal relationships with the borrowers. Therefore, P2P lending platforms have been able to undercut traditional loan servicers and encourage both individual and institutional lenders to lend to an ever-expanding volume of P2P borrowers.

So far, this essay argues that regulations have fundamentally changed the behaviors and business strategies of P2P lending platforms. P2P lending platforms had to adapt to changes in the regulatory landscape or die. While most P2P lending platforms died out, some P2P lending platforms, especially Lending Club and Prosper Marketplace, have successfully adapted the securities and banking regulations and survived to become the two biggest P2P lending platforms in the world. P2P lending platforms abandoned peer-to-peer features, moved to rely exclusively on the marketplace model with borrower payment dependent note structure, and partnered with a funding bank to export interest rate. Such adaptation drastically changes how the P2P lending

¹⁴⁷ Discover a new way to invest, LendingClub, https://www.lendingclub.com/investing/alternative-assets/how-itworks (Last visited May. 30, 2019).

industry operates and significantly diminish the importance of interpersonal relationships among borrowers and lenders. At the same time, the fact that P2P lending platforms can continue to operate despite facing several calamities may also suggest that the American P2P lending industry has been able to commoditize platform loans and facilitate P2P lending without the interpersonal relationships among lenders and borrowers. Nonetheless, the interpersonal relationships are still play a vital role for small individual lenders who might not be able to invest in a large number of platform notes to sufficiently diversify their P2P investment portfolios.

E. How the Current Regulatory Landscape Reshapes the Fundamentals of P2P Lending

This essay has provided the basic understanding of P2P lending based on economic, sociological perspectives, and its interplays with laws and regulations. This section will adopt the economic and sociological frameworks to analyze the current model of P2P lending after P2P lending platforms have adapted to the regulatory landscape. While P2P lending platforms have been able to navigate through complex and demanding regulatory obligations, P2P lending platforms have departed from their original principle that emphasizes of peer-to-peer relationship. By viewing the current P2P lending operation from the economic and sociological perspectives, this essay aims to reveal the pros and cons of P2P lending and show how P2P lending differs from traditional lending methods.

1. The Economic Perspective

The securities regulations under the SEC have significantly changed the way P2P lending platforms operate. The use of interpersonal relationships in the form of peer-to-peer features on P2P lending platforms has been largely abandoned. The ownership structure of platform loans has also been standardized in the form of borrower payment dependent notes. P2P lending platforms also standardize their overwriting practices by partnering with an FDIC insured bank. The road to the current business model of P2P lending platforms has greatly been influenced by laws and regulations. While the P2P lending's adaptation to conform with existing laws and regulations allow them to survive, such adaptation drastically changes the business of P2P lending from the economic perspectives. In particular, securities and banking regulations might actually increase uncertainty and information asymmetry in P2P lending.

a) Uncertainty

Regulations can have an impact on uncertainty in P2P lending in many ways. As mentioned throughout this essay, regulations can compel or induce P2P lending platforms to behave in specific ways. For instance, as P2P lending platforms terminated peer-to-peer lending features like social networks, detail personal profiles, and group affiliations, the extra certainty provided by these peer-to-peer features have also disappeared. Platform lenders, especially individual lenders, can no longer rely on interpersonal-relationship-based mechanisms such as the group vetting process, peer or social media monitoring, and peer pressure. Regulations can also have an impact on P2P lending platforms and certainty in P2P lending in a more direct way. For instance, the existing SEC regulatory framework technically forced P2P lending platforms to abandon the direct ownership model and adopt the borrower payment dependent note model. In fact, the borrower payment dependent model seems to be one of the most stirring factors contributing to uncertainty in P2P lending for platform lenders.

The borrower payment dependent model severs the contractual relationship between lenders and borrowers. The borrower payment dependent model severs then put P2P lending platforms between lenders and borrowers. The added intermediary layer may create additional uncertainty or risks in P2P lending transactions. At a glance, the borrower payment dependent

note model is no more than a legal construction that enables platform notes to employ shelf-registration exemption under SEC and allows P2P lending platforms to operate without having to name hundreds of co-issuers every day. When everything goes as planned, payments made by platform borrowers will be passed through to platform lenders who hold the associating notes. Nevertheless, this rosy anticipation fails to address rainy situations when things do not go as expected. The main critique of the borrower payment dependent note model is based on two concerns.

First, platform lenders have to partake an additional layer of a contractual relationship with a P2P lending platform hence being exposed to an additional credit risk of the P2P lending platform itself. When P2P lending platforms become insolvent, lenders might not be able to recover their investments even if borrowers make the payments to the P2P lending platforms. Mainly, platform lenders could lose most if not all of the investment when P2P lending platforms declare bankruptcy and liquidates its assets because borrower payment dependent note holders have the least senior interests in the assets of P2P lending platforms. In the event of liquidation, assets including loan payments will be depleted by creditors, shareholders, or other parties who have more senior interests in the company which operates the platform. It could also be possible that the P2P lending platform may use the payments to expand its business operation instead of passing payments to platform lenders. For instance, P2P lending platform might use the interest in platform loans borrower to pledge for other debts or P2P lending platforms may sell platform loans outright.

Second, while the borrower payment dependent model shifts the borrower credit risk to be borne entirely by platform lenders, platform lenders do not have any control over their own loans. Instead, P2P lending platforms retain all control over loans and borrowers who is the source of the credit risks. P2P lending platforms' capacity to have control without exposing to risk may result in a higher level of uncertainty. This situation is often referred to as 'moral hazard.' Here, P2P lending platforms can take more risk because platform borrowers bear all the cost of the risks. For instance, P2P lending platforms may want to overwrite as many loans as possible because their primary source of revenue comes origination fees. Yet, this strategy is not the best interest of platform lenders because when borrowers default, all loss falls on the lenders. In other words, due to the pass-through structure, lenders are exposed to default risks even the lenders are not the party that directly make the loan. While some may argue that P2P lending platforms have their reputation and long-term success at stake, P2P lending platforms still have the incentive to take a risk at least in the short run.

Ironically, while the SEC aims to protect lenders or investors from uncertainty, the possible fallouts caused by the borrower payment dependent note model can be counterproductive. The examples of additional default risk from P2P lending platform and the moral hazard due to the unalignment between risks and control have clearly shown that laws and regulation can increase uncertainty in P2P lending.

b) Information Asymmetry

While most banking and securities regulators, especially the SEC rely heavily on disclosure to dissipate information between different parties of a transaction. Therefore, the logical consequence of being regulated under banking and securities regulations should be less

¹⁴⁸ Moral hazard is when someone increases their exposure to risk when insured, especially when a person takes more risks because someone else bears the cost of those risks. A moral hazard may occur where the actions of one party may change to the detriment of another after a financial transaction has taken place.

information asymmetry. Yet, the journey of P2P lending platforms like Lending Club and Prosper Marketplace might prove otherwise.

As mentioned before, the elimination of peer-to-peer features significantly limited borrower's ability to distinguish themselves from others who have similar financial credentials. Borrowers can no longer take advantage of their wealth in personal connections and soft qualities which might not be able to be seen through objective indices like credit scores, income, or net worth. Personal values such as honesty, care for others, and accountability, can only be perceived through personal and descriptive manners. Therefore, not only, lenders, especially retail or individual ones, lost their ability to sort through loans from personal perspectives, borrowers also lost their ability to signal the soft quality based on personal relationships.

Banking and securities regulations tore apart direct relationships between lenders and borrowers. Platform borrowers now have to use a P2P lending platform and a funding bank as their agents for lending. This creates a principal-agent problem that can result in worse information asymmetry. The principle-agent problem occurs when a principal delegates decision making to another person or the agent, but the agent's own interest does not fully align with the principle's interest. The principle cannot be sure that the agent will always act for in its best interest. In the case of P2P lending, lenders are principles, and P2P lending platforms and funding banks are their agents.

Platform lenders are looking for low-risk and high-return investment. Therefore, at a given interest rate, platform lenders want to pick loans with the lowest risk possible. On the other hand, P2P lending platforms and funding banks might not share the same goal as platform lenders because they no longer hold an ownership interest in platform loans once the borrower payment dependent note was sold to the borrowers. The primary source of revenue of P2P lending platforms and funding banks comes from transaction fees from matching loans on their platforms. The more loans are made, the more fees can be charged. Therefore, it is P2P lending platforms' and funding banks' best move to maximize loan volume and minimize costs of operation. P2P lending platforms and funding banks are also constrained by their need to comply with laws and regulation in order to survive to operate another day.

First, P2P lending platforms banks want to spend the least resources possible on screening, issuing, servicing, and collecting loans. In fact, most P2P lending platforms do not verify loan information beyond the borrower's identity and credit report. With no contractual right nor ability to verify the information by themselves, platform lenders entirely rely on P2P lending platforms to provide accurate information. At the same time, Funding bank like WebBank does not have sufficient incentive to spend time and resources on loans that they only hold for a brief moment. Instead of applying strict underwriting standards like banks normally do when they issue loans, funding banks outsource the vetting and risk evaluation process to P2P lending platforms. Therefore, funding banks do not obtain and dissipate information like banks traditionally do. Therefore, while P2P lending platforms act as an intermediary, they fail to mitigate information asymmetry. Platform Lenders who rely on platform-verified information may pick a bad loan they would never have picked if they have access to accurate information. Furthermore, P2P lending platforms also have an incentive to set low criteria for loan applications in order to attract more applications. While some sophisticated lenders may be able to go through the long list of listings and weed out low-quality loans using complex credit model

¹⁴⁹ LendingClub Corporation, Annual Report Pursuant To Section 13 Or 15(D) Of The Securities Exchange Act Of 1934 (Form 10-K) (2017). Investors should be aware that all listings are posted to our marketplace without our verifying self-reported information such as the purpose of the loan, income, occupation and employment status.

based on financial information, many platform lenders, especially individual lenders, are unsophisticated or do not have time and resources to do the same.

Second, since P2P lending platforms are overseen and regulated by multiple regulatory agencies, P2P lending platforms are required to comply with such laws and regulations so that they can operate legally in the long run. Due to the rigid securities framework and concern over privacy, P2P lending platforms have been compelled to limit the range of personal information on platforms and prevent lenders from communicating with borrowers. As most of the personal information and interpersonal relationship between borrowers and lenders have evaporated, individual lenders can no longer take advantage of peer-to-peer featured they used to. In contrast, institutional lenders who have expertise in analyzing and modeling financial information find themselves in a better position. Due to their expertise and ability to diversify their portfolios, institutional lenders have had a larger presence in P2P lending. As a result, the new P2P lending business model seems to skew against individual lenders leaving them with a more severe information asymmetry problem.

2. The Sociological Perspective

From the sociological point of view, the laws and regulations on P2P lending may have a significant impact on trust between participants of P2P lending transactions. Based on the trust theory discussed earlier, ¹⁵⁰ Laws and regulations can have two opposing impacts on trust. On one hand, interpersonal trust among borrowers and lenders can be significantly reduced as peer-to-peer features were largely eliminated. On the other hand, the standardization of the industry under the existing laws and regulations and the regulatory certainty due to well-established rules and legal precedents may boost the institutional trust in P2P lending.

a) Interpersonal Trust

Peer-to-peer features like group affiliations, personal profiles, and social network platforms foster interpersonal trust.¹⁵¹ When these features were abandoned following the oversight of securities and banking regulators, P2P lending platforms can no longer facilitate interpersonal trust for borrowers and lenders. Loans listed on P2P lending platforms are like commodities which are sorted based on concrete financial criteria and traded anonymously without knowing whose borrowers are taking the loans. Therefore, it is impossible for platform lenders to identify and verify the identities and information of borrowers. Without any communication or personal knowledge borrowers, Interpersonal trust among borrowers and lenders cannot be formed. For instance, Prosper Marketplace terminated the lending group feature. Therefore, lenders who used to rely on their group leaders to screen and monitor loans based on interpersonal relationship and network no longer have such an option.

Moreover, even if platform lenders want to screen and monitor loans based on personal information of the borrower by themselves, they can no longer do that because P2P lending platforms have removed almost all personal information about borrowers from loan listings. On the other hand, borrowers also lost out. Without peer-to-peer features, borrowers cannot use their interpersonal relationships or personal information as social capital to help them secure loans at more favorable rates. In fact, group-associate loans have had significantly lower rates than loans with the same financial credentials. Therefore, the operation of P2P lending in the current regulatory landscape results in the disappearance of interpersonal trust of lenders and borrowers on P2P lending platforms.

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¹⁵⁰ See. Part II, D.

¹⁵¹ See supra, Section I. C.

b) Institutional Trust

While the business model of P2P lending under the current laws and regulations devastate interpersonal trust among borrowers and lenders, the current P2P lending operation might boost institutional trust. Laws and regulations can promote institutional trust because institutional trust is derived from external assurances that expectations will be fulfilled. Once regulations and standard behaviors are imposed on P2P lending platforms, both lenders and borrowers who participate in P2P lending platforms can form precise expectation as to how the outcomes are going to be. For, example, most P2P lending platforms provide statistics of performance for loans in different classes that that offer. Moreover, the platform also has set procedure for different situations such as loan vetting, money transfer, late payment, and debt collection. Both borrowers and lenders do not have to be creative or put the effort into lending, but just follow the set procedures with confidence. Yet, because institutional trust exists outside a particular relationship among individuals, the trust in the institution cannot help people build relationships or form any interpersonal trust. Therefore, the enforcement of standard procedures and regulations under the current regulatory landscape can be trade-offs between the increase in institutional trust and the decrease in interpersonal trust.

¹⁵² See supra, Section I. C.

Conclusion

This essay illustrates how P2P lending platforms have operated and evolved under existing laws and regulations. P2P lending offers a new solution to insufficient and expensive personal loans offered by traditional financial institutions. The P2P lending solution is derived from two main competitive advantages: the advancement in information and communication technology and the use of personal relationships. While the internet and telecommunication technology can be quickly adopted other personal loan providers, the use of personal relationship is unique to P2P lending and the focus of this section. P2P lending platforms developed their business model based on personal relationships among platform users. At the beginning, most P2P lending platforms adopted the use of peer-to-peer features such as a group affiliation, personal information, and a social networking platform. These peer-to-peer features have proofed to be helpful for borrowers and lenders from both the economic and sociological perspectives. From the economic perspective, peer-to-peer features can help reduce uncertainty and information asymmetry thereby allowing lenders and borrowers to predict the outcome of their lending transaction more accurately. From the sociological perspective, peer-to-peer features can foster interpersonal trust among borrowers and lenders thereby letting them have more confidence in transacting the loans. Although the business model based on peer-to-peer features seemed to be a promising alternative to mundane lending and investing products offered by mainstream financial institutions, several regulators eventually flexed their muscles and regulated P2P lending platforms under the same laws and regulations they use to regulate the traditional financial services. These laws and regulations have drastically changed how P2P lending platforms operate. Most peer-to-peer features were quickly abandoned. Platform lenders no longer lend to a borrower they personally picked. Instead, platform lenders only purchase indistinguishable platform notes which are priced by the platform according to opaque financial criteria. The commoditization of platform notes may work as a substitution for the absence of interpersonal relationships among borrowers and lenders and enable the American P2P lending industry to operate commercially at a large scale. Nevertheless, such a current business model is particularly disadvantageous for individual platform lenders because they can no longer form personal relationships nor exchange information regarding their personal qualities. Notably, the absence of personal relationships can increase uncertainty and information asymmetry and reduce interpersonal and institutional trust, all of which are fundamental concerns of lending among individual peers. This calls into question whether the current regulatory landscape really promote financial inclusion and protect financial consumers as it should.

Essay II

Online Fundraising Through the Lenses of Law, Economics, and Sociology: An Example from Thai Rotating Savings and Credit Associations

A rotating savings and credit association (ROSCA) is a classical fundraising method in which a group of individuals pool money and borrow from the group. Despite being informal and often sidelined by the formal financial institutions, regulators and lawmakers, ROSCAs have long been functioning as an effective lending and investing tool for ordinary people, especially those underserved by the formal financial system. This essay argues that ROSCAs traditionally rely on interpersonal relationships among participants to address four fundamental concerns in lending including uncertainty, information asymmetry, interpersonal trust, and institutional trust. Recently, an online form of ROSCAs has emerged and spread over the internet. While online ROSCAs allow strangers, who have no interpersonal relationship to easily create a virtual ROSCA, the absence of interpersonal relationship fail to address the four fundamentals leaving online ROSCA participants vulnerable to increased risks of frauds and defaults. This alarms the financial regulators, lawmakers, and the public. Nevertheless, laws and regulations regarding ROSCAs have been designed based on the traditional form of ROSCA focusing on limiting size, volume, and commercialization of ROSCAs. Unfortunately, such regulatory landscape fails to accommodate online ROSCAs and effectively ban them entirely. The ban has pushed online ROSCAs to operate in the shadow leaving the participants in a worse position economically and sociologically.

I. Introducing ROSCAs

A rotating savings and credit association (ROSCA) is a classical fundraising method in which a group of individuals pool money and borrow the funds from the group. Indeed, ROSCAs are an ancient fundraising method which has been practiced throughout the world under different names such as 'chit' in India, 'tandas' in Latin America, 'partnerhand' in the Caribbean, 'hui' in China and 'pia-share' in Thailand.¹⁵³ While practices in different locals vary, the core principle of ROSCAs is the reciprocity among individual members of the group who often have a close personal relationship with each other. While the rotating mechanism of a ROSCA means every member will both lend to and borrow from the group. A ROSCA member who takes out a fund from the group early on can be regarded as a borrower because such member takes an early payout by forgoing a stream of payments in the future. In contrast, a ROSCA member who takes out a fund from the group later can be regarded as a lender or investor because such member forgoes an early stream of payment for taking a larger payment later.

Unlike traditional lending methods which lending decisions are made almost exclusively based on financial qualifications such as collateral assets, credit history, and average monthly cash flow, ROSCAs rely almost exclusively on interpersonal qualities such as interpersonal relationships, shared identity, social norm, and trust among individual members within each ROSCA group. Interpersonal qualities used in ROSCAs can be seen as social capital that promotes successful borrowing and lending transactions within groups. ROSCAs seem to be a great alternative for the borrowers who are deprived of sufficient financial services due to their lacking conventional financial qualifications. ROSCAs also provide rare investment opportunities for lenders who lack knowledge and access to traditional investment vehicles offered by traditional financial institutions. Despite all these promising advantages, ROSCA practices had never taken off at a large scale until recently when ROSCAs were taken online.

Several local fundraising methods have organically developed in less developed areas that lack formal banking services, offering an alternative for the unbanked and underbanked population paths to gain access to necessary capital. In Thailand, ROSCAs are the most prominent local fundraising method which are used in both urban and rural settings throughout the country. Like other shadow banking activities, ¹⁵⁴ ROSCAs are often seen in a negative light because ROSCAs are not only practiced outside the banking system, but ROSCAs are also unrecognizable by Thai authorities.

Thailand's shadow banking practices have been in the limelight for decades due to a long history of well-known frauds resulting from fundraising methods outside traditional banking and securities systems. In facts, any non-traditional fundraising practice which is not regulated by appropriate government agencies is considered a financial crime or an economic crime under Thai law. Thai legal scholars often categorially regard all types of shadow fundraising practices as serious financial crimes with huge economic and social ramifications. ¹⁵⁵ Academic literature on Thailand's financial crime also portraits financial criminals as professionals who possess intelligence, skills, and techniques beyond ordinary standards and can commit complex crimes

¹⁵³ Shirley Ardener, The Comparative Study of Rotating Credit Associations, 94 THE JOURNAL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND 2(1964).

¹⁵⁴ Shadow banking often refers to lending and other financial operations outside traditional banking or financial regulations. While some shadow banking activities might not directly violate specific provisions that cover traditional financial activities, shadow banking activities often run afoul of banking and financial laws and regulations because these activities are highly regulated and regularly required licenses and permissions to operate.

¹⁵⁵ See WEERAPONG BOONYOOPAS, WHITE COLLAR CRIME (in Thai), Nitidrama Press 38-39 (1994).

resulting in substantial economic impacts beyond typical fraudulent cases. Yet, such a definition fails to address small but widespread activities which can collectively cause problems on a large scale.

This essay will explore the fundamental of ROSCAs. Particularly, I will discuss the market segments for both borrowers and lenders that ROSCAs serves. For borrowers, ROSCAs provide access to capital for the unbanked and the underbanked when they need the most. For lenders, ROSCAs provide rare high-return investment opportunities. Moreover, I will outline the basic operation of ROSCAs in Thailand from including formation, operational structure, and monitor and enforcement mechanisms.

A. The Participants of ROSCAs

Several local fundraising methods have organically developed in less developed areas that lack formal banking services, offering an alternative for the unbanked and underbanked population paths to gain access to necessary capital. In Thailand, rotating saving and credit associations (ROSCAs) are one of the most prominent local fundraising means which is practiced in both urban and rural settings throughout the countries.

Thailand has a sizeable market for ROSCAs. A significant number of people, especially those from low-come households rely on financial services outside of the formal financial system such as banks and stock markets. ROSCAs is Thailand's most prominent alternative finance. ROSCAs not only compete with both traditional financial service providers like banks, saving and credit cooperatives and the stock markets but ROSCAs also compete with other alternative finance like moneylenders, loan sharks, and pawnshops. While the financial market is somewhat saturated and competitive, ROSCAs have survived and thrived in Thailand for a long time. Even today is the digital age, a significant portion of people in Thailand still use ROSCAs as instruments for borrower and lender money from other individuals. In other words, the market of ROSCAs encompasses both the borrowers and the lenders. For the borrowers, ROSCAs provide a mean to obtain considerably flexible loans at reasonable and manageable rates. For the lenders, ROSCAs offer a profitable and familiar opportunity for ordinary people to save and invest money.

Nevertheless, there has not been any national statistic of ROSCAs. While many research studies, especially in the field of development economics and microfinance take an interest in ROSCAs, most researchers mainly based their studies on the population who engage in traditional financial services or take government assistance. Although no one knows the precise figures of participants or volume of ROSCAs in Thailand, it is certain that ROSCAs is an important financial method that a significant number of people use to borrow and lending money. The following sections will investigate the market of ROSCAs from both borrowers' and lenders' angles. Yet, without quantitative statistics of ROSCAs, the following sections will instead rely on anecdotal information from one-on-one interviews and peripheral information from national surveys and research studies that are indirectly relating to ROSCA borrowers and lenders.

1. The Borrowers

Academic literature on development economics and microfinance focuses typically on the supply side of lending, but they pay little attention to the demand side. Development economics focuses on economic tools and methods which promote growth and development of the economy and population of low-income nations. On the other hand, microfinance deals with financial services particularly tailored for low-income individuals and businesses that lack access to traditional banking and financial services. Nevertheless, it is equally important to understand

the demand side of the lending unless the financial services being provided would not be able to address the needs and concerns of people who use them.

Borrowers whose ROSCAs are their lending service of choice usually constitute of the unbanked and underbanked population. By definition, the unbanked are people who do not have bank accounts, whereas the underbanked are people who have bank accounts but do not fully utilize mainstream financial. Both the unbanked and underbanked rely extensively on alternative financial services or shadow banking services like loan sharks, pawnshops, and ROSCAs. Indeed, ROSCAs are widely practiced by people throughout both rural and urban communities in Thailand. This section will investigate the demand side of ROSCA loans by looking into the people who choose to borrow from ROSCAs from statistical surveys and an interview with a ROSCA participant who often borrows from ROSCAs.

a) Surveys on the Borrowers

The most authoritative and comprehensive research study program on development economics and microfinance ever conducted in Thailand is the Townsend Thai Project by Robert M. Townsend. The Townsend Thai Project runs detailed datasets collected monthly and annually from urban and rural communities in four provinces in Northeastern and Central Thailand. The baseline survey administered since 1997 described types of lending services and the population who used such services. The primary data summaries described ROSCA as one of the main assets of the surveyed population. ROSCAs constituted a significant proportion of asset ranging from -10 to 16 percent. Nevertheless, on average, households had a slightly negative net ROSCA position as of the most recent survey in 2012. In fact, the position of ROSCA asset provided by the Townsend Thai Project netted from both savings and borrowings where negative position means that households borrow more money than they lend to ROSCAs. In ROSCAs.

The Thai Government also run multiple surveys on the subject of microfinance and credit accessibility. The 2016 Financial Access Survey of Thai Households found that only about 60 percent of household obtain loans through banks, credit unions, and other formal financial institutions. The remaining household does not have access to financial services or choose not to use formal financial services. Most of the services outside the formal sector were provided by semi-formal and informal service providers such as village funds and ROSCAs. Therefore, semi-formal and informal loans constitute a significant share of the lending industry in Thailand. In fact, the semi-formal and informal financial sector play increasingly significant roles thanks to

¹⁵⁶ Monthly Surveys, Townsend Thai Data, The Townsend Thai Project http://townsend-thai.mit.edu/data/monthly-surveys.shtml (Last visited Jan 14, 2019).

¹⁵⁷ Robert Townsend and Joe Kaboski, Savings Services of Local Financial Institutions in Semi-Urban and Rural Thailand, The Townsend Thai Project http://townsend-thai.mit.edu/papers/project/SavingServices.pdf (Last visited Jan 14, 2019).

¹⁵⁸ Robert Townsend and Suparit Suwanik, Townsend Thai Monthly Rural Survey Household Financial Accounting Data Summary 2016, The Townsend Thai Project http://townsend-

thai.mit.edu/data/Household%20Financial%20Account%20Data%20Summaries_July16.pdf (Last visited Jan. 14, 2019).

¹⁵⁹ See id at 8.

¹⁶⁰ See id

 ¹⁶¹ Bank of Thailand, Financial Access Survey of Thai Households 2016
 https://www.bot.or.th/English/FinancialInstitutions/Highlights/FSMP2/2016%20Financial%20Access%20Survey%2
 0Final.pdf (Last visited Jan. 16, 2019).
 ¹⁶² See id.

advanced financial technologies such as electronic payment, telecommunication, and the internet. These technologies enable people to conduct financial activities by and among themselves without having to rely on banks as an intermediary.

According to the 2016 survey, more than 40 percent of the unbanked and the underbanked population did not have access to or chose not to lend from banks and other financial institution because they were in the poor financial position or did not have sufficient income. About 20 percent did not have the confidence to contact banks for fears of rejection. Roughly nine percent found banks' application process was too complicated for them. Seven percent also found formal banking services to be complicated and difficult to understand. In short, the survey results suggest that people are excluded from bank loans either because they lack sufficient financial credentials required by banks; they lack trust or confidence in their ability to obtain reasonably priced loans, or they lack knowledge or resources to participate in the formal financial sector.

Low-income people are the leading group of borrowers that rely upon ROSCAs. In 2016, the Thai Government created a new program that allowed ¹⁶⁷ who earned less than 100,000 baht a year to register with two government-owned banks in order to receive government benefits via a government-issued electronic card. This new program allows researchers to obtain updated information about low-income people across the country. Roughly 8 million people registered with the program constituting 12.4 percent of the adult population in Thailand. Among the 8 million participants, the government found that more than 7.5 million or 95 percent of the participants had debts outside the formal financial system. Seemingly, the number could be seen as an excellent approximation of the unbanked and underbanked population in Thailand. About 10 percent of indebted participants owed more than 100000 baht. In other words, a large portion of the participants owed more than what they earned in an entire year. While the data shows a shocking level of debts outside the formal financial system, such finding was well anticipated by the government. In fact, the program is part of the government's initiative to address the pressing concern regarding informal debts among the low-income population.

Another survey by the Community Development Institute of Thailand focused on how people from low-income communities took informal loans by surveying a large sample size of household that borrowed from government-subsidized lending programs in 2012. The survey revealed that while most respondents were either unbanked or underbanked, they usually have access to government-subsidized first-line loans like saving coops and village funds. While such first-line loans are relatively accessible and offer low-interest rates, the first-line loans are often capped at around 300,000 per individual or 400,000 to 600,000 baht per household. Once the first-line loans are depleted, Thai households tend to go to alternative financial providers, especially ROSCAs, instead of commercial banks. In addition, a large number of households also turn to ROSCAs to raise fund to fulfill the debt obligations such as first-line

¹⁶³ See id at 15.

¹⁶⁴ See id.

¹⁶⁵ See id

¹⁶⁶ See id

¹⁶⁷ Eligible adults have to be 18 years old or older.

¹⁶⁸ Community Organization Development Institute, Strategy and Project, http://www.codi.or.th/aboutcodi/strategy?id=132 (Last visited Jan 16, 2019).

¹⁶⁹ See id.

¹⁷⁰ See id.

loans, bank loans, auto loans, credit card loans.¹⁷¹ Using informal loans like ROSCAs as a mean to pay for existing loans from formal lenders seems illogical because informal loans are significantly higher interest rates. In effect, taking another loan to pay off an existing loan is just a way to extend the deadline for payments. Yet, borrowers do not necessarily have the potential to earn enough to make the payments for the initial loan, let alone additional interest payments they have to make for subsequent loans.

However, there has yet been any quantitative study which directly focuses on how people borrow from and lend to ROSACAs. The lack of a direct survey on ROSCAs participants is probably because of the difficulty of surveying such informal practice where there are no government records or reliable academic research studies on point. Surveying ROSCA participants is relatively difficult because there is no clue nor traceable link to who is actually participating in ROSCAs. While surveys and research studies involving low-income or unbanked and underbanked population often revealed that a significant number of respondents regularly engage in ROSCAs, information about ROSCAs participants from these surveys and studies are merely byproducts that do not directly address ROSCA practices. Without available quantitative data or reliable means for quantitative analysis, a qualitative approach like one-on-one interviews may provide an anecdotal perspective and experience of individual ROSCA participant.

b) Interviewing a ROSCA Borrower

I interviewed a ROSCA participant who often uses ROSCA as a mean to borrow money from on a one-hour phone interview session. The interviewee (hereafter II) was a female school cafeteria worker in her forties. II received a daily wage of 600 baht (about \$20) five days a week or roughly 12000 baht a month. The school I worked at was a public primary school located in densely populated inner-city Bangkok. Students and staffs were considerably diverse. II shared a rental home in a low-income neighborhood near the school with her adult son, his wife, and his six-year-old son. II contributed 3000 baht a month for rent and often paid for food and grocery for her whole household. At the time, II participated in three ROSCAs. Two of the three ROSCAs were formed within the school social circle comprising school teachers and staffs. The other ROSCA was formed within the neighborhood where she resided comprising her distant relatives and neighbors. II had an obligation to pay about 1000 baht biweekly for two ROSCAs and 500 baht biweekly for one ROSCAs. In other words, II's total monthly payment obligations to three ROSCAs was 5000 baht per month. Therefore, II only could only spend less 5000 baht each month.

Il voiced that she always overspent her 5000-baht budget and would eventually have to find another loan to cover her living expense. When asked what did Il use the money she got from three ROSCAs for, Il explained that the majority of the money was used to pay for an overdue debt she had with a loan shark. Il also used a small portion of the money to pay for her granddaughter's student uniforms at the beginning of the semester. Il also recounted that most of ROSCAs participants she knew used money from ROSCAs to pay out loan shark debts because loan sharks charged interest as much as 50 percent per month while ROSCA participants often pay interest of about 20 percent per month or less.

When asked who else often use ROSCAs as a method for borrowing money, I2 said that she only participated in ROSCAs formed within her communities or circle of acquaintances;

¹⁷¹ See id

¹⁷² Telephone interviews with two regular ROSCA participants from Wat Lardboakow School, Bangkok, Thailand, (Dec. 12, 2018).

therefore other ROSCAs participants she knew directly were school teachers, other school workers, and some parents of students who studied at the school. I1 recounted that participants who were richer like teachers often took the role of lenders and were less likely to bid high interest at the beginning of ROSCAs, while school workers like her often did. Yet, I2 claimed that most people who cannot borrow from banks from various occupations participated in ROSCAs. I1 explained that before she moved to Bangkok, she had already seen people, mostly farmers, and shopkeepers in her rural village in Surin Province practicing ROSCAs. Therefore, I1 believed that ROSCAs was widely practiced nationwide.

Il told that if she has had a choice, she would directly ask to borrow from her friends and family members but most of them were also poor or had already lent to her. Because Il was often late to make a payment, many of her friends and family members did not lend to her anymore. Il explained she could not borrow from banks or government assistant programs because she defaulted on a bank loan seven years ago and she was just a temporary employee outside the payroll. Therefore, her only available options are informal financial methods like loan sharks and ROSCAs. Il recounted that ROSCA was her preferred option because loan shark lending could result in unlawful property confiscation, violence, and physical harm when borrower failed to pay in time, and the interest rate was extremely high.

ROSCAs were not always available as it took time to find reliable participants to form a ROSCA and she still had to win a bid against other ROSCA participant to receive a payment. Thus, I1 saw a loan shark as a necessary evil poor people still rely on when there was no other option. In contrast, I1 viewed a ROSCA as her go-to source of capital because she was comfortable with ROSCA mechanism and she knew other participants well. Accordingly, I1 could plan when and how much to bid to take out a fund from a ROSCA. I1 told that sometimes ROSCAs interest could be as high as 20 percent per month when many ROSCAs participants wanted the money at the same time. However, because she knew when to avoid this situation or to negotiate with other participants to reduce such fierce competition, she often paid about 5 to 10 percent a month. From time to time, I1 recounted recovering very low or almost free interest when no other ROSCA participants competed to bid against hers.

The interview with I1 confirms many of the findings from the two surveys mentioned earlier. First, ROSCA borrowers tend to constitute of low-income people. Secondly, ROSCA borrowers often are not adequately served by banks and other formal financial institution. Third, ROSCA borrowers do not have a financial qualification to obtain a loan from a bank or at least believe that they are not qualified to borrow from a bank. Fourth, ROSCA borrowers use the money they borrower from ROSCAs to refinance other loans, particularly ones from informal lenders with extremely high-interest rates and to pay for big-ticket consumption. Fifth, while ROSCAs interest rates can exceed the legal limit, ROSCA borrowers often see ROSCA as a practical method of borrowing which offer flexibility and reasonable interest rates.

2. The Lenders

ROSCAs is an informal lending practice based on trust rather than legal foundations. Therefore, it is interesting to see why people choose to lend their money through ROSCAs where there are safer methods of saving and investing under the traditional financial system. There are a considerable number of financial methods people can save or invest their money. While most people have access to bank deposit services, it does not mean people can save money. Saving is difficult especially in a situation when one does not have much to save at the beginning. Typically, bank depositors are not required or obligated to deposit any amount. The act of saving money in a bank account is thus purely mandatory. People who lack self-discipline or

overwhelmed by the urges to spend would easily overspend and fail to save money. On the contrary, once ROSCA participants participate in a ROSCA, they are legally and socially obligated to save and make payments according to a plan they agreed to.

While banks understand of the issue and have developed special various saving programs incentivize people to save regularly by offering special rates or automatically transfer a portion of the salary of customers to their saving accounts, these programs do not provide a strong incentive to save or invest as ROSCAs do. ROSCA participants are strongly incentivized to save and make payments because they understand that the success of their ROSCA group and themselves depend on their regular payments and thus participants carefully vet new members, monitor suspicious behaviors and impose social pressure to make other participants make payments regularly.

Moreover, saving with banks is the only service that people with extra money need. As interest rates for saving are always low, people have to turn to investment that can offer them better returns. While formal financial method like government bonds, stocks, and funds offer better returns than bank deposits, evidence shows that most people do not have access, knowledge, or enough resources to employ these investment methods. This leaves unoccupied market space for informal saving and lending methods like ROSCAs. This section will investigate the supply side of ROSCA loans by looking into the people who choose to save and invest with ROSCAs from statistical surveys and an interview with a ROSCA participant who often lends to ROSCAs.

a) Surveys on the Lenders

Thailand still lags in terms of formal investment tools like stocks and bonds. During the past decade, people invest less than 15 percent of their long-term savings in the stock and bond market.¹⁷³ This figure is particularly low, especially when compared with developed economies like the US or the UK which invest as much as 45-55 percent in stocks and bonds.¹⁷⁴ In contrast, saving and checking accounts constitute more than 60 percent of long-term savings. Moreover, the ownership of domestic stocks and bonds is extremely concentrated in the hand of the wealthiest echelon of the countries. Only 500 wealthiest individuals own more than half of domestic stocks.¹⁷⁵ For a country of 65 million inhabitants, there are only 1.2 million trading accounts of which only 0.33 million accounts or less than 0.5 percent per capita are actively trading stocks and bonds in the Stock Exchange of Thailand (SET).¹⁷⁶

The two main factors that might contribute to such a low level of participation in the stock and bond market could be financial illiteracy and expensive trading fees. A survey on global financial literacy conducted by the World Bank in 2014 found that only about 27 percent of Thai adult were financially literate while most developed countries all scored above 50 percent. Second, trading incurs a relatively high fee with a minimum of 0.17 to 0.25 percent of trade volume. Besides, fees are set in step structure where low volume trade can face very high

¹⁷³ Statistics on Thai Stock and Bond Market 2561/1, The Securities and Exchange Commission Thailand, https://www.sec.or.th/TH/Documents/Information/ResearchesStudies/research112543.pdf (Last visited Dec 12, 2018).

¹⁷⁴ See id.

¹⁷⁵ SARINEE ACHAVANUNTAKUL, REVOLUTIONIZING CAPITAL MARKET AND REDUCING ECONOMIC INEQUALITY (in Thai) 15 (2013).

¹⁷⁶ See id.

¹⁷⁷ Leora Klapper, Annamaria Lusardi & Peter van Oudheusden, Financial Literacy Around the World: Insights from the Standard & Poor's Ratings Services Global Financial Literacy Survey (2015).

¹⁷⁸ See supra note 23.

commission fee because there is a daily minimum of 50 baht every trader has to pay. For instance, an investor will have to pay fees as much as 5 percent if she only trades 1000 baht a day. In fact, if people had invested in the SET, they should have been able to leap a successful return as the SET index have consistently gained 15 percent annually in the past five years.

While the level of participation in the stock and bond market is notably low, most people do have bank accounts. The Financial Access Survey of Thai Households conducted by the Bank of Thailand in 2016 found that 70 percent of more than 10,000 respondents regularly deposit money with commercial banks and other formal financial institutions. The survey also found that respondents were not fully satisfied with deposits and saving services. While the data shows bank deposits services seem to be quite accessible, Thirty-two percent of the households complained that deposits services were still insufficient. Twenty-four percent complained about low-interest rates or high taxes and fees. Such findings correspond with meager interest rates Thai commercial banks offer for saving accounts average around 0.5 percent. The interest returns are also subject to 15 percent tax. On the other hand, Thailand's headline inflation has been ticking around 1 percent during the past few years. In other words, depositing money with banks would certainly not enough to compensate the inflation.

As formal saving and investing options like stocks and bank deposits do not sufficiently address the needs and concerns of a large number of Thai households, it is not surprising to see many people choose to save or invest their money with alternative financial service like ROSCAs. Nevertheless, as mentioned earlier, there has yet been any quantitative study which directly focuses on how people borrow from and lend to ROSACAs. Surveying ROSCA participants is relatively difficult because there is no clue nor traceable link to who is actually participating in ROSCAs. Without available quantitative data or reliable means for quantitative analysis, the next section will instead rely on an interview with a ROSCA participant to choose a ROSCA as the mean for saving and investing money. While the interview of one person might not fully represent the fair diverse population of ROSCA participants, anecdotal accounts of a ROSCA participant may still provide some interesting perspectives regarding ROSCA as a mean of lending in general.

b) Interviewing a ROSCA Lender

In addition to I1, I interviewed another ROSCA participant who often saves and invests with ROSCA on a one-hour phone interview session. ¹⁸¹ The interviewee (hereafter I2) was a female primary school teacher in her forties. I2 worked at the same school I1 was working. They also know on another very well for over a decade. I2 received a monthly salary of 30000 baht (about \$1000). I2 owned a home in suburban Bangkok and drove to work every day. I2 lived with her husband who worked as an engineer for the Electricity Generating Authority of Thailand. I2's husband earned roughly 50000 baht (about \$1600). Both I2 and her husband entitled to government-officer health insurance and social security benefits provided by the government. I2 had two daughters who were enrolling in a public high school.

While I2 did not have any debt, her husband took responsivity to pay for their home mortgage and auto loan for a total of 35000 baht a month. Both loans were originated from a commercial bank where I2's husband was a long-standing customer. I2 took responsibility for her children's expense which cost around 10,000 baht a month. I2 also took care of the

¹⁷⁹ See supra note 9.

¹⁸⁰ See id at 12.

¹⁸¹ See supra note 20.

household's finance. She managed saving and investment of the whole family. I2 invest a significant amount of her family savings in Teacher's saving and credit cooperative, and banks deposits which returned approximately 5 percent per year and less than 1 percent per year respectively. I2 recounted that she took a significant amount of money from these saving and investment methods to lend to ROSCAs.

I2 explained that she would like to make more return in the environment where interest rates were low. I2 saw ROSCAs as an opportunity for high-return investment and felt familiar with the process and other participants in the ROSCAs she had joined. At the time, I2 participate in three ROSCAs. Indeed, I2 was participating in two of the three ROSCAs that I1 was participating. On a biweekly basis, I2 had to contribute about 1000 baht to each of the three ROSCAs. In other words, I2 had to make about 6000 baht a month or as much as 20 percent of I2's monthly salary. I2 explained that she usually received about 20 percent return in five months or almost 50 percent a year. I2 said that she only took out a fund at the very end of the ROSCA cycle which meant she lent to ROSCAs. When as why she has never borrowed from a ROSCA, I2 explained that borrowing from ROCAs was very costly and she had better options such as borrowing from banks or her saving cooperative. In fact, all of her loans were made through formal financial institutions as mention earlier.

When asked about her experience about lending to ROSCAs, I2 said that she only experienced loss due to default issue once in the past five years. I2 explained that she only participated in ROSCAs which she knew most, if not all, participants. Two of the three ROSCAs I2 was joining at the time were formed within the school comprising school teachers, staffs, and students' parents. The other ROSCA was formed with the circle of I2's college friends comprising mostly teachers as well. I2 said that she only experienced a loss due to default issue once in the past five years. Yet, the loss was small because the ROSCA leader was able to partially compensate some of the loss for I2 and other participants. The participant who failed to pay was a temporary school staff who had left the school and never returned.

I2 stated that while ROSCAs was a risky practice, she was comfortable with lending to ROSCAs because she knew and trusted most participants of her ROSCAs. I2 told that she was quite selective about joining a ROSCA and almost always join a ROSCAs comprising the same people from previous ROSCAs she had been with. I2 mentioned that ROSCAs was the investment option of choice. I2 stated that she had considered investing in stocks and mutual funds, but she did not know about the stock market at all. I2 did not know where and how to buy stocks nor which stocks she should buy. I2 also saw stock trading as a form of gambling and thought that trading stocks was only for wealthy people or greedy people. I2 revealed that most of her colleagues also had the same investment strategy which included bank deposits, cooperative saving, and lending to ROSCAs.

The interview with I2 also supports the conclusions from the surveys. First, ROSCA lenders see ROSCAs as a preferred choice for saving and investing as they do not have knowledge or familiarity with formal investment methods like stocks, bonds, and mutual fund. Interestingly, trading stocks can be seen as a form of gambling. Second, ROSCA lenders have substantial savings, and they want to make financial gain from such savings. Third, many of ROSCA participants took the role of either a borrower or a lender exclusively. For instance, I2 only lend to ROSCAs. Yet, when it comes to borrowing, she chooses to borrow from traditional financial institutions like banks and saving and credit cooperatives. Fourth, although ROSCAs are informal and not regulated by legal authorities, ROSCA lenders understand and trust the process and other participants. Intriguingly ROSCA lenders may see ROSCAs as a more a

reliable investing method than formal investing methods like stocks, bonds, and mutual funds. Fifth, lending to ROSCAs is profitable, and the risks are manageable if the lender carefully selects reliable ROSCA groups.

B. The Operation of ROSCAs in Thailand

A form of rotating savings and credit association (ROSCA) practiced in Thailand is generally called Pia-Share. Like other ROSCA variations, the Thai-style ROSCA is formed with a group of individual participants to assemble funds and borrow from the funds from the ROSCA group. Generally, ROSCAs participants meet in person periodically and contribute an agreed amount of money to the group as a ROSCA fund or the lump sum of the participants' constitutions. At each meeting, the fund will be given to one participant. Once a participant has received the fund, the participant must continue to contribute but will not receive the fund again until all of the participants have had an opportunity to receive a fund. When every participant has received the fund, the ROSCA ends. While the basic mechanism of ROSCA might seem simple, the actual executions of ROSCAs are highly complex involving different processes such as vetting, bidding, payment, monitoring, and collection. Local communities around the world have their own ways of executing ROSCAs. This essay will focus on the form of ROSCAs practiced in Thailand. The following sections will discuss the operation of ROSCAs in Thailand from the formation of a ROSCA group, the structure of operation, the monitoring and collection process.

1. Formation

A ROSCA can be formed by a varying number of participants from as few as five to as many as 100 participants. Yet, traditional ROSCAs where participants have to know each other and meet physically are often limited by the proximity of participants. In contrast, online ROSCAs can accommodate an almost unlimited number of participants because everything is done online, so there is no need for participants to meet physically. As mentioned early, most ROSCAs are typically formed based on the previous ROSCAs in which most of the recruited participants had participated. The formation of a ROSCA is the most crucial process and determinative of the success of the ROSCA. For Thai ROSCAs, the formation of a ROSCA is often done solely or mostly by the ROSCA manager. Yet, not only a ROSCA manager pick participants, most people choose to join a ROSCA that they trust based on their past experiences. When people have never previously participated in a ROSCA before they need a period of observation where they observe the ROSCA that they are interested in joining and the participants of such ROSCA. On the other hand, when to accept a new participant to a ROSCA, the manager also has to observe or vet the new participant. Based on an ethnographic study of 130 ROSCA population from a Bangkok's low-income community conducted in 2008¹⁸² and the interviewed conducted on the two ROSCA participants mentioned earlier, this section will first examine the composition of the pool of participants of which ROSCAs are formed. This section will also discuss the strategies of how ROSCA managers vet new people who wish to join the ROSCA and the strategies of how people use to select a ROSCA in which they never participated before.

Economic and sociological literature consistently agree that relationships are crucial for interactions especially in situations where institutional guarantees such as contracts, legal protection, or insurance are absent.¹⁸³ Therefore, it is not surprising that ROSCAs which are mostly informal and do not rely on institutional guarantees to form almost exclusively based on

¹⁸² Sumana Navaraj, Behaviors of ROSCA Participants in Soi-thong Low-income Community (in Thai) (2008).

¹⁸³ See infra, Section C: The Fundamentals of ROSCAS.

interpersonal relationships of people within the same communities or social circles. For instance, both I1 and I2 not only participated in two ROSCAs together, but they also worked at the same school. I1 and I2 also shared many mutual friends who were also teachers and staffs of the school.

I1 and I2 both recounted that they knew all other participants of the two ROSCAs they were with because they only trusted people whom they already established long-standing relationships with. I2 explained that her ROSCAs were reliable because participants were all trusted friends who interacted with each other almost every day. Yet, while I1, I2, and other participants of their ROSCAs shared the same workplace and social network, I1 and I2 were different in many ways. The most apparent differences between I1 and I2 are income and occupation. While a teaching job is considered a respectable occupation that offers sufficient financial security in Thailand, a temporary job at a school cafeteria is not reliable or respectable and does not offer financial security. Evidentially, I2 earned as much as 2.5 times of what I1 earned. If considered the household income, I2's family earned as much as four times of what I1's household earned.

These interviews responses also align with the results of an ethnographic study conducted in 2008 which found that while ROSCAs considered sex, occupation, education, and income of new members, the most important and determinative factor was the interpersonal relationships existing with communities or social networks all participants were part of. In particular, such interpersonal relationships are long-standing and existing outside of ROSCAs. For example, I1, I2, and other participants of their two ROSCAs had already worked with or at least known each other for a long time before they formed a ROSCA. Similarly, the ethnographic study revealed that while sex, occupation, level of education, and income of participants in a ROSCA group might be significantly diverse, one thing that they always had in common was that they were part of mutual social networks and lived close to each other.

The ethnographic study also confirmed that people of different education and income levels could still form a cohesive ROSCA group as long as they were connected personally. ¹⁸⁴ In particular, the ethnographic study found that while about 60 percent of ROSCA participants had a high school degree or lower, 40 percent had a college degree or higher. ¹⁸⁵ On the other hand, more than 90 percent of ROSCA participants participated in ROSCAs which have been formed and operated for over a year; yet, only less than 10 percent were new to their ROSCAs. ¹⁸⁶ Besides, 100 percent of respondents personal knew at least one other participant before participated in the ROSCA. Eighty-seven percent personally knew most of the participants. Sixty percent personally knew all other participants. Therefore, these findings convincingly suggest that ROSCAs are formed of people who already have existing interpersonal relationships within close-knit communities or social networks.

2. Vetting Process

While ROSCAs are generally informal and casual, most ROSCAs have an intensive and complicated vetting process. Vetting may include the process of checking the background and looking into relevant indicators that such potential participants can and are willing to fulfill their payment obligations. In general, vetting is a standard process which must be done at the

¹⁸⁴ See Supra note 30 at 65.

¹⁸⁵ See id.

¹⁸⁶ See id.

beginning of every financial transaction, especially lending transactions. ROSCA vetting process is drastically different from other the vetting process that institutional lenders use.

Traditional lenders focus on financial indicators such as the borrower's net worth, income, and credit score. In fact, a credit score is the most important factor financial institutions use to determine a person's creditworthiness. A credit score is a numerical score calculated based on the financial credit report which contains a record of a borrower's debt repayment. Financial institutions, particularly banks always use a credit score to assess the default risk associated with lending money to a borrower. Credit scores are also used to determine interest rates and loan limits for a particular borrower. Generally, using credit score is not limited to banks; other lenders such as credit card companies, phone companies, and real estate developers also rely on credit scores.

Nevertheless, not everyone has access to credit score. Thailand's credit reporting industry had just developed just over a decade ago when the government passed the Credit Information Business Acts B.E. 2545 (2002). Under the Credit Information Business Acts, a credit score and credit information can be disclosed only to registered members of the credit report agency and only with prior consent from the borrower whose credit score or credit information is being requested. 187 Indeed, the National Credit Bureau (NCB) is the only credit report agency in Thailand. NCB processes more than 50 million credit report accounts of 20 million consumers. Yet, NCB does not provide data to anyone outside of the current 81 members including banks, Insurance companies, and credit cards companies.¹⁸⁸ All NCB members are also required to submit data to NCB. 189 Because ROSCAs and individual lenders cannot become registered members of NCB, they do not have direct access to credit scores and credit information. On the other hand, borrowers may obtain their own credit reports by request credit scores directly from NCB and pass such reports to any lender. Nonetheless, lenders cannot verify the validity of the scores. Until recently, NCB required borrowers, and complete request forms and questionnaires at NCB headquarter or its three branches which are all located in Bangkok. Just last year, NCB had added options to obtain credit scores via postal mail and mobile application; yet the possess still take more than seven business days. 190 Therefore, self-requested reports are inconvenient for the borrowers and unreliable for lenders.

Instead of relying on formal financial indicators like credit reports, most ROSCAs rely almost exclusively on relationship-based measures. First and foremost, while financial institutions make their decision subjectively by sets of determined procedures with little involvement of an employee's discretion, the decision to allow a participant to join a ROSCA is made by a person or a consensus of existing participants. Most of the time, a ROSCA manager takes the responsibility to vet participants and form a ROSCA.

In Thailand, a ROSCA manager is called "Tow-share" or literally "the master of share." On the other hand, other participants are called "Luke-share" or literally "the child of share." Such names clearly signify a paternalistic relationship between a ROSCA manager and other ROSCA participants. Just like a parent, a ROSCA manager has the authority to take control and make a decision for the group. Accordingly, ROSCA managers are naturally tasked with

¹⁸⁷ The Credit Information Business Acts B.E. 2545, 2549 and 2551 (in 2002, 2006 and 2008, respectively).

¹⁸⁸ National Credit Bureau, History of the National Credit Bureau Ltd. https://www.ncb.co.th/about-us/history-th (Last visited Jan 17, 2019).

¹⁸⁹ See id

¹⁹⁰ National Credit Bureau, Applying Through Mobile Banking, https://www.ncb.co.th/check-your-credit-bank/chk-mobile-banking (Last visited Jan 17, 2019).

responsivity to vet participants at the formation of the ROSCA. For instance, the ethnographic study found that all ROSCA managers knew the address of their participants and most ROSCA managers visited new participants at their home at least once before allowing them to join. Similarly, I1 commented that most ROSCA managers she had been with were the hands-on and micromanaging type of people.

Besides, most ROSCA managers maintain a close relationship with their participants and demand intimate personal information from the participants and the people around them. The ethnographic study revealed that it was common that ROSCA managers asked participants about their personal life such as marriage, health, addiction, gambling habits, childcare, love affairs, and personal adversities. While personal information does not directly indicate the financial conditions of a person, it can provide handy and accurate clues about life which may accurately predict his or her financial conditions. For example, if a ROSCA manager know that a person is alcoholic or having many extramarital affairs, the ROSCA manager might refuse to let the person join the ROSCAs because such habits seem to indicate that the person may have reasons to overspend and might not be able or willing to fulfill the payment obligations of the ROSCA.

Not only these personal details are directly asked by other participants, but ROSCA managers also obtain the additional personal information from the social networks surrounding the participants. For example, I1 stated that one thing that she disliked about participating in a ROSCA was the prevalent gossiping around the ROSCA group. I1 asserted that many of ROSCA managers she knew often started and perpetuated gossips so to obtain intimate information of participants. While she thought the practice was irritating, yet she understood that intimate personal information could do good to her ROSCA and herself by allowing the ROSCA manager to evaluate and monitor participants' ability and willingness to pay regularly. For instance, I1 reported that a few years ago when her ROSCA manager caught a gossip about a ROSCA participant selling heroin to teenagers in the neighborhood, the manager decided to pull the participant out of the ROSCA before the participant took out the fund. Just about a month later, the participant.

Of course, to ask an intimate question and obtain useful personal information from the participants and people around them, ROSCA managers, ROSCA participant, and other people within the social network of ROSCA participant need to have close and often long-standing interpersonal relationships with each other. In fact, both the ethnographic study and the interview within I1 and I2 confirm that Thai-style ROSCAs prioritize interpersonal relationships and personal qualities of a person over the strength in financial numbers. For example, the ethnographic study found that ROSCA participants (including ROSCA managers) prioritize relationships and moral of other participants over financial figures such as income, net worth, or current debt. A ROSCA manager noted that while virtuous people would find all possible ways to fulfill their ROSCA obligation, cunning people might find many excuses to refuse to pay or intentionally defrauded others and ran away. Similarly, I2 stated that she did not mind participating in a ROSCA with people who have significantly lower income as long as she knew that they were conscientious and accountable. I2 revealed that a ROSCA would need to include both people who need money and people who have money. According to I2, participants who needed money would bid to take the fund very early on by offering high-interest rates. On the other hand, people who had money like her could wait and benefit from the interests. Accordingly, if a ROSCA only include people with perfect financial credentials, no one would offer interests to take the fund early. In other words, such a ROSCA group would not be able to

facilitate saving and lending among participants thereby defeating the purpose of forming a ROSCA.

3. Structure and Administration

After a ROSCA group has been formed, the participants then save and contribute an agreed amount of money in every round to towards to the formation of a fund. Such fund will then be assigned to each participant according to predetermined rules. Once a participant took the fund, he or she will be no longer eligible to take another fund but still has to contribute the ROSCA. Rounds of contribution continue until every participant receive the fund. Therefore, every ROSCA participant will have access to a sizable sum of money they might not be able to save for themselves. Research studies also found that ROSCA is a preferred option for saving at home because other family members may demand the saved money. 191 To demonstrate the operation of a ROSCA, I will show the illustration of a 4-participant ROSCA comprising Amy, Ben, Cole, and Dan. At the first round of meeting, all four participants must contribute \$100. Therefore, the total fund should be \$400. Given the fund will be assigned by alphabetical order. Amy will take the fund of \$400 for the first round. In other words, for the first round, Amy does not have to contribute anything to the ROSCA but pockets \$300 which is the supposed lump sum (\$400) subtracted by Amy's supposed contribution (\$100). Once Amy takes the first-round fund, she will be no longer eligible to take another fund but is still required to make the contribution. Similarly, in the second round of meeting, everyone, except Ben, contributes \$100 and Ben takes the fund of \$300. The ROSCA continue until Dan takes the fund in the fourth round of meeting. Therefore, the number of rounds will be equal to four which is the number of participants and the ROSCA will end after four rounds. The following table shows the payouts of the ROSCA.

Name/	Amy	Ben	Cole	Dan
Round	Contribution	Contribution	Contribution	Contribution
1	300	-100	-100	-100
2	-100	300	-100	-100
3	-100	-100	300	-100
4	-100	-100	-100	300

Table 1: A Basic ROSCA with equal contributions

A negative number represents an amount paid, and a positive number represents an amount recieved. With the alphabet order rule, each of the four participants contributes \$100 for three rounds and receives a lump sum of \$300 at one of the four rounds. In reality, a ROSCA typically includes around ten or more participants. Therefore, the aggregated fund can be considerably large which can be hard for an individual participant to save such amount for oneself. For instance, a ROSCA of I1 and I2 had 12 participants where each participant contributes 1000 baht for each round. Therefore, one participant took as much as 11,000 baht during each round.

a) Auction

As mentioned earlier, the rules which determine the recipient of the fund vary from place to place. In Thailand, an auction mechanism is by far the most predominant method of

¹⁹¹ Timothy Besley & Alec Levenson, The Anatomy of an Informal Finance Market: ROSCA Participation in Taiwan, 51 JOURNAL OF DEVELOPMENT ECONOMICS (1), 45-6 (1996).

determining the recipients. ROSCA participants compete in an auction by offering the highest interests so they and take the fund before other participants. Therefore, participants who want to take the fund sooner have to pay more, and participants who can wait will earn some interests from the early takers. The auction mechanism is drastically different from a typical ROSCA where the fund remains the same each round and no interests are being offered. For example, a variation of ROSCA in Latin America called Tanda does not have an auction mechanism but assigns the fund to a participant who needs money most first. Some Tanda also determines the taking order randomly by raffle. The Rickshaw ROSCAs in Bangladesh also determined the taking order by lottery.

The auction mechanism demands that participants who want to take the fund before others have to contribute an extra amount of money or interests to other participants for the privilege. Again, to demonstrate the operation of the auction mechanism, I will show the illustration of a 4-participant ROSCA comprising Amy, Ben, Cole, and Dan. Instead of assigning the fund by alphabetical order, the auction requires a participant to take the fund before others to compensate the other with interests. At the first round of the meeting, all four participants must contribute \$100. Amy, Cole, and Dan all want to take the fund at the first round and offer to pay \$5, \$3, and \$7 as interest payments. Typically, each bidder will write his or her bid on a piece of paper secretly. All bids will then be revealed at the same time at the meeting. The idea is that no participant will be able to collude or influence the auction. At the first-round meeting, all participants will find out that Dan wins the auction. As illustrated earlier, Dan takes \$300 from the rest of the participants, but he now has to pay \$7 as interests for three other participants every round until the ROSCA ends. Dan will also not be able to take the fund or bid again. For the second round, Amy and Cole still want to take the fund, but they want it a little less as some time has passed. Therefore, Amy and Cole offer \$4 and \$2 respectively. Amy wins the auction and takes \$300, but she has to pay \$4 to each of the other three participants for the rest of the rounds. At the third round, Cole might be able to guess that now it is only him that wants the fund, so he only offers \$1. Ben does not compete. Therefore, Cole wins the auction and takes \$300, but he has to pay \$1 as interests to each of the other participants until the end. At the last round, since there is only Ben who has yet taken the fund, Ben automictically wins the auction and take \$300 without having to pay anything. The following table shows the payouts of the ROSCA with an auction rule.

¹⁹² The New York Times, In Lending Circles, a Roundabout Way to a Higher Credit Score (Oct., 10, 2014) https://www.nytimes.com/2014/10/11/your-money/raising-a-credit-score-from-zero-to-789-in-26-months.html (Last visited Jan. 17, 2019).

¹⁹³ Fundary, Tandas And Tha Informal Economy of Mexico, Medium (Jan, 2, 2018) https://medium.com/@fundary/tandas-and-the-informal-economy-of-mexico-4f3c80c1c7ce (Last visited Jan. 17, 2019).

¹⁹⁴ See id.

Table 2: A ROSCA with auctions

Name/	Amy				Ben			Cole				Dan				
Round	Contri-	Inter	rest	Net	Contri-	ontri- Interest	Net	Contri-	Interest		Net	Contri-	Interest		Net	
	bution	get	pay	Earn	bution	get	pay	Earn	bution	get	pay	Earn	bution	get	pay	Earn
1	-100	7	0	-93	-100	7	0	-93	-100	7	0	-93	300	0	-21	279
2	300	7	-12	295	-100	11	0	-89	-100	11	0	-89	-100	4	-21	-117
3	-100	8	-12	-104	-100	12	0	-88	300	11	-3	308	-100	5	-21	-116
4	-100	8	-12	-104	300	12	0	312	-100	11	-3	-92	-100	5	-21	-116

Unlike equal contribution, Amy, Ben, Cole, and Dan receive different net payouts from participating in the ROSCA. Dan took out the fund first and received a net payout of \$-70, or he had to pay a total of \$70 to the rest of the participants so that he could receive the fund before anyone else. This can clearly show how Dan can be seen as a borrower who pays interest for taking out a loan. Similarly, Amy received a net payout of \$-6 or she had to pay \$6 so that she could take the fund before Ben and Cole. On the other hand, Cole received a net payout of \$34 because he had to wait until the third round. Lastly, Ben received the payout of \$42 because he could wait for the longest until the end of the ROSCA. In other words, Ben acted like a lender who lent out the money so that he could receive a positive net payout or the interest at the end. Unlike fixed or random assignment of the ROSCA fund, the auction mechanism allows participants to bid for the fund when they need it. The fund then goes to a participant who needs it and bid for it the most. Nonetheless, the auction mechanism may also enable risky participants who need the money more to bid more. Therefore, monitoring and enforcement are even more crucial for the success of ROSCAs in Thailand.

b) ROSCA Manager

As mention earlier, most ROSCA in Thailand also have a ROSCA manager who is designated participant who is tasked to form, record, and manage the ROSCA. In general, a ROSCA manager is also responsible for covering for default payments when some participant took the fund and run away. As mentioned earlier, I2 reported that when a participant took the money in the second round and ran away after the fourth round, the ROSCA manager had to compensate other participants for the missing contributions partially. While the compensation did not cover the whole amount other participants were entitled, the ROSCA manager had to pay it out of her pocket constituting a substantial loss for her. I2 told that she believed the ROSCA would have had collapse without the ROSCA manager's intervention, so I2 gave credit to the ROSCA manager and trusted her even more. To compensate such onerous burdens and risky responsibilities, a ROSCA manager receives a privilege to take the first-round fund without having to pay any interest to other participants. In other words, ROSCA manager receives an interest-free loan at the beginning. This incentivizes ROSCA managers to their best effort to form and manage ROSCAs.

c) Additional Hands

While for a basic ROSCA, a ROSCA participant can only take the fund once during the lifetime of a ROSCA, some, if not most, ROSCAs in Thailand allow participants to take the fund out more than once. Mainly, if a participant wants to take the fund twice, he or she must make an additional contribution to each round of the ROSCAs. The additional contribution is often referred to as an additional 'mur' in Thai or 'hand' in English. ROSCA participants can use additional hands as strategies to raise more fund or hedge against risks. For instance, II stated

that she sometimes needed to have an extra hand because the fund was not necessarily large enough to cover what she wanted to borrow. I2 also commented that, by taking an additional hand, she could also get rid of one bidder who would have competed against her. Also, I1 also used a hedging strategy where she would take one fund very early and another fund very late. I1 revealed that while she had to make a double contribution, she would at least receive some interest from the late hand to offset some of the interest she had pay for her early hand. I1 Said that her net payout would not be so negative if she had used this strategy. On the other hand, I2 had never had an additional hand. I2 revealed that she would have participated in another ROSCA if she wanted to invest more because having an additional hand to herself would mean one less participant to bid to offer interest.

4. Monitoring and Enforcement Process

Monitoring is another crucial process for the survival of a ROSCA. Generally, loan monitoring involves the continuous collection and analysis of information to oversee and evaluate borrowers' ability to repay their debts. Once payment becomes overdue, a ROSCA manager and other participants will have to find a way to enforce the overdue payment; otherwise, the ROSCA will collapse because other participants will be reluctant to continue their contributions. Saving and making a contribution to ROSCAs requires discipline, and ROSCAs encompass a mechanism for ROSCAs participants to monitor, discipline, and enforce each other. In other words, ROSCAs can be seen as a commitment tool based on repeated interaction and social sanctions.

ROSCA participants, especially ROSCA managers monitor, discipline, and enforce other participant's payments to herself and the ROSCA group as a whole. Since everyone benefits from anyone's effort to monitor, discipline, and enforce, the monitoring and enforcement process seems to be a joint responsibility of all participants of a ROSCA. Yet, from a personal perspective, a participant might lose her incentive to put effort into monitoring, discipline, enforcing others once she has taken the fund from the ROSCA. For instance, a ROSCA manager took the fund since the first round of meeting will not be affected by anyone's default because a ROSCA manager takes the fund before anyone else. A ROSCA manager have strong social and financial incentive to make sure that the ROSCA succeed because every participant trusted her to take the responsibility of a manager and expected that she would take responsibility to compensate other participants in the event of default. Therefore, if one ROSCA fails, it is improbable that participants would still put their trust in the ROSCA manager again. This would mean that the ROSCA manager will effectively lose her easy mean to get instant loan interestfree. In fact, it is also very possible that the whole network of participants will lose trust for each other and will never be able to form another ROSCA again in the near future. This means that the failure of a ROSCA can affect anyone, even those who have already taken the fund. Therefore, vigilant group monitoring will reduce the risk of the whole group and ensure access to future loans for everyone in the group.

There are many ways ROSCA managers and ROSCA participants use to monitor borrowers. The most common method is the pre-commitment plan where ROSCAs participants will be asked how they will use the money they get from their funds and the ROSCA manager, and other participants will monitor each participant to make sure that each participant honors his or her commitment. ROSCA managers and other participants can observe signs of any misuse of the fund or changes in the behavior of the concerned participants. Because ROSCA groups are generally small and participants know each other very well, such observation can be directly done by a house visit or indirectly done by talking to people in the social circle of such

participants. ROSCA managers and ROSCA participants can also use social sanctions to ensure that each and every participant continued contribution until the end. Social sanctions usually are exercised within a certain social group to control group members. For instance, the ethnographic study found that some ROSCA groups blocked shirking participants from attending social and religious events of the communities. A few ROSCAs encouraged their participants to ostracize non-paying participants or even encouraged people the community to do the same. These relationship-based methods are cheaper, faster, and more effective than law-based enforcement methods. Unless the default amount is high enough to justify money and time required during the legal enforcement process, ROSCA participants will choose to rely exclusively on relationship-based methods. It also seems the case for most ROSCAs because the amount of defaulting ROSCAs is generally modest. Besides, it is also likely that shirking participants will not have enough money to pay back even when the judgment is enforced.

ROSCA Group monitoring and enforcement is effective because ROSCA participants typically live or work close to each other and most importantly they have interpersonal relationships with each other. As a result, ROSCA groups are well informed about each participant's habits, behaviors, and activities. For instance, I2 revealed that her ROSCA would normally want to know how she will spend the money. Last time she told other participants that she would use the money for her grandson's school uniform, and she had to stick with it because her grandson went to the same school where every participant worked. I2 believed that this helped with her financial discipline because she had to follow her pre-committed plan instead of using the money on her bad habits like gambling or buying unnecessary merchandises. Economic literature agrees that this so-called social collateral which is form based on interpersonal relationships among participants can be used to control moral hazard in a borrowing group. 198 In other words, such social collateral can also be seen as another form of capital which can be used in place of actual capital such as net worth, income, and collateral asset. 199 Indeed, interpersonal relationships among members of lending groups facilitate screening, monitoring, and enforcement thereby improving the success of lending. For instance, a study of Madagascan group lending programs in 1998 revealed that groups with closer ties among members showed higher repayment rates.²⁰⁰ Similarly, another study conducted on poor communities of Guatemala found that the average distance between members of lending groups negatively affected repayment rates, while the personal knowledge of other members positively affected repayment rates. Wydick, B. (1999), "Can Social Cohesion Be Harnessed to Repair Market Failures? Evidence from Group-based lending in Guatemala", Economic Journal 109: 463-475. Moreover, a study on more than 1700 participants of a group lending program in Peru found that lending groups in which participants were more culturally similar had better repayment performance because participants knew each other and were able to screen, monitor, and enforce, each other.²⁰¹ Nevertheless, similarities in ethnicity, occupation, and income negatively affected

¹⁹⁵ See Stephen Knack, Civic Norms, Social Sanctions, and Voter Turnout, 4 Rationality and Soc. 133, 143 (192).

¹⁹⁶ See supra note 30.

¹⁹⁷ See id.

¹⁹⁸ Dean Karlan, Markus Mobius & Tanya Rosenblat & Adam Szeidl, Trust and Social Collateral, THE QUARTERLY JOURNAL OF ECONOMICS, MIT Press, vol. 124(3), pages 1307-1361 (2009).

¹⁹⁹ See id.

²⁰⁰ Manfred Sharma & Mnohar Zeller, Repayment Performance in Group-Based Credit Programs in Bangladesh: An Empirical Analysis, WORLD DEVELOPMENT, 25 (10),1731-1742 (1997).

²⁰¹ Dean Karlan, Social Connections and Group Banking, 117 The Economic Journal, 517 (2007).

repayment performance because the participants had lower incentives to screen, monitor, and enforce, each other.²⁰²

While a ROSCA seems to be a simple fundraising method at first glance, the more thorough examination into the operation of ROSCAs in Thailand shows that ROSCA participants are reasonable actors who employ savvy strategies and thoughtful considerations to navigate the intricate execution of ROSCAs. While many ROSCA participants do not have financial knowledge or capital to raise fund or invest via traditional financial methods, all ROSCA participant masterfully use ROSCAs to maximize their financial positions by lending and borrowing from each other. To do so, ROSCA participants heavily use personal relationships existing within their social network as social capital in place of financial resources like collateral or credit history. The longevity and widespread of ROSCAs around the world seem to suggest that interpersonal relationships are valuable for financial transaction, especially lending.

C. The Fundamentals of ROSCAs

While ROSCAs are an informal and self-organized method of fundraising and lending, ROSCAs have overcome many constraints to become one of the most important fundraising and lending methods in Thailand. Despite having access to the formal financial system, many people still choose to participate in ROSCAs. ROSCA participants who are looking to borrow are able to obtain the money from ROSCAs at acceptable rates and conditions. ROSCA participants who are looking to save and invest can obtain attractive returns at reasonable and manageable risk. The long-term and widespread of ROSCAs guarantees that ROSCAs effectively fulfill the needs of financial consumers whereas formal financial institutions fail or do not willing to do so. Moreover, despite being informal, the operation of ROSCAs is surprisingly systematic and efficient as it includes appropriate structure and processes to facilitate the formation, monitoring, administration, and enforcement of ROSCAs.

ROSCAs' systematic operation might be the answer to how ROSCAs could successfully serve ROSCA participants, but it does not tell what the fundamentals are behind the ROSCAs practices that make ROSCAs distinct and successful. Instead, it might be worthwhile to understand, and address the fundamental concerns of ROSCAs derived from interpersonal relationships among the participants from the economic and sociological perspectives. This section argues that there are four fundamentals which are necessary keys to understand the emergence and successful being of a financial practice like ROSCAs. From the economic perspective, there are two fundamental concerns including certainty and information asymmetry. The other two fundamentals through the sociological perspective include interpersonal trust and institutional trust. While each of the economic and sociological views may shed the light on different activities and functions of ROSCAs, each alone does not have a full grasp of all the bells and whistles of how ROSCAs are practiced. Thus, all four fundamentals based on the combination of economic and sociological perspectives will more fully depict the complete picture of ROSCAs.

1. The Economic Perspective

ROSCAs highly depends on interpersonal relationships among participants. Ronald Coase, a Nobel laureate in Economics for his works on transaction costs and property rights for the institutional structure and functioning of the economy, ²⁰³ discovered that valuable

²⁰² See id

²⁰³ The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1991 https://www.nobelprize.org/prizes/economic-sciences/1991/summary/ (Last visited Jan 18, 2019).

interpersonal relationship is necessary for interactions that involve uncertainty and information asymmetry. ²⁰⁴ Coase's idea can provide the key to understand the impact of interpersonal relationship on the fundamental functions of ROSCAs like the formation, admiration, and monitoring and enforcement process. In particular, Coase's proposition seems to suggest that the absence of interpersonal relationships among ROSCA participants and ROSCA managers could lead to an increase in the level of uncertainty and information asymmetry. Indeed, ROSCA participants and ROSCA managers primarily utilize their interpersonal relationships and surrounding social networks to mitigate risks associating with their transactions. I will explore the concepts of uncertainty and information asymmetry in ROSCAs respectively.

a) Uncertainty

The obvious downside of unsecured lending like personal loans, credit lines, and ROSCAs is the high level of uncertainty. Particularly uncertainty in unsecured lending the probability that borrowers will not fully repay their debt. In the case of ROSCAs, ROSCA participants who already took the fund still have an obligation to make contributions until every participant received the fund they entitled. Therefore, when ROSCA participants take the money and stop making contributions, it would mean such shirking participants default on a loan made by other ROSCA participants. Because ROSCAs require no collateral or a pledge of specific borrower's asset to the lender to secure loan repayments, ROSCA participants who have yet taken the fund from the ROSCA cannot be certain that they will receive the fund when it comes to their turn.

Not only ROSCA participants do not hold collateralized, but it is also impractical for ROSCA participants to seek relief through formal procedures like referring to collection services, reporting to the credit bureaus, and filing a lawsuit against the shirking participant. This is because these formal procedures require time, resources, and financial knowledge that most ROSCA participants do not have or are not willing to use. Instead, ROSCAs encompass various informal mechanisms based on interpersonal relationships to reduce uncertainty. These mechanisms are ingrained in every step of ROSCA operation.

ROSCAs are commonly formed by participants who already had established interpersonal relationships and lived or worked with each other. Often ROSCA participants are repeat participants who have been with the same ROSCA group for a long time. In addition, because these ROSCA participants are acquaintance, friends, or family members, they will also have to interact with each other again even after the ROSCA has ended. Such repeated interactions encourage them to take into consideration the impact of their current behavior on the future reactions of other participants. ROSCA participants have reasonable reasons to maintain their relationship and credibility as they know that they will undoubtedly interact with the same group of people again whether for ROSCA or non-ROSCA transaction. For instance, a shirking participant might never be accepted to any ROSCA in the community or social circle again because everyone knows everyone. Moreover, the shirking might also be banned from the involvement in other important functions of the community or social network such as leadership positions, community resources, and friendship. Therefore, each ROSCA participant is more likely to act considerately just as others would expect resulting in less uncertainty to the ROSCA as a whole.

²⁰⁴ Ronal H. Coase, The Nature of the Firm: Influence, 4 JOURNAL OF LAW, ECONOMICS, AND ORGANIZATION 33, 47 (1988).

While most ROSCA participants are repeated participants who were and will likely be with the same ROSCAs in the future, ROSCAs sometimes need to recruit new participants. ROSCAs can be quite selective on accepting new participants and often examine or vet potential participants carefully before accepting them. The vetting process also relies on interpersonal relationships between ROSCA participants and people in the same community or social network. The ROSCA managers and participants always recruit new participants whom they know from and their community or network. Therefore, the ROSCA manager and existing participants should be able to accurately evaluate the risk of such a new member. For example, when a ROSCA manager recruits her co-worker to join a ROSCA, the manager would already know a lot about her co-worker's income and financial situation. On the one hand, if the co-worker is financially stable, the manager can speculate that the co-worker might look to invest and take the fund at a very later stage thereby presenting a low risk. On the other hand, if the manager knows that the co-worker is struggling but has a very great potential to earn additional income, the manager could have noticed that the co-worker might take the fund early and present a considerable risk. If the co-worker were to be accepted to join the ROSCA, the manager and other participants would naturally take extra precautions to ensure that the co-worker will be closely monitored. Besides, because everyone correctly perceives the risks, it would not be a big surprise, if the co-worker will eventually be late or fail to pay. Such an ability to accurately evaluate the risk of new and repeated participants make can lower the level of uncertainty for everyone.

The administration and structure of ROSCAs can also reduce the level of certainty. As mention earlier, ROSCAs managers have a lead role in managing, administering, and guaranteeing ROSCAs. The ROSCA manager is still incentivized to upkeep the ROSCA by her best effort because she would be responsible for all participant when the ROSCA fails. In other words, the role of ROSCA manager can boost confidence and curb a panic. For instance, when a ROSCA participant fails to make a contribution on time, other participants can be nervous that the ROSCA will eventually fail and thus stop making a contribution as well. This is similar to the prisoner's dilemma game where betraying the other participant is a dominant strategy for each participant. Nevertheless, the lack of cooperation leads the worst outcome for the ROSCA as a whole because the ROSCA will immediately collapse. On the other hand, when participants are confident that the ROSCA manager will put her best effort to make the shirking participant pay and will ultimately be responsible for paying everyone back if her effort fails, each participant will continue to make a contribution. This would at least buy time for the ROSCA manager to collect the missing contributions, or else if the manager could not collect the missing contributions, the loss would be a lot smaller. Therefore, the role of the ROSCA manager can significantly reduce the uncertainty for ROSCAs.

Lastly, the monitoring and enforcement process of ROSCA can effectively reduce the level of uncertainty in ROSCAs. ROSCAs efficiently utilize valuable interpersonal relationships among participants and their community and social network. Close interpersonal relationships allow ROSCA participants to monitor the behaviors and conditions of other participants continually. This can allow ROSCA manager and participants to take early actions on participants who pose potential risks to the ROSCAs. Valuable interpersonal relationships and social network around ROSCA participant also allow ROSCA managers and participants to enforce meaningful social sanctions on shirking participants. The sanctions are effective because the person being sanctioned do not want to lose valuable relationships and social network she belongs, In contrast, formal financial institutions cannot employ the same kind of sanctions

because consumers of formal financial service because they could not care less about losing or damaging relationships with their service providers. While people might always find new providers that are willing to provide them the same service, they cannot easily build value interpersonal relationship and social network. Therefore, interpersonal relationships among ROSCA participants successfully help them monitor and enforce each other This in lower the uncertainty in ROCA practice.

b) Information Asymmetry

Lending also presents information asymmetry problems. For ROSCAs, information asymmetry problems result in very unfortunate outcomes for participants because ROSCAs are not secured by collaterals. George Akerlof uses the Market of Lemons or the market for used cars to examine information symmetry. Information asymmetry arises when one party of a transaction has relevant information, while the other does not. For some transactions where the relevant information is readily observable, both parties can normally negotiate for a fair deal. Yet, not all material information is readily observable. There, the sellers of low-quality can pass their cars as high-quality and sell them at higher prices. Akerlof suggests that buyers cannot distinguish high-quality cars and a low-quality car; hence buyer will only pay an average price. Given that the average price is lower than the value of a high-quality car, a seller will only be willing to sell if the car is a low-quality car. This so-called 'adverse selection' drives away seller of high-quality products creating the Market of Lemons which is full of low-quality products.

In the context of ROSCAs, a participant who takes the fund early can be seen as a buyer who is looking to sell debt. On the other hand, a participant who takes the fund later to gain interests can be seen as a buyer. The quality of the debt depends on the level of risk a participant poses to the ROSCA. While ROSCA participants perceive their own risk, they have to guess about the risk of other participants. ROSCA participants have to evaluate risk associated with other participants by guessing from relevant clues surrounding the person. In general, institutional lenders evaluate financial information from a verified credit report. Yet, such financial information is not always available, especially when the person has never established a credit report account with any credit report agency. Because ROSCAs participants tend to rely on informal financial methods, the verified credit reports and relating financial information will not be readily available. Without financial information, banks and other formal financial institutions face serious information asymmetry problem and are not willing to lend to many borrowers, especially those who rely primarily on informal financial services like ROSCAs.

Instead of relying on concrete financial information such as formal financial institutions do, ROSCAs utilized interpersonal relationships to mitigate information asymmetry problems. As mention earlier, most ROSCA managers maintain a close relationship with other participants and seek intimate personal information such as marriage, health, addiction, gambling habits, childcare, and love affairs from the participants and people around them. While personal information does not directly indicate the financial conditions of a person, it can provide very useful and accurate clues about life which may accurately predict his or her financial conditions. For example, if a ROSCA manager know that a person is alcoholic or having many extramarital affairs, the ROSCA manager might refuse to let the person join the ROSCAs because such habits

²⁰⁶ See supra, note 7.

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²⁰⁵ George A. Akerlof, George, The Market for 'Lemons', 84 Quality Uncertainty and the Market Mechanism." Quarterly Journal of Economics. The MIT Press (3) 488-500 (1970).

seem to indicate that the person may have reasons to overspend and might not be able or willing to fulfill the payment obligations of the ROSCA. Personal information of ROSCA participants can be obtained by directly asking the participants. Then, such personal information can be verified by inquiring the social networks surrounding the participants.

Moreover, constant monitoring of the behaviors and conditions of ROSCA participants also ensure that personal information is accurate and up-to-date. For instance, ROSCA managers and other participants can observe signs of any misuse of the fund or changes in the behavior of the concerned participants. Because ROSCA groups are generally small and participants know each other very well, such an observation can be closely and continuously done. This means that the whole ROSCA group will have the most updated information about each participant and thus it can take necessary actions promptly. For instance, if a ROSCA manager can check with colleagues of a suspicious participant that if he still goes to work and earns his wage regularly to make sure that participant will not run away and are afforded to pay for his share of contribution. Therefore, ROSCAs seem to have effective mechanisms to obtain accurate and up-to-date information and can address the information asymmetry problems in a way that traditional financial institutions cannot.

2. The Sociological Perspective

The presence of interpersonal relationships ingrained in ROSCAs not only reduces uncertainty and asymmetry information in lending but interpersonal relationships among ROSCA participants also promote and maintain trust among themselves. From the sociological perspective, trust can provide another useful lens to understand how ROSCAs can function effectively, despite operating entirely outside of the formal financial system. In sociology, trust is a prerequisite of human exchanges. Financial exchanges involving fundraising and lending activities like ROSCA thus depend on trust among their members. Francis Fukuyama, a renown American social scientist, suggests that "the communities do not require an extensive contract and legal regulation of their relations because prior moral consensus gives members of the group a basis for mutual trust." Fukuyama sees trust as an imperative element that can reduce the barrier of human exchange, especially when the exchange occurred in the absence of legal certainty. When financial activities occurred outside the formal financial system, financial consumers are exposed to a significant level of risk because they are not adequately protected by relevant laws and regulations. Therefore, trust among participants of a transaction becomes an even more important factor for the success of informal financial practices including ROSCAs.

Indeed, Fukuyama's proposition encompasses two distinct concepts of trust: interpersonal trust and institutional trust. Interpersonal trust examines how relationships foster trust among individuals. Hence, trust among ROSCA participants based on their interpersonal relationships is interpersonal trust. On the other hand, institutional trust reinforce trust based on institutional mechanisms such as guarantees, safety nets, and other structures. For ROSCAs, institutional trust involves the certainty of the transactional outcomes based on institutional assurances such as the laws, internal rules, and financial guarantees. This section will discuss how interpersonal trust and institutional trust may help explain the success of ROSCAs in the absence of formal legal certainty.

²⁰⁷ Francis Fukuyama, *Trust — The Social Virtues and the Creation of Prosperity*, New York: Free Press (1995). ²⁰⁸ *See id*.

a) Interpersonal Trust

Sociologists generally define trust as a trustor's expectations that a trustee will behave in a benevolent way based on the observable risks and uncertainty of the situation.²⁰⁹ In the context of ROSCAs, participants who already took fund will have an option to keep contributing the ROSCA or stop and run away. Because ROSCAs are not secured by collateral, participants can easily run away with little consequence. Therefore, keeping contributing is seemingly just a benevolent act. ROSCA participants need to trust other participants to take the fund before themselves. James Coleman develops a useful trust concept which can be easily applied to lending transactions. Coleman defines trust through four critical characteristics.²¹⁰ First, a trustor (referred to as Eco) must have the possibility of placing some resources at the disposal of a trustee (referred to as Alter) who then has the opportunity to accommodate or exploit the trustor.²¹¹ Second, the trustor will trust if she expects that the trustee will accommodate her, but will not trust if she expects that the trustee will exploit her.²¹² Third, there can be a binding agreement that can certainly prevent the trustee from exploiting the trust trustor.²¹³ Fourth, there can be a time lag between the two points at which trustor and trustee make a decision.²¹⁴

Coleman's trust framework accommodates the notion of interpersonal trust. Particularly, interpersonal trust is derived from a personal relationship between a trustor and a trustee. A trustor possesses interpersonal trust as he or she accepts vulnerability to the actions of the other party of exchange. A trustor is willing to be vulnerable to a trustee based on both the expectation that the trustee will not defect and the perception that the trustee is trustworthy. For ROSCAs, participants who have not taken the fund can be seen as trustors because they accept the risk that those who already took the fund and will never make any future contribution to the ROSCA. On the other hand, participants who took the fund are trustees because they have an option to establish trustworthiness by keeping making contribution even though they can easily run away with little consequence.

Interpersonal trust correlates with the strength of interpersonal ties.²¹⁷ Therefore, the stronger the relationship is, the more interpersonal trust a trustor will have towards a trustee. Specifically, a strong interpersonal relationship is a sufficient tie that binds two or more actors allowing for the reinforcement of positive expectations through social monitoring and social control.²¹⁸ Therefore, interpersonal trust is more likely to be more dominant in a relationship where actors directly connect via strong social interactions and personal knowledge of each other.²¹⁹

²⁰⁹ Linda D. Molm, Nobuyuki Takahashi& Gretchen Peterson, *Risk and Trust in Social Exchange: An Experimental Test of a Classical Proposition* 105 American Journal of Sociology (5) 1396, 1427 (2000).

²¹⁰ See id.

²¹¹ See id.

²¹² See id.

 $^{^{213}}$ See id.

²¹⁴ See id.

²¹⁵ Roger C. Mayer, James H. Davis, & F. David Schoorman, *An integrative model of organizational trust*, 20 ACADEMY OF MANAGEMENT REVIEW 709, 734 (1995).

²¹⁶ See id.

²¹⁷ Ronald S. Burt& Marc Knez, *Trust and Third-Party Gossip* in Trust in Organizations, 7 FRONTIERS OF THEORY AND RESEARCH 68, 89 (1996).

²¹⁸ Charles Sabel, *Studied Trust: Building New Forms of Cooperation in a Volatile Economy*, EXPLORATIONS IN ECONOMIC SOCIOLOGY 104, 144 (1993).

²¹⁹ See id.

It is clear that relationships among ROSCA participants have always been beyond the mere purpose of lending and borrowing from ROSCAs. ROSCA participants are friends and family. Because people are more likely to accepts vulnerability to the actions of their friends and family, they are more likely to trust friends and family when it comes to financial activities including ROSCAs. The success of previous ROSCAs reinforces interpersonal trust among participants. In other words, interpersonal trust can become a core value of the ROSCA group, and thus ROSCA participants are compelled to trust and be trustworthy to each other. This could be the main reason that most ROSCAs are reluctant to take new participants or do so only if the new participants are friends or family of existing participants. In other words, the selection preference for new participants also suggests that interpersonal trust is a relevant factor contributing to successful P2P lending.

ROSCAs participant also utilizes interpersonal trust arising from the social network where both new participants and existing participants and managers belong. For example, because a new participant is the wife of an existing participant's friend, the existing participant may perceive trustworthiness of the wife based on the existing participant's relationship with the husband. While the trustworthiness of a husband does not necessarily translate into the trustworthiness of his wife, ROSCA participants often deduct their interpersonal trust from trust embedded in social networks. ²²⁰ Either new ROSCA participants or existing ROSCA participants build and maintain interpersonal trust based on interpersonal relationships within their shared social networks.

b) Institutional Trust

Institutional trust is a totally distinct concept from interpersonal trust. In sociology, institutional trust is described as trust that is generated by the situation followed by assurances that expectations will be fulfilled.²²¹ In the realm of institutional trust, trustors base their expectations regarding the outcome of a transaction on the quality of the institutional system.²²² Institutional trust exists because the trustor believes that proper institutional structures are in place to enable one to anticipate a successful future endeavor.²²³ The institutional structures include structural assurances such as regulations, insurances and legally binding contracts, and reliable enforcement of these structural assurances.²²⁴ Various mechanisms which are used to generate institutional trust may include impartiality and justice, mediating between actors, and penalizing unpleasant or hostile behaviors.²²⁵ Institutional trust also encompasses exogenous elements like technological and commercial competence, its fair processes and structures.²²⁶ For instance, deposit insurance policies have turned bank deposits into the gold standard for our modern financial system despite a series of bank crises in the early twentieth century. As depositors are confident that they will surely get their money back either from the bank. In other

²²⁰ See id.

²²¹ Lynne G. Zucker, Production of trust: Institutional sources of economic structure, 8 RESEARCH IN ORGANIZATIONAL BEHAVIOR, 1840-1920 53, 111 (1986).

²²² Margaret Levi, M. A State of Trust, in Trust and Governance 77, 101. New York: Russell Sage Foundation (1998).

²²³ D. Harrison McKnight, Larry. I. Cummings & Norman. I. Chervany, Initial trust formation in new organizational relationships. 23 ACADEMY OF MANAGEMENT REVIEW (3) 473, 490 (1998).

²²⁴ See id.

²²⁵ See id.

²²⁶ See id.

words, the integrity and credibility of the system is the most important contributing factor for institutional trust.

Institutional trust is independent and occurs without the other party of the transaction. Accordingly, institutional trust may help two strangers to engage in a transaction which would not have happened in the first place.²²⁷ Institutional trust in shadow banking services like ROSCAs might not be as strong as institutional trust existing in the traditional banking industry because the laws and regulations are not applied at full force and ROSCA participants do not primarily rely on systematic assurances like collaterals or legal resolutions. Yet, institutional trust can also occur in systems that rely primarily on interpersonal relationships like ROSCAs. ROSCAs incorporate the manager role to ensure the proper functioning and informally guarantee the disbursement to every participant of the ROSCA. The primary responsibility of ROSCA managers is to form and administer a ROSCA. ROSCA managers can oblige participants to behave according to the mechanisms and rules of the ROSCA. For instance, a ROSCA manager can compel participants to make a contribution and penalize anyone who fails to do so. Therefore, ROSCA participants can trust that everyone will abide by the rules as they expected. Besides, ROSCA participants also expect that the ROSCA manager will cover for default payments when some participants took the fund and run away. Such manager guarantee works just as the deposit insurance policy, even though the guarantor is just an individual person instead of the government. While ROSCA participants recognize that a personal guarantee by the ROSCA manager is not as certain as the government's guarantee, they are still more confidence the ROSCA will operate just as it should be. In other words, the role of a ROSCA manager can induce ROSCA participant to have institutional trust in the ROSCA they are participating.

While institutional trust and interpersonal trust are distinct concepts, the two types of trust are not necessarily exclusive of one another. This section clearly shows that ROSCA participants can have interpersonal trust with each other and have institutional trust with the ROSCA as a system at the same time. Indeed, both institutional trust and interpersonal trust can work complimentarily to create and maintain the overall trust ROSCA participants have for their ROSCA. Moreover, institutional trust can reinforce interpersonal trust and vice versa. Both types of trust indistinctly promote the overall trustworthiness resulting in the success of the ROSCA. Such success then reinforces both interpersonal trust and institutional trust once again.

II. Development of Online ROSCAs

Online ROSCAs are ROSCAs that operate online using the internet and mobile technology. With the internet and mobile technology, especially social media and online payment, ROSCA participants can communicate and pay each other without having to meet the other participants at all physically. Therefore, internet and mobile technology greatly expand financial access to population which might not have access to a ROSCA locally. There are thousands of online ROSCAs on social media platforms such as Facebook and LINE. These only ROSCAs vary widely in volume, size, and duration. Therefore, online ROSCA participants have more choices as compare to their traditional ROSCA counterparts who only have limited choices offered within their communities or social networks.

At the same time, the internet and mobile technology change the way ROSCAs are operated and structured. In other words, online ROSCA participants have integrated technology with

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²²⁷ See id.

traditional practices. For instance, an Online ROSCA group is formed by a very diverse group of participants from different places over the country as supposed to a group of participants who live or work side-by-side. The structure of online ROSCAs also develops from a structure that focuses on consensus, relationship, and community to a very centralized structure where all authority and responsibility are exclusively in the hand of ROSCA managers.

A. The Rise of Internet and Mobile Technology

For developing countries including Thailand, financial services have been inaccessible for a large portion of the population. Banks and other financial institutions have not been able to sufficiently, and profitably provide financial services to all consumers, especially those low-volume transactions. Therefore, millions of people have relied exclusively on cash and direct exchanges until recently. While a large portion of the population may have underserved by the traditional banking system, the emergence of the internet and mobile technology is changing this.

While The internet was invented since the 1960s, it has just reached most of the people in developing countries through the adoption of internet-enabled phone service in the past decade. Internet-enabled phone service is more affordable and much more accessible for poor people, especially those in remote rural areas. Mobile services in Thailand are relatively accessible. More than 55 million people or 80 percent of the population use mobile phones and have access to the internet.²²⁸

The internet has changed the way we live in many ways including how we conduct our financial transactions. Policymakers, businesses, and scholars all realized the benefits of the internet and mobile technology as a vital tool to promote financial inclusion for all segments of society. More and more online financial services have begun to compete with brick-and-mortar institutions which rely heavily on physical presence and physical contacts between financial institutions and financial consumers.

1. Technology at the Government Level

The government of Thailand has recently pushed a new initiative so-called Thailand 4.0 in 2014 to free Thailand from a middle-income trap by moving the nation from a manufacturing-based economy to a high-tech economy. One of the main focuses of Thailand 4.0 is fintech industry. The government has passed several laws and regulations and encourage regulators, especially the Bank of Thailand to support the initiative. One of the recent achievements is PromptPay which a countrywide transfer and payment system called launched by the Bank of Thailand in 2017.

PromptPay allows account holders of all 15 commercial and four government banks in Thailand to transfer fund by using national identification card number or mobile phone number in place of the bank account number. PromptPay also charges no or very low service fee from nothing to ten baht (around \$0.30) per transaction. PromptPay is the quintessence of the Bank of Thailand's awareness of the importance of internet and mobile technology on the financial system. The Bank of Thailand also established a regulatory sandbox in 2017 to test novel financial products and services for 6 to 12 months before releasing to the public. For instance, mobile Quick Response (QR) Code was one of the first product from this regulatory sandbox.²²⁹

 ²²⁸ Center for Data Science, Technology, and Innovation, Statistics on Information and Communication Technology,
 The Ministry of Science and Technology Thailand, http://stiic.sti.or.th/stat/ind-it/ (Last visited Jan. 18, 2019).
 ²²⁹ Presentation on Payment & FinTech Development in Thailand on 16 April 2018 by Financial Technology
 Department of Bank of Thailand.

This could mean that the Bank of Thailand anticipates that internet and mobile financial service might soon take off and dominate the financial industry in Thailand.

2. Formal Financial Institutions and the Technology

Besides the government effort, all of fourteen commercial banks in Thailand have also adapted and invested in online and mobile banking. Over the past four years, commercial banks in Thailand have closed down over 300 branches. Kasikornbank (KBank), the fourth largest bank in Thailand by assets and the largest by market capitalization, has closed more than 100 of its branches and invested 8 billion baht (\$245 million) in KVision that incorporate digital banking, artificial intelligence, and big data on its banking platform. Unsurprisingly, Kbank's mobile banking application claimed the top spot in 2017 with 6.5 million users or 22 percent of the market trailing SCB's application which came second with a 9 percent market share. With great effort to adopt internet and mobile technology, Thailand ranks first in the world in terms of mobile banking users per internet users at 74 percent while Sweden comes second at 71 percent. ²³⁰ Indeed, the bank revolution in Thailand has been so successful that online and mobile applications by banks themselves outcompeted the financial products and services offered by technology companies. For instance, popular services like Apple Pay, Venmo, Paypal, or Square are far less popular than online and mobile banking services provided directly by Thai banks.

Most online and mobile banking platforms provide impressively comprehensive services including check deposit, pay bills, transfer, trading stocks and funds allowing people to conduct most of the banking activities on their mobile phones. However, commercial banks and other financial institutions have yet been able to provide online lending services because the Bank of Thailand still requires commercial banks to test their electronic customer identity verification system which is often referred to as electronic know-your-customer (e-KYC) process in the Bank of Thailand's regulatory sandbox for 6 to 12 months. ²³¹ As of now, commercial banks are still required to have human agents to talk to loan applicants (at least via call center) and obtain signed hardcopies of all documents necessary for the loan approval process. ²³²

3. Technology in the Hands of the People

The use of the internet and internet-enabled mobile services are not just limited to formal financial institutions, ordinary people also incorporate the internet and mobile technology, especially social media, and social platforms into every aspect of their lives including financial activities. In fact, Thailand is currently one of the top countries in terms of social media users and time spent on social media. According to the Digital 2018 Global Overview Report, Thai people spent as much as 3 hours and 10 minutes per day on the internet ranking fourth in the world just behind the Philippines, Brazil, and Indonesia. At the same time, Thailand ranked tenth in terms of social media penetration where 74 percent of the population had a social media account and actively used social media every month. The report also showed that Thailand had

²³⁰ Digital 2019: Thailand, Thais Lead the World in the Mobile Banking Per Capita (in Thai). https://www.google.com/amp/s/droidsans.com/thailand-mobile-banking-2019-to-cashless-society/amp/ (Last visited Feb. 24, 2019).

²³¹ Note that The Bank of Thailand announced that it would release the e-KYC process from its regulatory sandbox by 2019 and require each commercial bank to test its process before start using the process with actual customers.
²³² Bank of Thailand, Standards for Regulating Special Financial Institution- Phase II (Presentation Jan. 16, 2018), https://www.bot.or.th/Thai/FinancialInstitutions/PruReg_HB/Documents/SFIs%20Phase2/PPT%20hearing%20phas e2 Final.pdf (Last visited Jan. 18, 2019).

²³³ Simon Kemp, Digital in 2018: World's Internet Users Pass the 4 Billion Mark, We Are Social, https://wearesocial.com/blog/2018/01/global-digital-report-2018 (Last visited Jan 17, 2019). ²³⁴ See id

48 million user accounts where 22 user accounts were from Bangkok.²³⁵ Similarly, the number of active users of LINE which is Thailand's number-one messaging application reached 42 million in 2018.²³⁶

These figures are not surprising considering that a large portion of the Thai population does everything on social media, particularly Facebook and LINE, for multiple purposes from communicating, purchasing goods and services, dating, to conducting financial activities such as sending money, borrowing, and lending from other social media users. Networks or communities of internet users in Thailand have also immensely expanded. Either an official Facebook page of a celebrity or a Facebook group that gathers borrowers and lenders, these social-media enable groups to enable people who live in different backgrounds and locations to virtually interact with each other.

Online ROSCA is the quintessence of social media which facilitates lending and fundraising practices on the internet. Because ROSCAs are operated outside the formal banking regulations, operators of online ROSCAs have not been subject to regulations and oversights, especially the Bank of Thailand Regulatory sandbox, like other online financial services do. As a result, a large number of online ROSCAs spontaneously hit the ground and skyrocketed over the past few years. Online ROSCAs integrate online and mobile technology to every aspect of their operation including formation, screening, payment, collection, and enforcement.

B. The Operation of Online ROSCAs

With the online and mobile technology, especially social media, that facilitate the communication and sharing of information among people within virtual networks, people drastically change the way they operate ROSCAs and interact with other ROSCA participants. Interactions via social media platforms differ from face-to-face interactions in many ways such as accessibility, structure, frequency, and interpersonal relationship. This section will examine the operation of online ROSCAs including formation, vetting formation, operational structure, and monitoring and enforcement based on a one-month an observation of Bann Sarapat Share which is one of the biggest Thai online ROSCA communities on the internet. For this observation, I joined the Bann Sarapat Share and participated in two ROSCAs from February 16, 2018 to March 17, 2018.²³⁷ The observation was made daily for 30 days. This section will also highlight the differences between Online ROSCAs and traditional ROSCAs operated offline.

1. Formation

Online ROSCAs in Thailand are commonly formed within Facebook groups and often name themselves as 'Bann Share' which means 'house of ROSCAs' Bann Share groups often open to the public which means that any Facebook user can see and directly interact with the groups. Even when Bann Share groups are set as closed groups, the group administrators usually accept people to join their group without any questions.²³⁸ Therefore, online ROSCA participants have access to countless of only ROSCAs without physical or social limitations.

²³⁵ See id.

 ²³⁶ Marimi Kishimoto, Line: Thailand's New Gateway to the Gold Market, Nikkei Asian Review,
 https://asia.nikkei.com/Business/Line-Thailand-s-new-gateway-to-the-gold-market (Last visited Jan. 16, 2019).
 ²³⁷ Bann Sarapat Share (บ้านสารพัด) Facebook Group

 $https://www.facebook.com/groups/1651951111730330/?multi_permalinks=2338980043027430\¬if_id=1557419158846506\¬if_t=group_highlights (Last visited Feb. 24, 2019).$

²³⁸ Thai Public Broadcast Service, Perdpom: Online ROSCAs (Video published youtube.com on Jan. 23, 2017) https://www.youtube.com/watch?v=GDcy_gfqnQg (Last visited Feb. 24, 2019).

Because there is almost no barrier to join a Bann Share, most Bann Shares comprise many types of members from ROSCA managers, potential ROSCA participants, and people who are just observing. A large and popular Bann Share may have many thousand members. For instance, Baan Sarapat Share created in 2015 is one of the largest and oldest Bann Shares can still be seen on Facebook has more than 32 thousand members. On average, there are more than 50 posts appear on Bann Sarapat Share every day. Most of these are listings of available online ROSCAs posted by ROSCA managers. Within a month, a few hundred of different ROSCA managers have posted many recruiting listings. In fact, most ROSCA managers do not operate just one but many ROSCAs. One ROSCA manager on Bann Sarapat Share interestingly posted 47 listings of different ROSCAs within just a month. In other words, a large Bann Share like Bann Sarapat Share can easily contain many hundreds of ROSCA managers and thousands of online ROSCAs.

The listings posted on Bann Shares often contained important information about the available ROSCA such as required contribution, amount and type of the fund or asset participants can take, a number of rounds and participants, some names of participants, and the order of fund assignment. Nevertheless, the listings never in other important information, especially information about the credibility of the ROSCA manager and other ROSCA participants. Therefore, the formation of online ROSCAs is drastically different from the formation of traditional ROSCAs which is done exclusively based on existing interpersonal relationships among participants from the same social networks or communities.

Moreover, most of the online ROSCAs listed in Bann Shares required significantly smaller contribution as compare to traditional ROSCAs. On average the listings on Bann Sarapat Share and many other large Bann Shares required participants to contribute just around 200 baht (\$6) as compared 1000 baht for traditional ROSCAs.²⁴⁰ In fact, hardly any online ROSCA require participants to contribute more than 500 baht per round. Besides, online ROSCAs dispense funds a lot more frequently than traditional ROSCAs do.

In other words, each round of most online ROSCAs only lasts between two and seven days. On the one hand, online ROSCSAs' low contribution and short lifecycle mean that it is less risky for new participants to try on an online ROSCAs they have never involved before. On the other hand, characteristics like low contribution and short lifecycle may reflex that online ROSCAs cannot trust each other enough to a lot of money for an extended period of time.

Members of a Bann Share who are interested in participating with an online ROSCA have to go through hundreds of the listings which are not so informative and quite identical. Once, the members find interesting listings; they can either post a rely on the listings or contact the ROSCA managers directly via Facebook massager. At this stage, it seems like participants are the party that chooses an online ROSCA. The next step is the vetting process where ROSCA managers examine the qualification of potential ROSCA participant before letting them join the ROSCAs.

2. Vetting Process

The vetting process when ROSCA managers response to potential ROSCA participants to join a ROSCA. ROSCA managers usually communicate with each potential participant privately via LINE chat or Facebook Messenger. At this point, online ROSCA managers will be a party to

²³⁹ See supra note 85 (Information from constant researching and monitoring of the group for a month on Facebook.com).

²⁴⁰The comparison is made based on the interview with ROSCA participants, I1 and I2.

check on the credibility of potential participants. Because the conversations are private, the potential participants will not have a chance to evaluate or learn more about other participants in the online ROSCA. In other words, other participants have no involvement with vetting and selecting people whom they will have to trust their money with. While people often use pseudo names and social media profiles often contain insufficient or inaccurate information about the account holders, the vetting process for online ROSCAs is surprisingly cursory. In fact, it is quite uncommon for ROSCA managers to screen anyone out unless it is evidential that a particular person has cheated in the past. The vetting process for online ROSCAs seems to be merely an identity verification process where ROSCA managers will require potential ROSCA participant to submit a picture of them holding their national identity card and bankbook of the associated account they want to use for the ROSCA. This will allow ROSCA managers to see if the picture of the potential participants matches with their real name, national identification number, and bank account number.

The actual vetting often happens only when ROSCA managers are suspicious of a potential participant's past unpaid debt or cheating. In such an instance, ROSCA managers often conduct a brief background check in two methods. First, ROSCA managers can go through the timeline of a number Bann Shares to see if there is any negative comment about the suspicious participant as most ROSCA managers and participants often use public shaming on the social media platform to enforce or retaliate when any participant cheat or fail to pay. 241 Unfortunately, this method is like looking for a needle in a haystack. As mentioned earlier, there are numerous Bann Shares, and each Bann Share has hundreds of new posts on their timeline every day. Second, ROSCA managers can directly create posts on Bann Shares' timeline to ask about the credibility of a particular person hoping that anyone who had a bad experience with the person would reveal his or her past wrongdoings. Yet, background-check posts are more likely to receive a bunch of positive reviews from people who support the person. In fact, ROSCA managers cannot be sure at all if the public shaming posts and negative or positive replies are genuine. It is as difficult to verify the identity and credibility of the replies as to identify the credibility of potential participants in the first place. Potential participants, especially those with bad intents, have a great interest in faking positive replies. Other people may also have many reasons that motivate them to post either negative or positive criticisms about the other people, especially when they virtually bare no consequence of their false statement. Therefore, the vetting process of online ROSCAs seem a lot less reliable as compared to traditional ROSCAs that employ a long history of interaction and interpersonal relationship within close social networks as part of the vetting process.

3. Operational Structure

Once participants have been vetted, ROSCA managers usually organize a chat group on LINE application where the online ROSCA will operate. While an online ROSCA chat group often includes all ROSCA participants, the operation of an online ROSCA is still in the hand of the ROSCA manager. Online ROSCA managers retain authority to invite and expel anyone on the LINE group. Moreover, conversations within an online ROSCA chat group are also made or initiated by the ROSCA manager of the group. Particularly, ROSCA managers will announce the order of fund assignment, remind the participant to contribute to the ROSCA, and update participant with the current balance sheet. Participants' contributions are made exclusively to ROSCA managers via an online payment method like PromptPay before being redirected to

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²⁴¹See section III.B.4 for more detail about public shaming

participants according to the agreed order. Once participants transferred the contribution, they send a screenshotted photo of the transfer confirmation to the LINE group to confirm their payment. However, most participants do not talk to other participants because they often do not know each other.

On the one hand, the centralized control of the operation of online ROSCAs on LINE groups can make it more secure for all participants because ROSCA managers can easily control the access to such operational groups. Online ROSCA participants besides managers are less likely to be able to manipulate, spam, or cause troubles to other participants. On the other hand, such centralized control takes away online ROSCA participants' ability to evaluate, monitor, and manage other participants. For instance, it is not uncommon that the LINE group will have additional people who are not participants of the ROSCA. In addition, most participants do not know the actual identity of other members. This is dramatically different from the tractional ROSCA operation where ROSCA managers and every participant help evaluate, monitor, and manage each other. Therefore, participant of traditional ROSCA will be able to understand the risk associated with their ROSCA far better than online ROSCA participants do.

The method of assigning ROSCA funds online ROSCAs also differ from the method commonly used by traditional ROSCAs. While traditional ROSCAs almost exclusively use an auction mechanism to determine the order of fund assignment, the order is fixed by the ROSCA manager. Besides, ROSCA managers still have the right to take the first-round fund without having to pay interest. Online ROSCA managers usually predetermine the interest participants are required to pay so they can take a fund out at a particular order. The following table shows an example of the fixed fund assignment structure often used by a six-participant online ROSCA.

Round/Name	Aaron	Beth	Chris	Dole	Emma	Fred
	Contribution	Contribution	Contribution	Contribution	Contribution	Contribution
1	750	-170	-160	-150	-140	-130
2	-150	730	-160	-150	-140	-130
3	-150	-170	740	-150	-140	-130
4	-150	-170	-160	750	-140	-130
5	-150	-170	-160	-150	760	-130
6	-150	-170	-160	-150	-140	770
Net payoff	0	-120	-60	0	60	120

Table 3: An Online ROSCA with Fixed Assignment

For Table 3, a negative number represents an amount paid, while a positive number represents an amount received. For this six-participant ROSCA, Aaron, Beth, Chris, Dole, Emma, and Fred are required to contribute \$150, \$170, \$160, \$150, \$140, and \$130 respectively. The fund for each round will be \$900 minus the participant's contribution. For instance, from the second round, Beth has to contribute \$170 until the end of the ROSCA, so she can take \$730. In other words, Beth's total net payoff is \$-120 or she has to pay \$120 as interest payment. In contrast, by taking the fund last, Fred has a net payoff of \$120, or he receives an interest of \$120 to compensate for the money he lent to the ROSCA.

Because a ROSCA manager has full authority to determine the order of fund assignment, a ROSCA manager often allows participants from her previous ROSCAs to pick their preferred

spots on a first-come, first-serve basis. Usually, ROSCA participants who look to invest their money often pick very last spots, while participants who look to borrow often pick the earliest spots available. Therefore, it is common that spots in the middle of the ROSCAs period often remain unfiled. ROSCA managers can and often fill up these spots with new participants. Not only ROSCA managers bring new participants to fill undesirable spots, but such arrangement also allows ROSCA managers to observe and evaluate the credibility of new participant. For example, Chris contributes \$150 and has to wait until the fourth round to take the ROSCA fund where he receives no interest at all. While this might also be undesirable for Chris, he might want to take the deal as he needs to establish some relationship with the ROSCA manager before he can get a better deal in the future.

Like traditional ROSCAs, a participant who takes her fund earlier than others should contribute more to compensate for the risk others have to endure. In this case, Amy is the first participant to take the ROSCA fund, but she only contributes \$150 each round and receives \$0 net payoff because she is the ROSCA manager and has the right to take first round fund without having to pay interest to other participants. In reality, many online ROSCA managers do not only take the first-round fund interest-free, but they take the first-round fund without contributing any money to the ROSCA. The following table shows an example of a fixed fund assignment structure often used by a six-participant online ROSCA where the ROSCA manager does not contribute to the ROSCA.

Round/	Aaron	Beth	Chris	Dole	Emma	Fred
Name	Contribution	Contribution	Contribution	Contribution	Contribution	Contribution
1	750	-185	-175	-150	-125	-115
2	0	565	-175	-150	-125	-115
3	0	-185	575	-150	-125	-115
4	0	-185	-175	600	-125	-115
5	0	-185	-175	-150	625	-115

-150

-150

-125

635

60

Table 4: An Online ROSCA with Fixed Assignment and No Manager Contribution

-185

750

Net payoff

Table 4 shows a very similar structure of an Online ROSCA; however, Aaron as a ROSCA manager does not make any monetary contribution to the ROSC. Aaron, Beth, Chris, Dole, Emma, and Fred are required to contribute \$0, \$185, \$175, \$150, \$125, and \$115 respectively. Aaron still takes the first-round fund of \$750 from the ROSCA. Without the ROSCA manager's contribution, other participants receive a lot less money. For instance, Beth only took only \$565 on the second round, while she had to contribute as much as \$185 per round. This left her with a net payoff of \$-360. In other words, Beth has to pay as much as \$360 (63% of the principle) as an interest. At the same time, Emma only took \$625 on the fifth round which is next to last and received a net payoff of \$0 which means that she did not receive any interest for the contribution she made for many rounds.

While numbers in Table 4 might be a little exaggerated, the actual practices of online ROSCAs are not much better. The interest rates of online ROSCAs are usually a lot higher than the rates offered by traditional ROSCAs or formal financial institutions. Even worse, a

significant portion of participants' contributions goes to ROSCA managers as service fees. In addition, because interest payment for early fund takers is high, participants who already took the fund will be more like to run away from their responsibility to pay until the end of the ROSCA. This means that online ROSCAs are a lot riskier than traditional ROSCAs.

Once new participants have participated in many online ROSCAs, they are often invited to join more exclusive ROSCA groups where the required contributions are much higher. In fact, many online ROSCA participants revealed that sometimes joining high-contribution ROSCAs were not an option as some ROSCA managers threaten to expel ROSCA participants who refuse to join their opening ROSCAs.²⁴² Therefore, many online ROSCA participants much more money than they initially expected in multiple online ROSCAs. Undoubtedly, dependence on a ROSCA manager and excessive contribution to many ROSCAs constitute a recipe for failure. Many of high-contribution online ROSCAs ended up like other fraudulent fundraising cases where the masterminds reach for more victims and secretly run away with a surprising amount of money. In fact, online ROSCAs have become one of the most common fundraising frauds surpassing Ponzi schemes, Pyramid schemes, and traditional ROSCA over the past few years.²⁴³ The proliferation of fraudulent online ROSCAs only not only concerns law enforcement, but it also compromises public confidence in the reliability of online ROSCAs as a whole.

4. Monitoring and Enforcement Process

As mention earlier, because online ROSCAs are highly centralized, the monitoring and enforcement duties fall almost exclusively on ROSCA managers. The monitoring process of online ROSCAs is made exclusively online. Generally, ROSCA managers send messages to remind participants or ask about their current financial situation. Because ROSCA managers and other participants do not personally know or share social networks, it is almost impossible for ROSCA managers to receive information beyond the communication via the LINE messaging application. Online ROSCA participants cannot observe other participant's habits, behaviors, and activities which can be seen as a sign of default risks. This is significantly different from traditional ROSCAs where information about a particular participant is widely available among other participant or within their social networks. Therefore, if a participant disappears from an online ROSCA's operating chat group, it is almost certain that no one will have a clue about where the person is. Without efficient monitoring, online ROSCAs are generally riskier than traditional ROSCAs. Therefore, online ROSCA might need to rely more heavily on effective enforcement.

Nevertheless, the enforcement process for online ROSCAs is far from perfect. Like traditional ROSCAs, online ROSCAs do not rely on the legal process to enforce their participants to pay what they owe. Online ROSCA participants who contribute a small share of the fund to a particular person often find it impractical to use a legal mean because it is expensive and time-consuming for each participant. Even when ROSCA participants win the case in the court, it does not mean that they will be able to collect anything, especially when the perpetrator has no or little asset.

Besides, online ROSCA participants cannot effectively rely on social sanctions for enforcing other participants because ROSCA participants did not have social collateral like established interpersonal relationships or shared social networks. In other words, online ROSCA

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²⁴² See supra note 86.

²⁴³ See id.

participants would care less whether the ROSCA manager or other participants will be angry or talk badly of them to others whom they do not know.

Instead of social sanctions, online ROSCA managers often use online shaming to retaliate shirking participants and deter future defaults. Unlike social sanctions which are typically exercised within a particular social group to control group members, ²⁴⁴ Online shaming aims to humiliate the target publicly. Social networks like Facebook not only allow people to have constructive conversations, but social networks also offer a tool for people to destroy the credibility and reputation of others. When an online ROSCA ran away with the ROSCA fund, ROSCA managers often broadcast such behaviors along with insulting words and personally identifying information of the participant on many public forums such, especially Bann Shares. Sensitive information such as photo, national identification number, address, and bank account number become available to the public including criminals. Therefore, such practice greatly increases the risk of hacking, extortion, coercion, and harassment to the person whose information is disclosed.

The online shaming strategy is also employed by ROSCA participants to attack ROSCA managers who scam or cheat on participants. In facts, anyone can employ such a strategy to destroy the credibility and reputation of others in the Bann Share. For instance, a competing ROSCA manager might use online shaming to attack the other ROSCA manager so that they can take new or existing participants from the shamed manager. Some shirking participants also use public shaming as a preemptive tactic by shaming and destroying his manager's credibility before being publicly shamed. As everyone knows that it is impossible to verify to the accuracy of an online shaming message, members of Bann Shares do not necessarily avoid the shamed individual. In addition, shaming messages can be quickly buried by a large number of posts that people publish every day. Therefore, a shamed participant will often into an online ROSCA group again. In other words, online shaming is not an effective strategy to enforce online ROSCA participants either.

C. The Fundamentals of online ROSCAs.

Thanks to the internet and mobile technologies, online ROSCAs adopted a different technique of operation which is significantly distinct from traditional ROSCAs. Specifically, online ROSCAs rely on virtual communication to participants via social media instead of direct physical communications which have to be done in person. One of the most important differences of online ROSCAs is the departure from its relationship-based and community-based concept to a centralized operation which aims to resemble large-scale and business-oriented enterprises. Online ROSCAs no longer serve the local communities nor focus on interpersonal relationships among participants. Such radical changes clearly imply that the four fundamentals of online ROSCAs have also drastically changed. This section will revisit all four fundamentals including certainty, information asymmetry, interpersonal trust, and institutional trust of online ROSCAs based on the same economic and sociological framework. The thorough examination of these fundamentals could shed light on how online ROSCAs came into being and highlight how online ROSCAs are distinct from traditional ROSCAs.

1. The Economic Perspective

Unlike traditional ROSCAs, online ROSCAs rely on virtual communication between ROSCA managers and their participants rather than direct communication among all participants. Therefore, the arrangement and construction of interpersonal relationships among

²⁴⁴ Stephen Knack, Civic Norms, Social Sanctions and Voter Turnout, 4 Rationality and Soc. 133, 143 (1992).

participants also change drastically. The less meaningful interpersonal relationships existing in online ROSCAs might not be able to address uncertainty and information asymmetry issues in the same manner that strong interpersonal relationships in traditional ROSCAs have done.²⁴⁵ Nevertheless, the economic concept of uncertainty and information asymmetry may still be a key to understand the fundamentals of online ROSCAs. Particularly. The absence or degrade of interpersonal relationships among online ROSCA participants could lead to an increase in the level of uncertainty and information asymmetry unprecedented to traditional ROSCAs. I will explore the concepts of uncertainty and information asymmetry in online ROSCAs respectively.

a) Uncertainty

Like traditional ROSCAs, online ROSCAs are very uncertain due to default risk posed by participants who took the fund before themselves. This is because the contributions made to online ROSCAs are not secured by external assurance like collaterals, government regulations, or reliable and affordable resolution process. In fact, online ROSCA participants seem to be subject to additional uncertainty due to the distinct way online ROSCAs operate because strong interpersonal relationships among participants existing in traditional ROSCAs seem to be absent in case of online ROSCAs.

Because online ROSCA participants rarely know nor have ever met other participants, online ROSCA could not care less about their future interactions with other participants. In fact, it is almost impossible for online ROSCA participants and online ROSCA managers to track down a shirking participant who stops contributing once he took out the fund. With less possibility and necessity for future interactions with other participants, online ROSCA participants are not motivated to maintain their relationship and credibility. Shirking online participants can run away from strangers with little or no consequence. In contrast, a shirking participant might never be accepted to a traditional ROSCA or its surrounding social circle again. Therefore, online ROSCA participants are less like to act considerately just as others would expect resulting in uncertainty to the online ROSCA as a whole.

Moreover, most online ROSCAs are less selective when they recruit participants. While traditional ROSCA often vets potential participants carefully and only accept new participants from the local community or social circle, online ROSCAs recruit unknown people on a random Bann Share Facebook page. Because new recruits are unknown to the online ROSCAs, online ROSCA managers are not able to accurately evaluate the risk of the unknown recruits. For instance, because online ROSCA managers only have basic information from the national identification card of new participants, it is impossible for a ROSCA manager to examine other aspects of a new participant's personal life which can be useful to evaluate the risk of the new participant. Without the ability to perceive the risk of new participants before accepting them, online ROSCAs can have a high level of uncertainty.

Lastly, because online ROSCA managers do not have interpersonal relationships with their participants, online ROSCA managers are less compelled to put their time and efforts to work hard for the interest of the rest of the participants. In contrast, traditional ROSCA managers who are often friends or family of their participants. For good relationships inside and outside of financial deals, traditional ROSCA managers are more likely to have aligned interest with their participants. Therefore, online ROSCA managers are less likely to put their best effort to

²⁴⁵ Ronald H. Coase, The Nature of the Firm: Influence, 4 Journal of LAW, ECONOMICS, AND ORGANIZATION 33, 47 (1988).

administer, monitor, and enforce unpaid debt for online ROSCAs. Besides, as most online ROSCA managers operate many ROSCAs at the same time, they might not have enough time and resources to administer, monitor, or enforce on online ROSCAs even if they want to. Such unaligned interest between ROSCA managers and their participants can be catastrophic for online ROSCAs because online ROSCA participants do not know nor establish interpersonal relationships with each other and have to rely entirely on their managers to operate every step of online ROSCAs. Accordingly, the role of online ROSCA managers might not be able to reduce the uncertainty as much as traditional ROSCA managers can do.

b) Information Asymmetry

In addition to uncertainty, information asymmetry can present a big problem for online ROSCAs. Information asymmetry problems can be severe for online ROSCAs because managers and participants do not have accurate and complete information about each other. Like traditional ROSCAs, participants who look to invest by taking the fund later would like to have information about those who took the fund early in order to evaluate their risk and take action appropriately. Because online ROSCAs are an informal practice and do not rely primarily on formal financial information, the only available information is the personal information of participants. While personal information does not directly indicate the financial conditions of a person, it can provide very useful and accurate clues about life which may accurately predict his or her financial conditions. Yet, personal information of online ROSCA participants are not as readily available as that of traditional ROSCA participants.

Online ROSCA participants know their own risk, but they have to rely on their manager to collect and disseminate information necessary to evaluate the risk. This is because the structure of online ROSCA does not allow participants to know or directly communicate with each other. However, online ROSCA managers do not maintain a close relationship with participants. Unlike traditional ROSCA managers who can obtain useful personal information about participants thanks to the interpersonal relationship they have with the participants and community and social network around them, online ROSCA managers do not usually establish interpersonal relationship nor reside in the same community or social network as participants. Therefore, online ROSCA managers have neither financial information nor personal information of participants. Although Online ROSCA managers have consolidated power and exclusive control on online ROSCAs, they might not be as competent in obtaining and disseminating useful information as participants would have wished. Therefore, online ROSCAs may face more severe information asymmetry problems than traditional ROSCAs.

2. The Sociological Perspective

From the sociological perspective, the introduction of technology and changes in the operation of online ROSCAs from their traditional counterpart may have a significant impact on both interpersonal trust among participants and institutional trust with the system. According to the trust theory mentioned earlier, interpersonal relationships and ability to provide systematic assurance to the system can affect interpersonal trust and institutional trust respectively. For online ROSCAs, ROSCA managers play even more central role in building and maintaining interpersonal trust and institutional trust for all participants. It is questionable whether the current practice of online ROSCA will be able to accommodate interpersonal trust and institutional trust which are two key fundamentals of online ROSCAs from the sociological perspective.

a) Interpersonal Trust

While close interpersonal relationships in traditional ROSCAs foster interpersonal trust among participants, interpersonal relationships are no longer the focus of online ROSCAs.

Therefore, online ROSCAs cannot build and maintain interpersonal trust among participant the same way that traditional ROSCAs do. Online ROSCA managers treat their participants as customers rather than friends and family members. Without the ability to form and maintain interpersonal relationships, online ROSCA participants might not have enough interpersonal trust to put themselves in a vulnerable position and let other participants take the fund before themselves. For example, a new participant of an online ROSCA is often forced to take the fund at a very later stage because the manager and other participants do not know the new participant enough to let him take the fund before themselves. Furthermore, even when online ROSCA participants have been with the same online ROSCA group for some time, the manager and other participants might still not be able to establish interpersonal relationships with them due to the business-oriented focus and impersonal nature of online ROSCAs. For example, one online ROSCA manager often manager tens of ROSCAs which contain hundreds of participants. Therefore, the role of ROSCA managers resembles a bookkeeper or business manager instead of a friend who knows everyone. In fact, the low level of interpersonal trust has reflected in significantly higher interest rates charged by online ROSCAs as compared to traditional ROSCAs or regular personal loans to friends and family members.

b) Institutional Trust

Institutional trust in online ROSCAs can be even weaker than that in traditional ROSCAs because the laws and regulations governing ROSCAs were designed to regulate traditional ROSCA instead of online ROSCAs exclusively.²⁴⁶ In other words, online ROSCAs are mostly operating outside of the law. As laws and regulation cannot provide external assurance for online ROSCAs and online ROSCAs, the institutional trust of online ROSCAs has to be made out of an internal system of assurance. In essence, the most apparent internal system that reduces the risk associated with online ROSCAs is the ROSCA manager. Like traditional ROSCAs, online ROSCA managers also have the role to ensure the proper functioning and informally guarantee that everyone will get the fund they entitle. Yet, online ROSCA managers are not personally connected with their participants, so online ROSCA managers are less likely to take their responsibilities as seriously as traditional ROSCA managers. Specifically, ROSCA participants do not have effective means to force their manager to put effort or take responsibility in the interest of themselves because they do have close interpersonal relationships with their manager. Moreover, even when an online ROSCAs manager is willing to put effort or take responsibility. such a manager may not be capable of doing so because the manager manages several online ROSCAs at the same. These online ROSCAs can account for a large sum of money an online ROSCA manager can never afford to pay. In fact, most online ROSCAs fail because online ROSCA managers cannot fulfill their duty to guarantee the fund for every participant. Accordingly, online ROSCAs cannot build and maintain institutional trust as well as traditional financial institutions nor traditional ROSCAs.

This section has illustrated that online ROSCAs do not seem to have strong fundamentals as traditional ROSCAs. While the internet and mobile technology allow people to interact beyond geographical proximity of their community or social network, such online interactions do not build and maintain interpersonal relationships for parties of the transaction. Therefore, although online ROSCAs mushroom over the internet and become another mode of business in the shadow banking system, online ROSCAs often fails to address the fundamental issues of ROSCAs like uncertainty, information asymmetry, interpersonal trust, and institutional trust. In

²⁴⁶ Laws and regulations on ROSCAs will be discussed in Part III of this essay.

other words, the proliferation of online ROSCAs occurs over the internet without strong fundamentals. As many online ROSCAs fail or turn out to be fraudulent, many financial consumers in Thailand have lost not only their money but also their confidence in ROSCAs. Such an unfortunate situation calls into to attention of the public, media, and regulators. The following part will further explore the regulatory landscape of traditional and online ROSCAs.

III. ROSCAs and Regulatory Landscape

ROSCAs are often seen in a negative light because ROSCAs operate in the so-called shadow banking system where most business activities are unrecognizable by legal and tax authorities. Without direct oversight by designated financial regulators, criminals often exploit financial consumers who not have effective means to fend for themselves by promising to offer extraordinary investment opportunities or incredibly low-interest loans to lure these hopeful financial consumers to join fraudulent schemes like Ponzi schemes, pyramid schemes, or fraudulent ROSCAs. The shadow banking issue has been in the limelight of Thailand's lending industries for decades due to a long history of well-known frauds resulting from fundraising methods outside traditional banking and securities systems. The issue has recently worsened due to the emergence of the internet and mobile technologies which allow people to virtually conduct financial transactions without having to meet or have interpersonal relationships with each other. Online transactions also leave little trace making it impossible for the authority to help the victims.

In facts, non-traditional fundraising and lending methods in the shadowing banking system have long been regarded as financial crimes or economic crimes under Thai law. Part III will outline the chronic problems of shadow fundraising and lending services in the past including Ponzi schemes, pyramid schemes, and fraudulent ROSCAs. These financial crime cases provide helpful context to understand the driving force behind laws and regulations on ROSCAs and the constant challenges that Thai regulators and lawmakers have been facing. Indeed, the key regulations on ROSCAs based on the Bank of Thailand's Regulatory Framework and the ROSCA Operation Act well reflect the regulatory goal to restrict and prohibit the commercialization of ROSCAs by limiting the size and volume of ROSCAs. Nevertheless, such strict regulations turn out to be indifferent of controlling and improving the integrity of ROSCAs. Indeed, the regulations fail to address the emergence of online ROSCSs because the regulations deem online ROSCAs illegal and ban them outright instead of regulating them.

A. The Chronic Problems of Fraudulent Fundraising

Thai legal scholars stereotype various types of shadow fundraising activities as serious financial crimes with huge economic and social ramifications. Literature on Thai financial crime also portrait shadow banking activities including ROSCAs as situations in which professionals or charlatans who claim to possess knowledge, skills, and techniques commit complex crimes resulting in substantial economic impacts beyond typical fraudulent cases. Such negative depiction of shadow banking practices is drastically different from the relationship-based focus of traditional ROSCAs explained in the previous section. While these fraudulent fundraising and lending cases may vary in their structures, operations, and targeted victims, these fraudulent cases similarly caused widespread losses to a massive number of financial consumers and the economy at large. This section will discuss major

²⁴⁷ See supra note 3 at 38-39.

²⁴⁸ See id.

fraudulent fundraising and lending cases which have captured the public attention and altered the public attention and raise regulatory concern over any fundraising and lending method outside of the formal financial system.

1. Ponzi Schemes

A Ponzi scheme is a type of fundraising frauds that entices investors to invest in a sham business by promising an absurd amount of returns to the investors. In fact, profitable returns to the earlier investors come from funds from new investors who are later lured into joining the Ponzi scheme. A Ponzi scheme must keep the impression of sustainable business in order to convince new investors to offer new funds and must convince most of earlier investors not to withdraw their funds until the scheme receive sufficient new funds to pay the earlier investors off. In Thailand, a Ponzi scheme is considered public fraud which is punishable under the Thai criminal code and the Emergency Decree on Borrowing Which Are Regarded as Public Cheating and Fraud, B.E. 2527 (1984). Ponzi schemes were particularly prevalent in Thailand during the 1970s and early 1980s. Yet, there have still been several Ponzi scheme cases even until now.

Mae Cha-moy Ponzi scheme is the most prominent Ponzi scheme or 'share-look-soe' in Thailand because it also involved the largest number of investors and investment in Thai history. Mae Cha-moy Ponzi scheme was established in 1973. Mrs. Cha-moy Tipso, the founder of the Ponzi Scheme, was an employee of the Department of Fuel and offered a return at a rate of 6.5 percent per month or 78 percent annually for the investment contributed to her fuel business. In the beginning, Cha-moy paid monthly returns to all investors as promised and allowed the investors to withdraw their investment. Her good reputation and her position at the Department of Fuel convinced more than 10,000 investors to invest as much as 10 billion baht with her. The range of investors included small businesses, wealthy individuals, middle-class individuals, and even low-income individuals. Many of which took loans to invest in the scheme hoping to make profits from higher interests offered by Cha-moy.

During most of its course, Mae Cha-moy Ponzi scheme maintained a significant portion of the investment funds for interest payments. The maintained fund was big enough to pay interests to every investor for at least 16 months causing new investors to believe that the scheme was safe. Yet, instead of operating the fuel business she portraited, Cha-moy's business strategy was to find more and more investment funds to pay interest for the earlier investors. In the process, Cha-moy also redirected a significant portion of the funds to her personal account. Eventually, Cha-moy could not keep up with the interest payments and ran away with more than 4 billion baht.

Almost a decade later, another massive Thai Ponzi scheme was established under a housing development project called 'Sema-fah-kram.' Sema-fah-kram company owned by Pornchai Singsema claimed that it ran a housing development project in a suburb of Bangkok. Sema-fah-kram company lured in more than 50 million baht of investment funds from more than 1000 people.

The rampant emergence of high-profile Ponzi scheme during the 1970s and early 1980s let the Thai government take the issue seriously. In 1984, Ministry of Finance and Ministry of Interior were tasked to oversight the Ponzi schemes and fundraising practices outside the formal banking and securities system under the Emergency Decree on Borrowing Which Are Regarded as Public Cheating and Fraud, B.E. 2527 (1984).²⁴⁹ Soon after the enactment of the Decree, Thai

²⁴⁹ Published in the Government Gazette Vol. 101, Part 164, Special Issue, page 1, dated 12th November B.E. 2527 (1984).

Court found both Cha-moy Tipso and Pornchai Singsema guilty of public fraud under Section 343 of the Thai Criminal Code and Sections 4, 5, and 12 under the Emergency Decree on Borrowing Which Are Regarded as Public Cheating and Fraud, B.E. 2527 (1984). While the actual prison term under the Criminal Code and the Decree amounted to more than 200,00 years, the actual prison term was capped by Section 91 of the Criminal Code at 20 years. Since the government took the Ponzi scheme seriously and raised public awareness, the number of Ponzi schemes have subsided.

Recently, several Ponzi scheme cases have rebound especially on social media. A massive Ponzi scheme case stroke again in April 2017 when 871 victims were left to wait for six Airbus A330 planes that were supposed to take them to Japan as part of a package tour offered Sensei Shogun. In December 2016, Pasit Arinlapis or Sensei Shogun founded WealthEver company which used 'Wealth Ever for Life" Facebook page and LINE application group to recruit members and solicit investments for WealthEver's nootropics supplements business. Sensei Shogun claimed that a member who invests around 9000 baht (approximately \$300) would be offered a five-day package tour to Japan which generally costs around 30,000 baht for free. At the beginning, Sensei Shogun gave away free trips to Hong Kong and Japan to about 60 members. Sensei Shogun detailly documented and photographed the trips to promote her Ponzi Scheme on WealthEver Facebook page and LINE group. Since these first few trips were real, good words about such incredible travel deals quickly spread. Sensei Shogun also created numerous marketing activities such as iPhone giveaways, free river-cruise dinners, and a Mercedes Benz car raffle. These activities created buzz luring many people to participate in the Ponzi Scheme.

Unlike Mae Cha-moy and Sema-fah-kram cases, Sensei Shogun's communicate instantly and directly with potential members on social platforms. Money was also transmitted instantly by online and mobile payments. Accordingly, Sensei Shogun reached out to almost a thousand of investors by herself within a few months. At the same time, bad words about the Ponzi scheme also spread at even faster speed. Within a matter of hours, news about the 871 victims at the airport surfaced on social media and national news reports.

2. Pyramid Schemes

A pyramid scheme is a form of a business model that recruits members by promising returns based on several new member recruitments into the scheme instead of the volume of sale or investment. As a pyramid scheme saturates a market, it becomes impossible for the members to recruit enough members to make a profit. In most jurisdiction, pyramid schemes are illegal because they do not provide actual products or services but only siphon membership fees back from the bottom to the top of the pyramid. A pyramid scheme can be distinguished from a Ponzi scheme.

In Thailand, pyramid schemes are often adapted to accompany the sale of products like food supplements, skin care products, and educational and professional training courses. While offering some actual products, pyramid scheme proprietors often make unrealistic claims about the qualities of their products in order to attract more consumers and to sell such product at incredibly high prices.

Magic Skin case was the most recent famous pyramid scheme case in 2018. Magic Skin, found in 2017, was a supplement, skin care, cosmetic products company that operated a business based on a pyramid scheme. The company's strategy was to encourage current sale representatives to find team members or down-line representatives by offering to sell the products to representatives at a fraction of retail price so sale representatives could make good

profits from the hefty price difference. While upstream sale representatives were offered the products at a very low price, sometimes less than 10 percent of the retail price, they were required to purchase a very high volume of products. The sale representatives at the provincial level were required to made advance payments to keep their status.

Magic Skin was very keen on marketing. Magic Skin used social network platforms such as Facebook as its main platform for communication and advertisement. To make the brand looks credible, Magic Skin hired many A-list celebrities and social media influencers to promote and review its products on its Facebook page. Besides, the marketing team also trained and advised the sale representatives to sell and recruit new member by appearing to be wealthy. While, Magic skin executives posted photos and video of themselves with expensive home, exotic cars, luxury handbags, or big piles of cash. lower-ranked representatives presented the supplement and skincare products alongside gold jewelry, iPhones, and cash. These displays of affluence were to convey a message that Magic Skin could make its sale representatives rich. New sale representatives were convinced that the product would sell well, and they could also be rich within a short period of time. The sale volume of Magic Skin products rose to 300 million baht (\$10 million) at one point.²⁵⁰

As Magic Skin pyramid network expanded, the volume of orders exploded. Unable to fulfill its massive volume of orders, Magic Skin produced most of its products with unscrupulous ingredients in makeshift factories. A significant portion of Magic Skin products contained heavy metals and carcinogenic substances. Reports on severe allergic reactions and health complications quickly circulated on social media channels include the very same platforms Magic Skin used to operate its business. Such negative news swiftly broke national news and gained tremendous public attention. The Thai Food and Drug Administration (FDA) rushed to announce that the FDA did not approve Magic Skin products. Magic Skin sale representatives who stocked up the several-million-baht worth of the bogus products could no longer sell them. The police confiscated assets of 8 Magic Skin's executives and pressed public fraud charges against them.

3. Fraudulent ROSCAs

As mentioned earlier, ROSCAs have been widely practiced within a small group of people from the same locals. Nonetheless, large-scale commercialization of ROSCAs first happened in Thailand in 1966 when Lee Guang Ming company organized a form of ROSCA originated in overseas Chinese communities in Malaysia and Singapore. The operation of Lee Guang Ming ROSCAs was similar to ROSCA already practiced in Thailand, but Lee Guang Ming exclusively took the ROSCA manager role. Lee Guang Ming did not contribute to the ROSCAs nor receive the first-round fund. Lee Guang Ming still performed a manager's responsibilities like forming, managing, and paying participants. Lee Guang Ming also collected service fees from ROSCA participants. The business expanded exponentially, and the ROSCAs were no longer practiced among friends and family members. The size of a ROSCA also increased significantly. Many organized ROSCAs reached more than 100 participants making the fund very large. As the ROSCA business was very lucrative, many other companies started ROSCA business. From 1978 to 1979, there had been a significant increase in the number of

²⁵⁰ Post Reporters, Magic Skin Owners Brace for Asset Seizure, Bangkok Post, https://www.bangkokpost.com/news/crime/1466666/magic-skin-owners-brace-for-asset-seizure (Last visited Dec. 23, 2018).

companies registering for ROSCA business with the Ministry of Commerce. In particular, more than 200 companies filed the registration within just one year.

At the same time, it was apparent that many of the ROSCA companies failed to deal with people who were tempted to run away with a big pot of money. Most ROSCA companies were unable to compensate victims of collapsed ROSCAs. The Thai Government at that time used the executive power to halt the registration of ROSCA companies. The executive action was not supported by the legislative branch as they did not pass any ban on ROSCA business. The Supreme Court of Thailand decided that registration of ROSCA business was a right and liberty under the Constitution.²⁵¹ Therefore, any restriction on ROSCA business could only be implemented if a law clearly proclaimed such restriction. Therefore, the registration of ROSCA business should be regulated under Section 1019 of the Civil and Commercial Code like other businesses under such Section. The order to halt registration was therefore unlawful. Yet, the real crisis occurred between 1983 and 1984 when the number of ROSCA companies rose up to more than 400 companies, and many of them began to run out of business because borrowers failed to make payments. Moreover, some ROSCA companies also exploited the situation and defrauded their own clients. Many of these fraudulent ROSCA companies were related to each other and were set up merely to defraud the public. Financial losses of ROSCA participants were severe and widespread. Consequently, the Thai legislator took notice and passed the Len-share (ROSCA Operation) Act B.E. 2534 in 1991. The primary purpose of the ROSCA Act was to protect people of public fraudulent, defend government-sponsored saving programs and institutions, and prevent system-wide economic crisis. In effect, all ROSCA companies and their related business were entirely banned and deemed illegal. Yet, ROSCAs organized and practiced by individuals are allowed and regulated under the ROSCA Act. While the details of each case may vary, these fraudulent cases have several characteristics in common. First, all of these cases recruited a large number of people from the public by the mean of public solicitation. Second, these fraudulent cases promised incredibly high returns to incentivize victim to invest as much money as they can. Third, all of the fraudulent fundraising methods have not been regulated or securitized by the victims until after significant losses have had occurred many victims. The following section will illustrate how laws and regulations have been developed in response to these common characteristics.

B. Laws and Regulations on ROSCAs and other Informal Fundraising Methods

While the previous section discusses the situations and events that have meaningfully influenced laws and regulations on ROSCA practices in Thailand, this section will directly examine the laws and regulations on ROSCA practice in Thailand. Indeed, laws, and regulations on ROSCAs have developed in response to the constant public concerns over a long history of high-impact fundraising and lending frauds which were operated outside the banking and securities regulation regimes over several decades. While laws and regulations have been gradually developed to address the series of frauds in the past, these reactive laws and regulations fail to catch up with the rapidly evolving financial services like online ROSCAs which have been assisted by the internet and mobile technology. The laws, and regulations on ROSCAs were designed to severely restrict or prohibit such activities categorically. In other words, regulators choose to deem most of shadow banking activities illegal instead of attempt to regulate them.

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²⁵¹ Supreme Court (Thailand) Decision 2383/2536.

The attempt of the Thai government to categorially ban banking activities outside of the formal financial system appeared in the very first legislation on banking. The Revolutionary Council Order No. 58 was passed in 1972 to prohibit anyone from operating banking and fundraising business unless the person or entity obtains a license from the Ministry of Finance. The Bank of Thailand is subsequently authorized by the Ministry of Finance to license and regulate financial service providers based on rigid categories of covered entities. Generally, the banking regulation framework aims to proactively scrutinize and regulate banking and lending service providers to prevent and mitigate harms that may happen to the economy and financial consumers. Although ROSCAs directly involve lending and fundraising activities, ROSCAs seemingly slip through the regulation of the Bank of Thailand because the ROSCAs do not belong to any class of covered business entities. At the same time, ROSCAs are directly regulated under the ROSCA Operation Act B.E. 2534 which is specific legislation that stipulates the scope and methods of lawful operation of ROSCAs. In other words, the ROSCA Operation Act may restrict the size, volume, and publicity of ROSCAs. Therefore, both the Bank of Thailand's regulatory framework and the ROSCA Operation Act seem to address the three characteristics of the aforementioned fraudulent fundraising methods. I will discuss the Bank of Thailand's regulatory framework and the ROSCA Act B.E. 2534 respectively.

1. Bank of Thailand's Regulatory Framework

The regulatory structure for banking and lending regulations in Thailand is highly centralized. The current regulations on the business of banking and lending first began in 1972 when the military dictator took control and enforced the Revolutionary Council Order No. 58 (the Order). At the time, the military dictator was afraid that the expansion of private business dealing with promissory notes, fundraising, purchasing or exchanging financial assets, and representing these activities might affect the safety or peace of the public. Section 5 of the Order prohibited anyone from operating businesses involving insurance, warehouse, banking, deposition, credit fonciers, promissory notes, fundraising for lending or buying promissory notes or other financial instruments, purchase, sell, or exchange financial instruments such as bonds, equities, debentures, or commercial instruments, and provide advice regarding investment in such financial instruments. The Order gave the authority on the covered businesses to the Ministry of Finance and provided that the Ministry of Finance might delegate the Bank of Thailand to license and regulate the covered businesses under the Ministry of Finance's authority.

Today, the Revolutionary Council Order No. 58 remains in force, and the Bank of Thailand is essentially the sole regulator of all banking, lending, and fundraising activities in Thailand. Notably, the Bank of Thailand regulates banking and lending businesses by relying primarily on Ministerial Regulations, Ministry of Finance Notifications, and the Bank of Thailand Notifications. Besides, Thai legislators also authorize the Bank of Thailand to oversee the banking and lending industry under many specific laws. The most important law in the area of financial regulation is the Business of Financial Institutions Act which has been recently updated in 2015. Other relevant laws include the Currency Act B.E. 2551, and the Payment System Act B.E. 2560. Therefore, the authority of the Bank of Thailand is broad covering various types of banking and lending activities from traditional banking to online lending like peer-to-peer lending or online ROSCAs.

²⁵² The Revolutionary Council Order No. 58

²⁵³ The Revolutionary Council Order No. 58 section 5 and section 14.

a) Financial Institution Act B.E. 2551 (2008)

In 2008, The legislators passed the Business of Financial Institutions Act B.E. 2551 to replaces the Commercial Banks Act and Financial Company Act. Both Acts regulated financial institutions, but the Financial Institution Act also designates the new definition of "financial institutions" to include commercial banks, finance companies, and credit fonciers.²⁵⁴ The Business of Financial Institutions Act significantly transforms Thailand's banking and lending regulations on financial institutions in two important ways.

First, the Business of Financial Institutions Act authorized of the Bank of Thailand to regulate financial institutions that involve in banking, lending, fundraising activities. In general, the Bank of Thailand has the authority to license, oversee and regulate financial institutions and relevant financial activities. Any business that is considered a financial institution will be subject to the Bank of Thailand's broad scope of regulation. Section 5 of the Business of Financial Institution Act regulates financial controls such as reserve fund, investment restrictions, business operation standards, credit restrictions, credit issuing, and financial business operation if such activities may affect the economy of the country. 255 Section 9 mandates that financial institutions must obtain a license from the Bank of Thailand. 256 Section 17 requires that at least 70 percent of common and preferred stocks of a financial institution must be held by Thai nationals. ²⁵⁷ The Act regulates relating activities such as asset management, solvency, accounting, merger and transfer, auditing, and financial controls.²⁵⁸ For example, Any person holding more than 10 percent of all floating stocks must receive permission from the Bank of Thailand.²⁵⁹ Section 29 requires that financial institution must maintain reserve as prescribed by the Bank of Thailand based on debt to asset ratio and other risk factors.²⁶⁰ Financial institutions must also periodically disclose information regarding its reserve and risks to the Bank of Thailand.²⁶¹ In addition to regulating lending activities, the Business of Financial Institutions Act also covers fundraising siding of financial institutions. Section 5 provides that the Bank of Thailand can pass ordinances to control public fundraising.²⁶²

Second, the Business of Financial Institutions Act authorizes the Bank of Thailand to oversee and prescribe consumer protection measures to protect financial consumers. In particular, Section 39 authorizes the Bank of Thailand to oversee financial consumer protection covering a wide range of activities such as deposit taking, lending, investment, and credit approval. Section 39 also extends the scope of consumer protection to cover situations when financial institutions create legal transactions or contracts with consumers. Furthermore, Section 40 requires that financial institutions must notify consumers about methods and details regarding fees including interest, discount, and any other service fee. In addition, the Act also broadly authorizes the Bank of Thailand to compel financial institutions to do or not to do certain

²⁵⁴ Financial Institution Act B.E. 2551 (2008) Section 4.

²⁵⁵ Financial Institution Act B.E. 2551 (2008) Section 5.

²⁵⁶ Financial Institution Act B.E. 2551 (2008) Section 9.

²⁵⁷ Financial Institution Act B.E. 2551 (2008) Section 16.

²⁵⁸ Financial Institution Act B.E. 2551 (2008) Chapter 2.

²⁵⁹ Financial Institution Act B.E. 2551 (2008) Section 18.

²⁶⁰ Financial Institution Act B.E. 2551 (2008) Section 29.

²⁶¹ See id

²⁶² However, Section 6 excludes fundraising via the selling of securities from the authority of the Business of Financial Institutions Act.

activities in order to prevent and resolves the economic crisis.²⁶³ These measures aim to improve corporate governance and transparency of financial institutions.

b) Bank of Thailand's Notifications on Restricted Personal Lending Business

Subsequent to the Business of Financial Institutions Act, the Bank of Thailand issued Notification 61/2560 Re: standards, measures, and conditions for operating business on restricted personal loans for financial institutions (Notification 61) in 2017. Notification 61 is a comprehensive compilation of previous notifications. Notification 61 specifically defines restricted personal loan as personal loans which are not secured by any collateral asset. Notification 61 also sets the ceiling on the amount of personal loans which financial institutions can offer to borrowers based on their average monthly bank account statement over the previous six months. While the previous Notification passed in 2007 set up that ceiling at five times of a monthly bank statement, the current Notification creates two tiers of the ceiling. For borrowers with a monthly bank statement of less than 30,000 baht, the maximum allowable loan must be less than one and a half times of the monthly bank statement. For borrowers with a monthly bank statement of equal or more than 30,000 baht, the ceiling remains at five times of a monthly bank statement.

Moreover, Notification 61 sets the maximum effective rate for any personal loan at 28 percent per year. The effective rate is meant to include all interests, fees, and penalties for default and delinquency. However, Financial institutions may request borrowers to pay for additional operational fees to cover operational costs that the financial institution incurred such as regulatory fees. Notification 61 also contains customer protection provisions such as a requirement for clear disclosure of interests, fees, and fines in prospectuses, applications, and contracts, ²⁶⁴ a requirement for periodic debt reports and receipts which clearly and separately indicates capitals, interests, and outstanding debts, ²⁶⁵ a requirement for payment notifications which must include details about applicable interests, fees, and fines and must be delivered at least ten days before due dates, ²⁶⁶ and a requirement for data protection which obliges financial institutions to implement measure to make sure that consumer's information is correct and complete and to maintain the confidentiality of the information. ²⁶⁷

In addition to Notification 61, the Bank of Thailand also issued Thailand Notification 62/2560 Re: standards, measures, and conditions for operating the restricted personal lending business for personal loan lenders which are not financial institutions (Notification 62) in 2017. Essentially, Notification 62 is almost identical to Notification 61. The only difference is that Notification 62 regulates non-banks which only include credit card companies and registered personal loan companies. Because most of the non-banks have closed down during the 1997 Asian financial crisis and the Bank of Thailand has never granted any license to a non-bank applicant, Notification 62 only regulates a handful of credit cards and personal loan companies. In other words, Notification 62 does not apply to shadow banking services like ROSCAs or unregistered loan companies. In fact, Section 5.2 of Notification 62 also requires that covered

²⁶³ Financial Institution Act B.E. 2551 (2008) Section 42.

²⁶⁴ See id at 5.2.4.

²⁶⁵ See id at 5.2.5.

²⁶⁶ See id at 5.2.6.

²⁶⁷ See id at 5.2.8 (Financial Institution may disclose consumer's information only in certain circumstances such as a disclosure upon obtaining written consent from the consumer, a disclosure for investigation or litigation, and disclosure for authorized credit report companies).

lenders must receive specific permission from the Mistry of Finance through the Bank of Thailand.²⁶⁸ In other words, any business that wishes to legally operate in Thailand's personal loan space must obtain the personal loan lending license through the Bank of Thailand.

c) Bank of Thailand's Notifications for Business of Retail Business Loans for Financial Institutions

The Bank of Thailand also issued Notification 6/2558 re: standards, measures, and conditions for operating business of retail business loans for financial institutions (Notification 6) to promote access to microfinance in order to alleviate the illegal lending practices which are commonly used by low-income people in Thailand.²⁶⁹ Loans under Notification 6 are aimed at supporting borrowers' ability to gain sustainable income; therefore, the loans cannot be used for consumption purposes like purchasing automobiles, real properties, or refinancing.²⁷⁰ Generally, Notification 6 is very similar to regulations for regular personal lending.

Similar to Notification 61, Notification 6 contains consumer protection provision like disclosure of interests, fees, and fines, debt reports and receipts, payment notifications and warnings, and data protection. Nevertheless, there are a few key differences. First, there is no ceiling based on a monthly bank statement. Instead, the ceiling is fixed at 100,000 baht for every borrower. Second, the maximum for the effective interest rate is raised to 36 percent per year. Like regulation on regular personal loans, the effective interest rate includes interests, fees, and fines. The Bank of Thailand also separately issued Notification 5/2558 re: standards, measures, and conditions for operating business of retail business loans for lenders which are not financial institutions to regulate non-bank lenders. Similar to Notification 62, Notification 5 requires lenders that wish to offer occupation loans to obtain a specific license through the Bank of Thailand.

d) Bank of Thailand's Financial Consumer Protection Center
The Bank of Thailand established the Financial Consumer Protection Center (FCC) in
2012 to support its financial consumer protection goal. The FCC is a one-stop service center that
handles complaints and inquiries relating to all financial products and services offered by the
financial service providers overseen by the Bank of Thailand.²⁷¹ The FCC also must provide to
the public financial knowledge regarding consumer rights and responsibilities.²⁷² Furthermore,
the FCC has a reporting system in which the FCC sends monthly inputs to related departments
regarding consumer financial issues so that the Bank of Thailand can form appropriate and up-todate policies and regulations. Therefore, the FCC is tasked a comprehensive role to prevent,
monitor, and remedy financial consumer problems. Nevertheless, the FCC is only responsible for

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²⁶⁸ See id at 5.2; see also, Notification 62/2560 Re: standards, measures, and conditions for operating a restricted personal lending business for Personal Loan Lenders which are not Financial Institutions. Section 5.2 Letter from Somboon Jitpenthom, Senior Director of Financial Institution Policy Group to all Commercial Banks and Finance Company Re: Standards, Procedures and Condition for Operating small personal loans for occupation purpose (Jan. 26, 2015) https://www.bot.or.th/Thai/FIPCS/Documents/FPG/2558/ThaiPDF/25580018.pdf (Last visited Jan. 17, 2019).

²⁷⁰ Notification 6/2558 re: standards, measures, and conditions for operating business of retail loans for occupation purpose (Notification 6) section 4.1.

²⁷¹ Financial Consumer Protection Center (FCC), About FCC, https://www.1213.or.th/en/Pages/About-FCC.aspx (Last visited Jan. 17, 2019). (The FCC's oversight also has a broad co-operate with other authorities of which roles also involve financial consumer protection, such as Securities and Exchange Commission Thailand (SEC), Thailand Securities Institute (TSI), Office of Insurance Commission (OIC), Ministry of Finance (MOF), Office of the Consumer Protection Board (OCPB)).

²⁷² See id.

financial consumer issues arising from the financial service providers under the Bank of Thailand's oversight. The limited authority of the FCC effectively excludes ROSCA participants and most consumers of shadow banking services from FCC's valuable programs and services.

2. The Len-share Act B.E. 2534

The Len-share (herein, the ROSCA Operation) Act B.E. 2534 was passed to protect people of widespread public frauds, defend government-sponsored saving programs and institutions, and prevent system-wide economic crisis.²⁷³ Therefore, the ROSCA Operation Act effectively bans ROSCAs which are operated as a business and restrict ROSCAs to operate on a small scale. Section 4 of the ROSCA Operation Act defines a ROSCA as an activity in which three or more individuals agree to be participants and contribute money or other assets to create ROSCA funds for a determined number of rounds so that each participant can take the fund at each round in an order determined auction mechanism or other methods. Therefore, the definition makes it clear that only individuals or natural person per the Thai legal system can form and engage in any process of a ROSCA.

Section 5 further emphasizes that participants must only be natural persons and prohibits judicial persons (i.e., corporations, companies, and government entities) from being a ROSCA manager or forming a ROSCA. Section 8 also prohibits judicial persons from promising to pay or paying a ROSCA manager or ROSCA participants. In effect, a business cannot pay or hire individuals to form or manage a ROSCA for them. Section 10 prohibits a business name that includes the word 'share' (a Thai word for ROSCA) or other words which have a similar meaning.

Not only the ROSCA operation Act prohibits judicial persons from engaging a ROSCA, but the Act also put many restrictions on individuals who participate in a ROSCA. Section 6 prohibits individuals from being a manager or forming a ROSCA or ROSCAs which has any of the following characteristics: (1) engaging in more three ROSCAs at a time; (2) having more than 30 participants in all ROSCAs²⁷⁴; (3) having a combined value of a fund or funds for each round exceeding a maximum limit determined by the Ministry of Finance (Currently set at 300,000 baht or \$10,000); and (4) allowing a ROSCA manager to receive benefit other than receiving the first-round fund interest-free. Section 6 (1)- (3) limits the possibility that a ROSCA or ROSCAs managed by a ROSCA manager will be too large in terms of numbers of participant or amount of a fund for each round. For clarification, Section 6 counts a ROCSA manager as one of the participants because a ROSCA manager also contributes to the funds just like other participants. For instance, if a ROSCA manager already formed one twelve-participant ROSCA and one six-participant ROSCA, the manager can only form the other ROSCA that contains no more than twelve participants. Similarly, if the combined value of for the funds for each round from first and second ROSCAs is 200,000 baht, the third ROSCA can only have a fund of at most 100,000 baht for each round. Section 6 (4) aims to regulate benefits that ROSCA managers can receive which might help prevent ROSCA managers from exploiting or taking advantage of their participants. The provision also disincentives the commercialization of ROSCAs as ROSCA managers will not be able to charge service fees or other fees akin to Lee Guang Ming's business model mentioned earlier.

²⁷³ Len-share (ROSCA Operation) Act B.E. 2534.

²⁷⁴ For clarification, Section 6 counts a ROCSA manager as one of the participants because a ROSCA manager also contributes to the funds just like other participants.

Section 9 also prohibits anyone (either natural or judicial persons) from soliciting the public to join or participate in a ROSCA. Seemingly, Section 9 broadly covers all kinds of entities, not just ROSCA participants, ROSCA managers, and ROSCA business. This means that even legitimate ROSCA managers and ROSCA participants cannot solicit and ask or hire individuals or business entities to solicit the ROSCA to the public. Yet, Section 9 does not prohibit private solicitation. Therefore, ROSCA managers or ROSCA participants can free solicit the ROSCA to their friends, family, or people whom they already knew. For instance, a ROSCA manager can legally call to ask her nephew to join a ROSCA or even ask her nephew to invite her nephew's friend to join a ROSCA as well. Yet, it is illegal for the ROSCA manager to put the solicitation on public posts on Facebook or randomly send the invitation message to strangers on Facebook.

Section 30 gives the Ministry of Finance the authority to pass specific regulations and enforce the ROSCA Operation Act. While the Ministry of Finance is responsible for overseeing public finance²⁷⁵, the Ministry of Finance exclusively assigns its authorities to regulate the country's banking system to the Bank of Thailand.²⁷⁶ Therefore, the Bank of Thailand is more equipped expertise, knowledge, and resources to oversee all banking activities including lending and fundraising. The Bank of Thailand actively oversees two key areas the soundness of the banking system and consumer protection through various regulatory tools such as licensing regimes, continuous monitoring systems, and penalty system. On the other hand, the Ministry of Finance only focuses on policy formulation on financial matters such as fiscal policies, tax policies, and financial system policies.²⁷⁷ Accordingly, the Ministry of Finance does not actively regulate ROSCAs as the Bank of Thailand regulates its covered entities. In contrast, ROSCAs is merely subject to the restrictions and penalties provided by the ROSCA Operation Act. Section 16-27 of the ROSCA Operation Act prescribes criminal penalties including both fines and prison terms. Yet, the Ministry of Finance does not implement a licensing regime nor a monitoring system on ROSCAs.

In contrast, the ROSCA Operation Act is enforced only if the Office of Public Attorney files lawsuits through a proper judicial route. In a Supreme Court Case 2926/2544, eleven ROSCA participants sued a defendant who took the ROSCA fund and ran away for violating the ROSCA Operation Act in pursuant to Section 4, 6, 17 and for misappropriating the ROSCA fund in pursuant to Section 352 of the Criminal Code.²⁷⁸ The Supreme Court decided that all eleven ROSCA participants did not have the standing as plaintiffs for the ROSCA Operation Act.²⁷⁹ Particularly, the Court opined that only the State through the Public Attorney Office would have the standing as a plaintiff in pursuant to the ROSCA Operation Act.²⁸⁰ On the other hand, victims of ROSCAs only have legal recourses under legal violations under the.²⁸¹ Therefore, to seek a legal recourse specifically under the ROSCA Operation Act, victims of ROSCA frauds must go through a lengthy and out-of-control process from reporting the crime to the police, corresponding with the police investigation, and waiting for the Public Attorney Office to file

²⁷⁵ Ministry of Finance, Organization Info, http://www2.mof.go.th/government_agencies.htm (Last visited Jan. 18, 2019).

²⁷⁶ Financial Institution Act B.E. 2551 (2008)

²⁷⁷ See supra note 123.

²⁷⁸ The Supreme Court in Case 2926/2544 (2001).

²⁷⁹ See id.

²⁸⁰ See id.

²⁸¹ See id.

lawsuits. On the one hand, delegating such legal responsibility to the State could help victims who have no resources nor expertise. On the other hand, the whole process can take a lot longer and become less efficient as it involves multiple parties and the victims cannot directly participate in the process. In addition, issues regarding the ROSCA Operation Act are not with the authorities of the FCC. Therefore, ROSCAs participants will not benefit from the comprehensive financial advocacy by the FCC. That is to say, the ROSCA Operation Act can only enforce ex-post when the loss to ROSCA participants already happened.

This section provides a legal landscape of laws and regulations that banking activities including ROSCA operation in Thailand. The Bank of Thailand is tasked with the responsivities to stabilize the banking system, to felicitate financial transactions including lending and fundraising, and to protect inexperience financial consumers. These goals are achieved by financial regulations and policies such as capital reserves, risk controls, interest ceiling, borrower eligibility standards, disclosure requirements, reporting requirements, advertising and soliciting rules, and debt collection standards. While the Bank of Thailand's comprehensive regulations effectively regulates banks and other covered financial entities, the regulations are designed to control specific categories of actors rather than regulating the activities. In other words, the Bank of Thailand's regulation does not extend beyond predetermined categories of covered entities. Therefore, most informal banking practices including ROSCAs are not regulated by the Bank of Thailand's regime. On the other hand, ROSCAs are regulated by the ROSCA Operation Act. Unlike the Bank of Thailand's comprehensive regulations, the ROSCA Operation Act merely prescribes restrictions and penalties. In particular, the ROSCA Operation Act not only ban business entities from forming and managing ROSCAs entirely but it also put up inflexible restrictions on individual actors to limit the numbers and size of ROSCAs an individual can form, manage, and participate. Such restrictions strictly limit the operation of ROSCAs especially in today's digital age where internet and mobile technology help facilitate financial transactions among people across distance. In fact, the rigid restrictions and lack of active oversight may push modern practices of ROSCAs, especially online ROSCAs to operate outside of the realm of laws and regulations altogether.

C. ROSCAs in the Current Regulation Landscape

1. Traditional ROSCAs in the Current Regulatory Landscape

Traditional ROSCAs are practiced locally and casually among friends and family members. Therefore, legal compliance might not be the main concern of people who form a traditional ROSCA. Nevertheless, most traditional ROSCAs already complied with both the Bank of Thailand's regulation and the ROSCA Operation Act because traditional ROSCAs are not suitable for scaling up to operate commercially. In particular, because traditional ROSCAs largely depends on interpersonal relationships, traditional ROSCAs are limited within the frontiers of the social network or local community in which participants of the ROSCA belong. It is unlikely that a traditional ROSCA manager will exceed the legal limits prescribed by the ROSCA Operation Act like engaging in more than three ROSCAs at a time, having more than 30 participants in all ROSCAs, or collecting the total sum more than \$10,000.²⁸² Therefore, most traditional ROSCAs that rely on interpersonal relationships are less likely to violate the ROSCA Operation Act. In other words, if a traditional ROSCA complies with the ROSCA Operation Act, the ROSCA will not be able to go beyond relationship-based to operate at a commercial level.

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²⁸² Section 6, Len-Share Act B.E 2534.

Likewise, traditional ROSCAs are unlikely to be considered as a financial institution because most traditional ROSCAs operate locally by a handful of friends and family members and do not operate commercially like financial institutions. The Thai Supreme Court Decision 2013/2537 suggests the Usury Limit Act B.E. 2475²⁸³ which prohibits anyone including individual persons and business entities from charging an interest rate of more than 18 percent per year does not apply to a traditional ROSCA. This implies that the Supreme Court does not consider a traditional ROSA as a person nor a business entity. Because traditional ROSCAs are regarded as not a business of lending and fundraising, various Bank of Thailand's regulatory tools such as reserve fund, investment restrictions, business operation standards, and credit restrictions, will not apply to traditional ROSCAs. In fact, these regulatory tools are not applicable to traditional ROSCAs that are practiced primarily based on interpersonal relationships and social networks. Moreover, as traditional ROSCAs have long been perceived as a local fundraising tool, the Bank of Thailand has never regulated or pushed any policies around the area of ROSCAs.

2. Online ROSCAs in the Current Regulatory Landscape

While online ROSCAs share many similarities with traditional ROSCAs, online ROSCAs solicit publicly on widely accessible forums and operate commercially at a large scale. Therefore, unlike traditional ROSCAs, online ROSCAs are severely restricted by the current regulatory landscape including both the Bank of Thailand's regulations and the ROSCA Operation Act. As mention earlier, a single online ROSCA manager regularly recruits over thirty participants per day. Therefore, online ROSCAs can easily exceed the legal limits in terms of a number of participants or volume of capital. Most importantly, because online ROSCAs advertise and recruit participants from online forums, like Facebook pages which are publicly available. Therefore, online ROSCAs inevitably violate Section 9 of the ROSCAs Operation Act which prohibits the public solicitation of ROSCAs. In other words, even if a ROSCA manager only form and manage one ROSCA from a group of ten participants, such ROSCA will violate Section 9 as long as the manager recruits ROSCA participants from a publicly available online forum. In other words, all online ROSCAs no matter how big or small will be illegal because the business model of online ROSCAs rely on advertising or recruiting participants on online forums which are widely accessible to the public. Hence, the ROSCA Operation Act fails to address the fact that online ROSCAs depend on online forums to advertise, recruit, and manage participants. The inflexibility of the ROSCA Operation Act effectively bans all online ROSCAs rather than compelling them to operate locally among friends and family members as the legislators would have expected.

Furthermore, because online ROSCAs tend to operate commercially, it is questionable whether online ROSCAs should be considered as a business of banking and lending under the Revolutionary Council Order No. 58. It is evident that online ROSCAs operate commercially with a focus on profitability to the ROSCA managers who advertise, recruit members, set interest rates and rules, collect money, and enforce unpaid debts all by themselves. In other words, online ROSCA managers behave more like business operators who have control over all aspects of the enterprise. While the Thai Court has yet decided on the business entity status of online ROSCAs, it is possible that the Court will find online ROSCAs to operate in a business manner and subject to the Usury Limit Act. By the same token, online ROSCAs would also be subject to the Bank of Thailand's banking and lending regulations. It could be even more complicated than

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²⁸³ The Usury Limit Act B.E. 2475 was replaced by the Usury Limit Act B.E. 2560.

it appears as the Bank of Thailand's cover entities are only limited to commercial banks, finance companies, and credit fonciers.²⁸⁴ In other words, while online ROSCAs appear to be in a business of lending and fundraising which should be subject to the Bank of Thailand' regulation, the Bank of Thailand does not have the authority to license or regulate any business outside to the enumerated categories. Without the ability to obtain a license or be regulated by the Bank of Thailand, the entire online ROSCA industry is effectively illegal and unregulated must operate in outside of the formal financial system.

3. Online ROSCAs in the Shadow

Generally, ROSCAs are legal and recognized by the ROSCA Operation Act. Most traditional ROSCAs formed with a group of friends and family members have successfully operated without any legal glitch as long as they follow the ROSCA Operation Act. On the other hand, online ROSCAs are categorially illegal because several aspects of online ROSCAs such as size and volume, advertisement, compensation, and commercialization blatantly violate many rules set out by the ROSCA Operation Act and the Bank of Thailand's regulatory framework. Instead of curbing and halting online ROSCAs, the ambiguity of legality of online ROSCAs pushes them to become more secretive and operate in the shadow system where regulation and enforcement are even harder to implements. Indeed, online ROSCAs have been used to conceal other illegal activities like loan sharks and fraudulent schemes.²⁸⁵

Many online ROSCAs do not operate a real ROSCA but conceal extremely-high-interest-rate lending under a ROSCA.²⁸⁶ Instead of pooling money from participants or allowing them to bid for the fund, a loan shark would set up a fake ROSCA in which all capitals are provided by the ROSCA manager or loan shark. A loan shark in disguise will let a participant take the first round of fund and require her to pay back in the form of contributions to the nonsexist ROSCA afterward. Participants do not see through the trick because they do not know other participants and every interaction is made between an individual participant and the ROSCA manager. Like loan sharks, such fake ROSCAs also use violent tactics such as coercion, illegal confiscation of properties, threats and actual bodily harms to enforce unpaid debts.

Online ROSCAs are also utilized to conceal frauds. Several online ROSCAs were formed to defraud participants who yearn for high-return investment. For example, Bann Share Starzy which was a collection of online ROSCAs managed by one ROSCA manager defrauded more than 500 million baht (approximately \$16 million) from 222 victims who were participants from the Bann Share.²⁸⁷ The victims reported that the ROSCA manager formed dozens of ROSCAs. Each ROSCA offered very high-interest rates to dupe the victims to make substantial capital contributions to the ROSCAs. The manager will take the first few rounds of the funds meanwhile still making regular contribution and interests. Once the manager took all the funds, she had her name on, she closed down the ROSCA and stopped making payment anymore. The manager used some of the money she made as seed fund to pay for other new formed ROSCAs. The number of ROSCAs and the number of victims expanded exponentially within just less than a year. Bann Share Starzy is just one example of many cases of serious frauds that cause significant losses to a high number of victims in the past few years. Indeed, the number of

²⁸⁴ Financial Institution Act B.E. 2551 (2008) Section 4.

²⁸⁵ Polawut Songskul Disclosing Online ROSCA Frauds: New Form of Pyramid Scheme (in Thai), The Standard (Published Nov. 29, 2017), https://thestandard.co/cheats-pyramid-scheme/ (Last visited Jan. 18, 2019).

²⁸⁶ See id.

²⁸⁷ See id.

fraudulent online ROSCAs like Bann Share Starzy have far exceeded those of other traditional fraudulent fundraising methods like Ponzi scheme and pyramid scheme.

One possible way to pull online ROSCAs out of the shadow is to regulate online ROSCAs. By assigning an appropriate regulator to make specific policies and to systematically oversee online ROSCAs, online ROSCAs can be regulated just like other traditional lenders. The Bank of Thailand can be the regulator that oversee online ROSCAs because the Bank of Thailand already have resources and expertise to regulate various lending activities. The Bank of Thailand may be able to apply the financial regulatory framework which involves policymaking, registration, and systematic oversight to online ROSCAs. Nevertheless, the Bank of Thailand is not able to regulate online ROSCAs under the current regulatory regime because online ROSCA activities are still practically illegal and the Bank of Thailand does not have authority to regulate entities outside the current list of regulated financial entities.

The first step towards regulating online ROSCAs is to lift the ban by changing the scope and language of the ROSCA Operation Act to allow the commercialization of online ROSCAs that are regulated by the regulator. For instance, the ROSCA Operation Act should allow registered ROSCAs to advertise to the public and increase the limit on the number of ROSCAs participants and volume of capital so that online ROSCAs can operate commercially and sustainably. The next step is to pass a specific law that authorizes the Bank of Thailand to regulate online ROSCAs and their peripheral activities. These two steps will ensure that online ROSCAs can operate legally under the supervision of the Bank of Thailand. Ultimately, the proper regulation may help the Bank of Thailand achieve its regulatory goals of ensuring that online ROSCAs will be safe for the economic system, enhancing the efficiency of online ROSCAs, and protecting online ROSCA consumers from unfair and inequitable practices.

Conclusion

This essay shows how ROSCAs have operated and evolved in response to technological advancement and regulatory influences. ROSCAs offer an alternative method for ordinary people, especially those underserved by the formal financial system to borrow and invest at desirable rates and terms. ROSCAs have become a viable alternative to traditional financial services because ROSCAs can address the fundamental concerns of lending from both the economic and sociological perspectives. From the economic perspective, ROSCAs rely on interpersonal relationships to mitigate uncertainty and information asymmetry. From the sociological perspectives, interpersonal relationships within ROSCAs also build and maintain interpersonal and institutional trusts among participants. Nevertheless, as online ROSCAs have adopted the internet and mobile technology thereby allowing them to reach to a broader base of financial consumers and operate commercially, online ROSCAs seem to lose their focus on interpersonal relationship. Hence, online ROSCAs may not be able to tackle the fundamental concerns as well as traditional ROSCAs. Moreover, the current laws and regulations regarding ROSCAs have been developed in response to the characteristics of more traditional fraudulent fundraising methods. Hence, while the current regulatory landscape can regulate traditional ROSCAs, it does not recognize the legality of online ROSCAs and fails to address the pertaining fundamental concerns of online ROSCAs. Indeed, the ambiguity of legality of online ROSCAs pushes online ROSCAs to operate in the shadow financial system leaving the online ROSCA participants in a worse position economically and sociologically. Therefore, a proper regulation of online ROSCAs under an oversight by a competent regulator like the Bank of Thailand, rather than an outright ban, will enable the online ROSCA industry to provide valuable financial opportunities to the people at its full potential.