A STUDY OF INFORMAL LOAN IN THE GREATER BANGKOK AREA:

FATORS AFFECTING LOAN DECISION AND INTEREST RATE FROM THE

DEMAND SIDE

Miss Wichyada Tanomchat

A Dissertation Submitted in Partial Fulfillment of the Requirements
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การศึกษาเกี่ยวกับหนี้นอกระบบในเขตกรุงเทพฯ และปริมณฑล ในเรื่องปัจจัยที่ส่งผลต่อการ
ตัดสินใจกู้และอัตราดอกเบี้ยจากข้อมูลฝั่งผู้กู้

นางสาววิชญาดา ถนอมชาติ

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาเศรษฐศาสตรดุษฎีบัณฑิต
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ปีการศึกษา 2560
ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย

Thesis Title	A STUDY OF INFORMAL LOAN IN THE GREATER BANGKOK AREA: FATORS AFFECTING LOAN DECISION AND INTEREST RATE FROM THE DEMAND SIDE
By	Miss Wichyada Tanomchat
Field of Study	Economics
Thesis Advisor	Assistant Professor San Sampattavanija, Ph.D.
Thesis Co-Advisor	Assistant Professor Sukanda Luangon, Ph.D.

Accepted by the Faculty of Economics, Chulalongkorn University in Partial Fulfillment of the Requirements for the Doctoral Degree

....Dean of the Faculty of Economics
(Professor Worawet Suwanrada, Ph.D.)

THESIS COMMITTEE

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(Associate Professor Nualnoi Treerat, Ph.D.)

....Thesis Advisor
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....Thesis Co-Advisor
(Assistant Professor Sukanda Luangon, Ph.D.)

....Examiner
(Associate Professor Sothitorn Mallikamas, Ph.D.)

....Examiner
(Assistant Professor Kanittha Tambunlertchai, Ph.D.)

....External Examiner
(Kontee Nuchsuwan, Ph.D.)

วิชญาดา ถนอมชาติ : การศึกษาเกี่ยวกับหนี้นอกระบบในเขตกรุงเทพฯ และปริมณฑล ในเรื่องปัจจัยที่ส่งผลต่อการตัดสินใจกู้และอัตราดอกเบี้ยจากข้อมูลฝั่งผู้กู้ (A STUDY OF INFORMAL LOAN IN THE GREATER BANGKOK AREA: FATORS AFFECTING LOAN DECISION AND INTEREST RATE FROM THE DEMAND SIDE) อ.ที่ปรึกษาวิทยานิพนธ์หลัก: ผศ. ดร. สันต์ สัมปัตตะวนิช, อ.ที่ ปรึกษาวิทยานิพนธ์ร่วม: ผศ. ดร. สุกานดา เหลืองอ่อน, หน้า.

วิทยานิพนธ์เล่มนี้ได้รวมการศึกษาความน่าจะเป็นในการที่บุคคลได้เลือกกู้ยืมเงินจาก ตลาดเงินกู้นอกระบบ ปัจจัยที่กำหนดระดับอัตราดอกเบี้ยในตลาดเงินกู้นอกระบบ และพฤติกรรม การกู้ยืมซ้ำซ้อนที่เกิดขึ้นในตลาดเงินกู้นอกระบบของบุคคลที่มีอายุตั้งแต่ 20 ปีขึ้นไป ที่อาศัยอยู่ใน จังหวัดกรุงเทพมหานคร นนทบุรี ปทุมธานี และสมุทรปราการของประเทศไทย โดยผ่านการเก็บ ข้อมูลจากแบบสอบถามจาก ทั้งนี้ มีจำนวนผู้ตอบแบบสอบถามทั้งสิ้นเท่ากับ 1,494 คน

ผลการศึกษาพบว่า (1) พฤติกรรมการใช้จ่ายฟุ่มเฟือย ระดับรายได้เฉลี่ยต่อเดือน อัตราส่วนหนี้สินต่อรายได้ รายได้สุทธิต่อเดือน การมีเงินออม และ การทำบัญชีรายรับ-รายจ่ายต่อ เดือนเป็นปัจจัยที่มีอิทธิพลต่อความน่าจะเป็นในการกู้ยืมเงินจากตลาดเงินกู้นอกระบบของประเทศ ไทยอย่างมีนัยสำคัญ (2) ในขณะที่ผลการศึกษาเกี่ยวกับปัจจัยที่มีอิทธิพลต่อระดับอัตราดอกเบี้ย เงินกู้นอกระบบในพื้นที่การศึกษาพบว่า ระดับอัตราดอกเบี้ยเงินกู้นอกระบบแปรตามระดับอิทธิพล ของผู้กู้นอกระบบและอัตราส่วนหนี้สินต่อรายได้ โดยอัตราดอกเบี้ยดังกล่าวได้แปรผกผันกับความ สนิทสนมระหว่างผู้กู้และผู้ปล่อยกู้นอกระบบ (3) จากการศึกษาปัจจัยที่อิทธิพลต่อพฤติกรรมการ กู้ยืมซ้ำซากในตลาดเงินกู้นอกระบบของประเทศไทยพบว่า การมีเงินออม รายได้สุทธิต่อเดือน ความถี่ในการได้รับรายได้ประเภทรายวันและรายสัปดาห์ จำนวนเงินที่ใช้ผ่อนชำระสินค้าต่อเดือน วัตถุนิยม และพฤติกรรมการซื้อโดยขาดการไตร่ตรองมีอิทธิพลต่อการตัดสินใจกู้ยืมเงินนอกระบบ ซ้ำซากของผู้ตอบแบบสอบถาม

สาขาวิชา เศรษฐศาสตร์	ลายมือชื่อนิสิต _____
ปีการศึกษา 2560	ลายมือชื่อ อ.ที่ปรึกษาหลัก _____
	ลายมือชื่อ อ.ที่ปรึกษาร่วม _____

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KEYWORDS: INFORMAL LOAN, INFORMAL CREDIT, INFORMAL INTEREST RATE, LEVEL OF LENDERS' INFLUENCE

WICHYADA TANOMCHAT: A STUDY OF INFORMAL LOAN IN THE GREATER BANGKOK AREA: FATORS AFFECTING LOAN DECISION AND INTEREST RATE FROM THE DEMAND SIDE. ADVISOR: ASST. PROF. SAN SAMPATTAVANIJA, Ph.D., CO-ADVISOR: ASST. PROF. SUKANDA LUANGON, Ph.D., pp.

This thesis examines the likelihood of borrowing money from the informal credit market, the significant factors influencing the informal interest rates, and the factors which affect people's decision on going back to rely on informal credit of individuals over 20+ years of age in four provinces, including Bangkok and Greater Bangkok, in Thailand. The survey uses a multi-stage stratified random sampling method by the weight of populations in each province for analysis with a quota sampling technique. The data used in the study is collected from 1,494 respondents by questionnaires.

The results suggest that (i) luxury spending behavior, income levels, debt-to-income ratio, net monthly income, saving discipline, and the presence of monthly income and expense accounts are consistent with favorable decision-making for a loan from the informal credit market, (ii) the study of correlation between the characteristics of the informal borrowers and the rates shows that the level of the lender's influence and high levels of familiarity between the informal lenders and borrowers were found to be highly correlated with the interest rates. Moreover, the debt-to-income ratio also affects the rates, (iii) consistent saving, net monthly income, income payment on daily and weekly basis, installments, materialism, and impulsive buying behavior affect the likelihood of making repeated informal loans.

Field of Study: Economics	Student's Signature	....
Academic Year: 2017	Advisor's Signature	....
	Co-Advisor's Signature	....

ACKNOWLEDGEMENTS

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ABBREVIATIONS

BOT	Bank of Thailand
DTI	Debt-to-income ratio
HH	Household
INC	Income level
INT	Interest rate level
IV	Instrumental variable analysis
MFIs	Microfinance institutions
N	Number of observations
N/A	Data is not available
NPLs	Non-performing loans
NSO	Thai National Statistical Office
PROBIT	Binary Probit method
Q1	The first quarter of year (January to March)
Q2	The second quarter of year (April to June)
SVYSET	The Stata survey commands
VIF	Variance inflation factor

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Chapter 1

1   Introduction

1.1   Background and Importance of the Study

Informal loan borrowing is a commonly seen phenomenon among people of various age groups in Thai society. It can vary from money borrowing from family members, relatives, friends and coworkers to rich people (moneylenders) who gives out loans as their main income. In addition, many studies have revealed that those who turn to informal credits are not only those who work in inconsistent income sectors such as farmers or dealers, but also include even people with steady income, salarymen or professionals who might turn to informal lenders when they face liquidity shortages and urgent need of money.

The benefit of informal loans is that it allows many people to obtain readily available credit in urgent times for consumption or business investments, but there can also be many downsides to this. Newspapers often highlight the problems that interest rates for such loans tend to be exceedingly high and the process of ensuring payments sometimes involves violence and even physical harm, and many people cannot escape the cycle of debt. Even though the various administration have long attempted to push commercial banks to provide low interest loans to people with informal debts, such as the Nano-finance that shifts informal borrowers into the formal sector, but these were mainly dealing with the end results rather than the cause, as many people who have escaped the informal debt cycle eventually returned to informal borrowing again. This paper then wishes to study why people incur informal debts so widely, even though they are aware of the risks that follow their informal borrowing.

The first research studies about the factors that made people turn to informal credit by focusing on personal factors as well as income and spending behavior, to learn about what drives a person to borrow from informal and sometimes illegal sources rather than depending on formal credit institutions that might have been associated with much lower costs of borrowing (interest rates).

Very high interest rates for informal loans are frequently observed and presented in many papers, but there are very few papers that try to study the methods by which they are determined since the data required are limited and hard to access. Most informal lenders are aware that they are charging excessive rates compared to those permitted by regulations and will not easily disclose their data to the researcher. As this study is aware that it is difficult to reach and obtain data from the lenders' side, it has focused instead on the determinants of informal interest rates from the side of borrowers and uses those factors in econometric analysis to present why informal lenders charge different rates between each borrower. Also, the researcher has conducted an in-depth interview from 14 lenders to confirm the findings on how informal interest rates are determined in Thailand.

Many people who are caught in the informal debt trap found themselves in a perpetual cycle of debt as they frequently turn to informal credits whenever they run out of cash, or whenever they want to purchase a new item or product, but could not afford paying for it with the money they have at the moment. High interest rates charged informally then lead to lower future ability to pay for other goods and services as their income must be used to pay off existing debts and interests. These payments do not generate future income or consumptions for the borrower, and often lead to stress and may even result in persistent troubles in managing one's own income in the long term. Given these facts, this paper has focused on studying the factors that make people repeatedly turn to informal lending, since this knowledge can be used to prevent chronic dependence on informal debt if that person can change some behavior, such as impulsive buying, which can help them escape the vicious cycle of long-term debt.

1.2   Research Questions

The study mainly addresses the following three research questions:

1.) What are the significant factors affecting an individual's probability of borrowing money from the informal credit market?

2.) Does the borrowers be charged different informal interest rates based on characteristics of the borrowers, level of lenders' influence, and level of familiarity between a borrow and his lender?

3.) What are the significant factors influencing an individual to make repeated loans from the informal credit market?

1.3   Objectives of the Study

The main objectives of this thesis are:

1.) To investigate the determinant factors affecting decision making on informal loans of individuals.

2.) To examine the significant factors influencing informal interest rates.

3.) To study the significant factors influencing an individual to borrow repeatedly from informal credit sources.

4.) To propose the guidelines for reducing problems caused by informal loans in Thailand.

1.4   Scopes of the Study

The scopes of the study are:

1.) The study focuses on understanding the personal factors influencing informal loans borrowing. It also includes consider factors affecting interest rates of the loans and motivating people to borrow the loans repeatedly. In this study, respondents may not necessary to be a head of a family, but he/she is a part of a family and has an age of 20 or over who lives in Bangkok and Greater

Bangkok including Bangkok, Nonthaburi, Pathum Thani, and Samut Prakan without census registration concerns.

2.) The time frame for collecting data with surveys lasted for 3 months (during December 2016 to February 2017).

1.5 Benefits of the Study

The benefits of this study accrue to researcher through an improved understanding of the factors determining the individuals' decision making on the informal loans borrowing. It also indicates the factors influencing interest rate of informal loans and motivating people borrow informal loans repeatedly. These assist researcher to suggest the guidance for reducing problems caused by the informal loans.

1.6 Contributions of the Study

The first study contributes to the understanding of the significant factors determining individuals' decision making on borrowing in the informal credit market in Thailand, especially the lack of financial discipline and the relatively high expenses on expensive products, compared to the personal income levels of people, which have yet to be clearly clarified in other studies. These findings fill the research gap in both literature and the data collected from the individual level, and presents important roles of such variables in increasing the demand for informal credit.

The second study was to test the relationship between lenders' influence (over the borrower) and the informal interest rates that were charged. We have not found any existing article which studied those kinds of relationships. Moreover, we also investigate the correlation between close relationship of informal lenders and borrowers, and the interest rates, because the relationships between people in the Thai society are quite close in some areas, especially in rural regions. These findings enhance our understanding regarding why informal borrowers are charged different levels of interest rates, which shows that the determinant factors are notably different from the case of borrowing loans from formal credit institutions.

Finally, the third study highlighted the factors influencing people to return to informal credit dependency. Existing literatures have not provided much clear explanation of why people decide to re-enter the cycle of informal credit borrowing. Therefore, we focused on impulsive buying behavior and the lack of saving disciplines, where the latter is used as a crucial source of money that prevents individuals from needing to rely on informal debts.

Overall, due to the lack of completed data from the borrowers' side in the informal credit sector in Thailand, there are some misunderstandings about the factors influencing informal borrowing, which leads to ambiguity in dealing with the root problems. This is caused by the characteristics of informal borrowers and loans. This study provides this missing knowledge which can be used to be a guideline to be applied for policymakers. Meanwhile, this information will also be beneficial for people in terms of financial discipline realization, and will help them to avoid detrimental spending or saving behaviors that force them to turn to informal loans.

1.7   Key Terms and Definitions

The concept of informal finance is a rather broad topic, as it covers a wide range of activities outside of formal activities in financial institutions which occur outside of regulatory coverage. The Thai National Statistical Office (2007) defines informal debt as debt from common individuals, such as money-lenders, middlemen, relatives, neighbors, where the interest rate is set by the lenders. Schreiner (2001) defined informal finance as "contracts or agreements conducted without reference or recourse to the legal system to exchange cash in the present for promises of cash in the future" (Schreiner, 2001). Whereas, Islam et al. (2015) defined informal loans as credit from moneylenders, landlords, friends and relatives.

For the purpose of this study, *an informal loan* refers to a loan from sources that are not formal credit institutions including loans from relatives, friends, and money-lenders.

In order to explain consumers' behavior in luxury spending in the study, we define *luxury spending* as a spending on non-essential purchases in following items: (i)

brand-name products, (ii) perfumes and cosmetics, and (iii) accessories bought for non-investment or speculation purposes.

Materialism refers to the constant decision to purchase in-trend products that a person desires, often out of impulse.

Impulsive buying refers to a behavior of a person which buys a product that he desires immediately (with unplanned purchase) at the first time he sees it and feel the need to own it.

Debt-to-income ratio is calculated by dividing total recurring monthly debt by gross monthly income, and it is expressed as a percentage where the monthly debts include mortgage loans, installments on car purchase payments, installments on commodity goods, insurance payments, and rents.

Installment refers to purchase of goods through partial initial payments (after that a person needs to do periodic payments that consist of principle and/or interest).

Level of lender's influence refers to an enforcement action of an informal lender in order to recall for informal debt from his borrower including using physical violence, harassment, seizure a borrower's collateral, and no aggressive action when default occurs.

Collateral refers to both tangible and intangible assets: namely land, vehicles, gold, diamond, stocks, bonds, and working tools.

Owning house refers the state of exclusive rights and control over a property, that is, a house, not including a house with mortgage loans, rents, or houses that belongs to another person.

1.8 Outline of the Thesis

The remainder of the paper proceeds as follows. Chapter 2 provides secondary data related to households' income, expenditure and savings, barriers in accessing formal credit channels of Thai households, and up-to-date data of informal loans in Thailand. Chapter 3 presents the data from the survey in this study. Chapter 4 to Chapter 6 provide continuity from the empirical analysis of probability of borrowing an informal loan of a person (Chapter 4), the factors determining informal interest rates

(Chapter 5), to the factors influencing an individual to make repeated borrowings in the informal credit market (Chapter 6). Chapter 7 provides the conclusion to the study.

Chapter 2

2   Informal loans in Thailand

The presentation of the secondary data in this Chapter will start with the overview of the current household situations in terms of income, expense levels, and personal savings of the people in Thailand (topic 2.1). After this, we will present the numerical data for household borrowing statistics, and the obstacles that prevent many people from accessing formal loans from commercial banks in the context of the Thai society. These are meant to provide readers with the understanding of the overview of the situation between the years 2007-2017 (in the first and second quarters) (topic 2.2) which may have contributed to informal borrowing. Our chapter will then show the various measures employed by Thai government in attempts to reduce the burden of the people who are afflicted with the informal debt problem.

2.1   Income, Expenditure, and Savings of Thai Households

Figure 2.1   Monthly income and monthly expenditure per household during 2007 to 2017 (Unit: Baht)
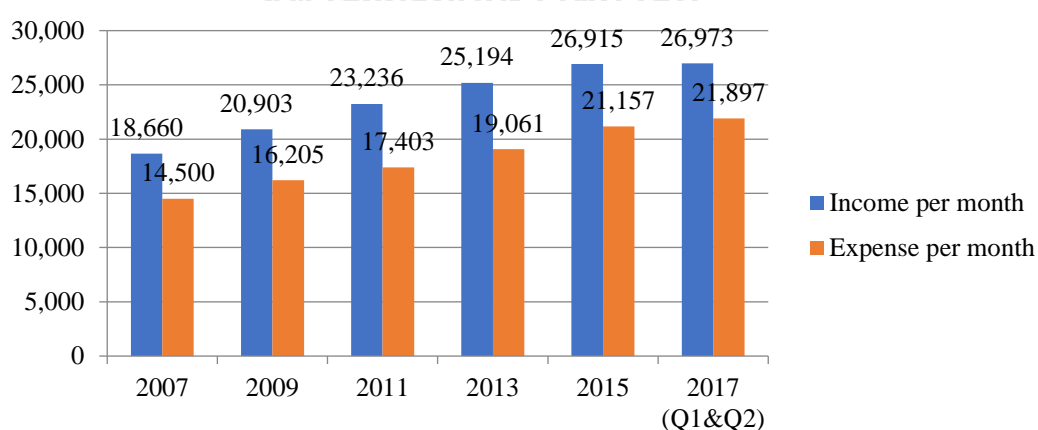
Source: The National Statistical Office, Thailand (2018)

According to the Household-Socio Economic Survey Report by The National Statistical Office[1] as shown in Figure 2.1, the average monthly income and average monthly expenditure of Thai households during 2007 to 2017 (in the first and the second quarters) was found that both of the number have a tendency to slightly increases and it has not much difference between the number of income levels and expenditure levels of the households between 2015 and 2017.

Figure 2.2 Average income level per month of each income group in 2016 (Unit: Baht)
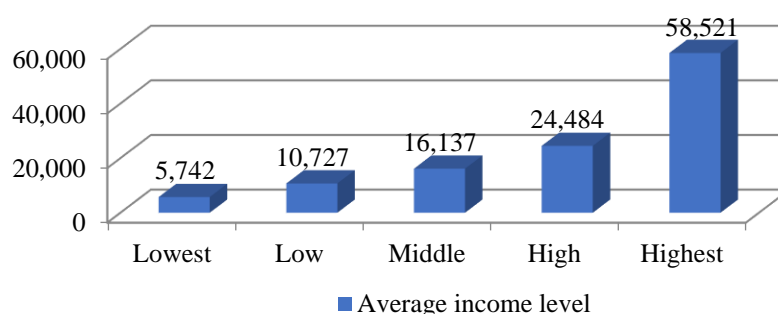
Note: Each income group consists of 20% of all samples
Source: Bank of Thailand (2017)

Figure 2.2 reports the average income level per month of each income group on the individual level in 2016 by the Bank of Thailand.[2] The highest income group had monthly income much higher than the other groups. Whereas the lowest income group had merely 5,742 baht per month for living.

According to the Financial Services and Microfinance Report by The Ministry of Finance[3] as shown in Figure 2.3, the total amount of savings in commercial banks in Thailand during Q1 to Q4 of 2016 occupied the most volume when compared to another sources, followed by specialized financial institution. Savings group had the lowest amount of savings among all sources in the same year.

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[1]http://www.nso.go.th/sites/2014en/Pages/survey/Social/Household/The-2017-House hold-Socio-Economic-Survey.aspx

[2] https://www.bot.or.th/English/FinancialInstitutions/Highlights/FSMP2/2016%20Fina ncial%20Access%20Survey%20Final.pdf

[3] http://www.fpo.go.th/main/News/Press-conference.aspx

Figure 2.3 Total amount of savings in Thailand during Q1 – Q4 of 2016
(Unit: Billion Baht)
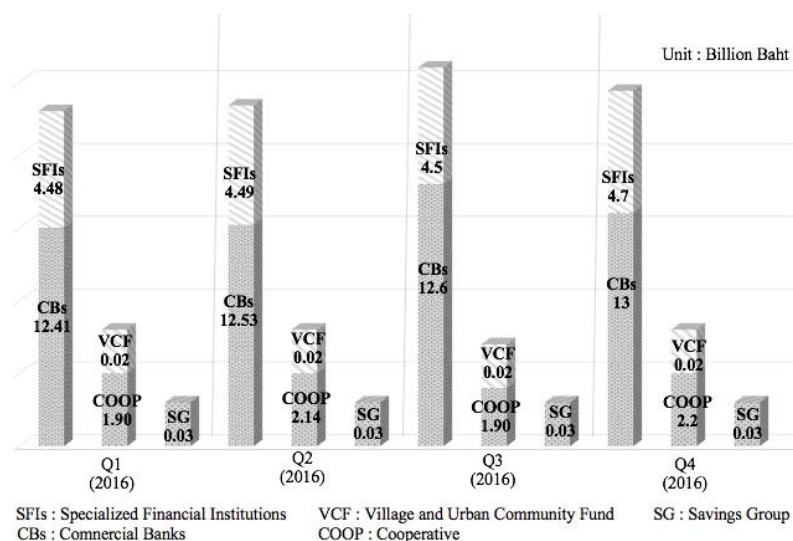
Source: Ministry of Finance (2017)

2.2   Formal Credit, and Obstacle to Access Commercial Banks' Loan

2.2.1   Amount of Formal Loan and Number of Indebted Households in Thailand

The information presented in the section 2.2.1 shows the data for loans incurred by people who have borrowed during Q1 – Q4 of 2016 and the number of households who have formal debts during 2007-2017.

Figure 2.4 shows that loans granted by commercial banks have the highest share in all quarters of 2016, amounting to around 12.5 billion baht per year, followed by loans from specialized financial institutions, cooperatives, village and municipal funds, non-banks, and savings groups, respectively.

Figure 2.4 Amount of formal loans in Thailand during Q1 to Q4 in 2016 (Unit: Billion Baht)
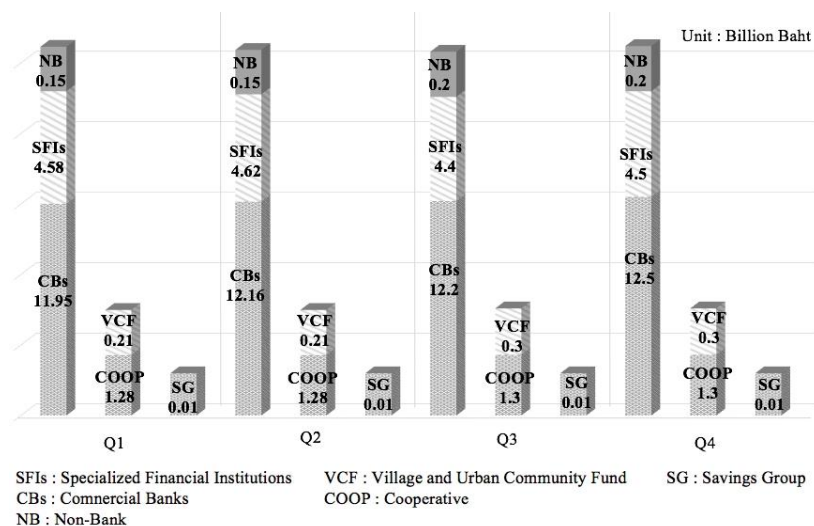
Source: Ministry of Finance, Thailand (2017)[4]

Figure 2.5 Number of indebted households on formal loans during 2007 to 2017 (Unit: Percent)

Source: The National Statistical Office, Thailand (2018)

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[4] http://www.fpo.go.th/main/News/Press-conference.aspx
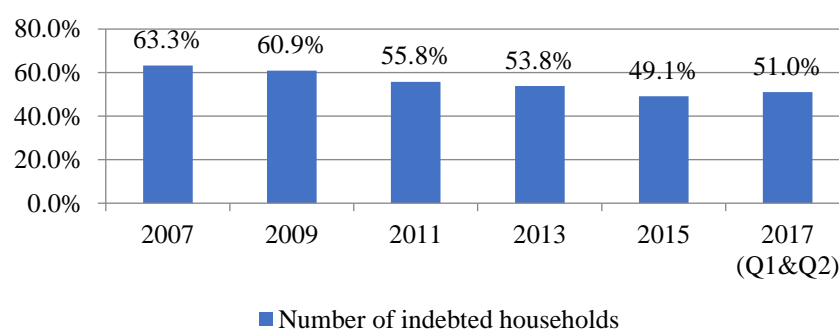
Figure 2.6 Average amount of debt per household during 2007 to 2017 (Unit: Baht)
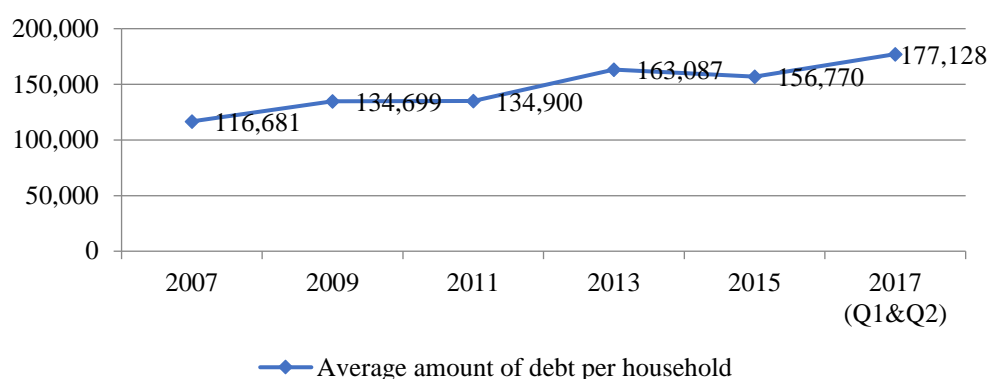
Source: The National Statistical Office, Thailand (2018)

According to the Household-Socio Economic Survey Report by The National Statistical Office as shown in Figure 2.5 and Figure 2.6, the number of indebted households on formal loans decreased from 63.3% in 2007 to 49.1% in 2015, but slightly increased at 51% in the second quarter of 2017. While average amount of debt per household during the same years have a tendency to increase which was equal to 177,128 baht per household in the second quarter of 2017.

2.2.2   Obstacle to Access Commercial Banks' Loan

The vertical bars in Figure 2.7 from The Financial Access Survey of Thai Households 2016[5] show the percentage of the people who could access to formal credit sources by income level between 2013 and 2016. Self-exclusion represents people who choose not to use any financial service. In Figure 2.7, there are not much different between the ratios in 2013 and 2016. However, low income people have access to a limited range of financial services compared to the middle to high income groups. About merely 24.4% and 38.6% of lowest and low income people used financial services, with another 75.6% and 61.3% of lowest and low income people did not use financial services at all in 2016.

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[5]https://www.bot.or.th/English/FinancialInstitutions/Highlights/FSMP2/2016%20Financial%20Access%20Survey%20Final.pdf

Figure 2.7 Access to formal credit by income level between 2013 and 2016 (Unit: Percent)
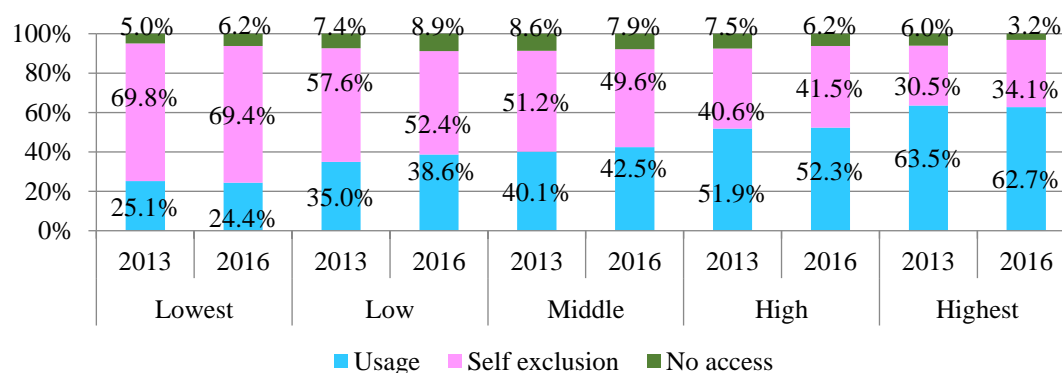
Source: Bank of Thailand (2017)

The reasons for not applying on commercial banks' loans of people in 2016 are shown in Table 2.1. Low financial position and insufficient income were observed to have an effect on both the no-access group and the self-exclusion group, with 43.9% and 14.2% being affected, respectively. 19.4% of the people chose not to apply for formal loans since they cannot meet the qualification requirements.

Table 2.1 Obstacles to access commercial banks' loan services and reasons for voluntary self-exclusion in 2016

Group	Reasons cited for not using commercial banks' loan services	Percent
No access	**Poor financial position/ insufficient income**	**43.9%**
	Lack of confidence/ fears of rejection	19.4%
	Complicated conditions/ processes	7.2%
Self-exclusion	**Poor financial position/ insufficient income**	**14.2%**
	No need to use services	67.7%
	Lack of understanding	7.6%

Source: Bank of Thailand (2017)[6]

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[6]https://www.bot.or.th/English/FinancialInstitutions/Highlights/FSMP2/2016%20Financial%20Access%20Survey%20Final.pdf

2.3   Informal loans, and Government Policy to reduce informal loans

This section addresses the overview information of the key personal characteristics of people with informal debts in Thailand, and the compelling factors that drive them to seek out loans from informal sources rather than from formal credit institutions. Also, we will show the recent numerical data for the overview of the people with informal debts in Thailand, including the measures to help these groups of people by the government, which consist of various policies and projects.

2.3.1   Data from Academic Articles, Documents and Reports Related to Informal Debt in Thailand

This part shows valuable information from previous research papers collected by many other researchers through articles and academic papers, which deal with the informal debt problem in the Thai society.

Many existing research papers on informal debt in Thailand have shown consistent findings that most people who turn to informal credit sources face *the problem of not being able to qualify for formal loans*, including papers by Buddhawongsa et al. (2014, p.84)[7], Jumneanpol (2014, p.16)[8]. Inkhong (2014) studied factors influencing success in implementing policy on informal debt of Thai households during 2004-2013 based on document study and in-depth interview of 16 key informants who are involved in informal debt policy implementation. The results address that many informal borrowers in Thailand lack of qualification requirements of

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[7] Buddhawongsa et al. (2014) studied informal debt of Thai people who lived in Chiang Mai, Chiang Rai, Kanchanaburi, Bangkok, Si Sa Ket, Buri Ram, Nakorn Si Thammarat, and Surat Thani where the highest number of people who earned incomes below the poverty line. They used interviews as a major tool for collecting data from 1,801 samples who lived in these provinces including 446 no-debt people, 452 formal debt people, and 434 informal debt people. They presented that 41.47% of informal borrowers (that was equal to 180 respondents) in their study got deny credit by the formal credit sector.

[8] Jumneanpol (2014) studied informal debt problem of 4,709 people from 12 provinces in Thailand. The results show that 38.2% of the samples couldn't receive credit from the formal credit sector because of bad credit or failure to meet the formal qualification requirements.

a loan application from formal credit sectors, such as collateral, guarantor, or having bad credit history.

In addition to this, some papers have shown their collected data that the majority of informal borrowers are in *the low-income group of people*, such as the research by Buddhawongsa et al. (2014), who have observed that 41.24% of studied households have monthly earnings not exceeding 20,000 baht. Singhakham (2011) studied determinant factors affecting decision making on informal loans of people in Nakhon Ratchasima by using survey data from 372 samples. The results address that 73.5% of the samples had monthly income of not more than 20,000 baht.

Moreover, most people who borrowed from informal sources *have no savings*, as shown in the papers by Giné (2011) who studied mechanism underlying access to formal and informal of 2,535 households in the Northeast and Central regions of Thailand in 1997 by using Townsend-Thai data set and substantial cross-section survey. The results address that 31.6% of informal borrowers in the study had no savings at all, which is consistent with the study by Prayoonsin et al. (2011). They studied legal measure for supervision policy and solution in Money lending problem by using data from 2 sources that are: (i) questionnaires collected from 50 informal lenders and 400 informal borrowers in Bangkok, Angthong, and Suphan buri, and (ii) the Public Debt Problem Solving Operation Center through call center database of Ministry of Finance by making phone calls to 100 informal borrowers in the lists randomly. The data were collected in July 2011. The results show that over 75% of the informal borrowers had monthly income below 20,000 baht. The researchers also found that more than 65% of the borrowers, who were merchant, agricultural operator, owning a business, monthly employee, or freelance, had to turn to informal loans repeatedly because of lack of required documents for applying to formal credit and lack of savings.

The related papers have consistently shown that a dominant cause of informal debt dependency is *the inadequacy of money* required for everyday living, caused by many reasons (see Buddhawongsa et al. 2014).[9] Similarly, using survey data from 1,044 households in Thailand in 2012, Viboonpong et al. (2012) studied Econometric

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[9] 24.42% of the informal borrowers in their study faced insufficient income, whereas 21.83% of the respondents who had formal and informal credit at the same time had insufficient money to spend on daily life.

modeling for the analysis of household informal personal debt and building warning indicators towards policy formulation to manage and prevent the debt based on sufficiency economy philosophy The results show that over 30% of the informal borrowers had inadequacy of money because of low-income level and 77.43% of the borrowers could merely repay interest without principle money.

2.3.2 Up-to-date data of informal loans in Thailand

The information for the most recent situations for informal credit in Thailand between 2007-2017 which appears in this chapter has been obtained from 2 major agencies in Thailand, which are the National Statistical Office (NSO) and the Ministry of Finance. Here, we present these data to show the trends of the informal debt problem during the past 10 years. It should be noted, also, that

1.) The NSO data is a report that presents household level statistics, which were available to the public through the Household-Socio Economic Survey Report, made every 2 years. The sample of about 52,000 households, in both municipal and non-municipal areas in 77 provinces, was divided into 12 equally representative sub-samples and collected the survey data an interviewing method. At any rate, the data was collected for households and despite the usefulness in showing the big picture of the informal debt situation in Thailand, it still lacks the individual level perspectives.

2.) The data of people with informal debt published by the Ministry of Finance covers only those who have registered in Thailand's State Welfare Program, provided to low-income people (who earns less than 100,000 baht per year). This is an individual level dataset presented in yearly terms, but it faces limitations in terms of timeframe, since it was only recently established in 2016, and deals with only those with low income. Therefore, it excludes people with middle or high income levels who may have also been faced with informal debt problems. The data was gathered by the Government Savings Bank and the Bank of Agriculture and Agricultural Cooperation, which are the main agencies who collect the registration forms from people who enrolled in the program.

Informal debt has long been a part of the Thai society. The Household Survey data from the NSO indicates that despite decreasing trends of informal loans during

2007-2015, but the total average informal household debt has risen again in the first and second quarters of 2017. Table 2.2 reports that the Bangkok and Greater Bangkok regions have the highest levels of informal debt compared to other parts of the country, between 2009-2015, which reflects high burden of repayment which is normal in the Thai informal credit sector. The fact also highlights the problem of lack of access to formal or semi-formal credit institutions which are associated with lower repayment burdens compared to informal ones.

Table 2.2 Average amount of informal debt per household in Thailand during 2007 to 2017 (Unit: Baht)

Region	Average amount of debt per household (Baht)					
	2007	2009	2011	2013	2015	2017 (Q1-Q2)
Whole Kingdom	6,855	6,984	3,970	3,271	3,346	4,940
Bangkok and Greater Bangkok	6,214	11,706	8,044	5,729	4,226	7,922
Central	10,551	7,692	3,861	3,867	4,079	5,503
North	4,911	4,686	2,225	2,935	1,669	2,508
Northeast	5,614	5,963	3,614	1,843	2,913	2,807
South	8,024	6,484	3,090	3,644	3,823	6,664

Source: The National Statistical Office, Thailand (2018)

Table 2.3 Total number of households which indebtedness in informal loans in Thailand during 2009 to 2015 (Unit: Household)

Region	Total number of indebted households (informal loans)			
	2009	2011	2013	2015
Whole Kingdom	2,099,455	1,389,530	902,777	900,673
Bangkok and Greater Bangkok	309,573	228,903	162,577	183,509
Central	444,007	270,904	221,059	242,573
North	278,110	157,817	118,560	90,151
Northeast	701,130	517,626	206,879	205,664
South	366,633	214,281	193,702	178,776

Source: The National Statistical Office, Thailand (2016)

Table 2.3 shows that number of households which had informal debt in whole country have a tendency to decrease during 2009-2015, but the number of indebted households increased seems to increase in Bangkok and Greater Bangkok, and Central regions in 2015.

Data from the Thailand's State Welfare Program in 2016 (Ministry of Finance 2018) has found that *1.33 million people from the 7 million total individuals enrolled in the program were facing the informal debt problem*, which constitutes up to almost 100,000 million baht worth of informal credit loans. (This program grants assistance to people with income under 100,000 baht per year, by providing participants with vocational skills and training to raise their income capabilities. Participants must be of Thai nationality, aged 18 or over, and do not possess ownership of real estates in accordance with the government's specified terms, and participants can register at the Bank of Agriculture and Agricultural Cooperatives, Government Savings Bank, and the Krung Thai Bank in announced time periods).

2.3.3   Solving Methods to Reduce Informal Loans by Government Sector

Solid attempts at solving the informal debt problem by the government began back in 2003 when the government assigned the Ministry of Interior to open up registration channels for people afflicted with poverty and social problems. At the same time, the Ministry of Finance was assigned to establish the Public Debt Problem Solving Operation Center to help relieve the debt problem of the Thai people, both from formal and informal debt burdens. Since 2008, the Thai government has assigned the Public Debt Problem Solving Operation Center to be the main agency in dealing with the problem of informal debts. Soon afterward, informal debt in Thailand seemed to have been reduced during 2009-2015, but rebounded after this period and continues to be increasingly troublesome since 2016 to the present day (see Table 2.2 and 2.3 for more details).

The negative effects of being indebted informally include both economic and mental hardships both to the borrowers themselves and to their family. Given the importance of this problem which affects many people in Thailand, *the government has*

made this a national agenda in March of 2018, and has made multiple attempts at designing effective mechanisms to solve this issue, including:

1) The passing of the law which prohibits excessive interest rates (forbidding the collection of interests over 15% per year) meant to relieve the problem of very high rates charged by informal lenders in Thailand, carried out by the Royal Thai Police Headqaurters.

2) Increasing channels to access formal credit as follow:

2.1) Nanofinance, on a national level, started in 2015 to provide loans to people who met certain criteria with the purpose of funding their vocations, not exceeding 100,000 baht in amount, without any collateral requirements.

2.2) Picofinance, on local levels, started in 2016 to provide loans to people who met certain criteria for usage in various spendings, not exceeding 50,000 baht (with rates no more than 36% per year).

2.3) We can classify Microfinance into 3 main categories. The first category is for the large and formal Microfinance institutions (MFIs), operating under regulations. The second category covers semi-formal MFIs, such as various types of cooperatives (agricultural cooperatives, savings and credit union cooperatives), as well as "savings-for-production groups" which are registered, and also the "Thailand Village and Urban Revolving Fund" (TVURF). The third and last type of microfinance incorporates informal and independent microfinance institutions supported by other external organizations, for example, by NGOs or local government agencies.

3) Reduction of informal credit burdens through negotiation between the lenders and borrowers, with government officials acting as the mediators.

4) Vocational skills assistance provided to informal borrowers around the country (in all 77 provinces), focusing on promoting skills and knowledge that can be used for earning a living and enhancing income, as well as financial disciplines.

5) Support for relieving informal credit problems carried out by government agencies and other related financial organizations.

Despite many years of government agencies' attempts at assisting people who faced informal debt problems in escaping the perpetual cycle, the problem still remains significantly to this day as we can see that the total number of informal debt borrowings has not decreased by much. In fact, the informal borrowing problem seems to have increased in the year 2017. The personal problem of not having enough money to spend, which leads to people's poor financial positions, is a major reason why so many people cannot qualify for loans from formal institutions. This forces these people to turn to informal credit sources.

Chapter 3

3 Data Considerations

3.1 Research design

This study is a survey research aimed at studying the informal loans system particularly in the individual level. The main objectives of this study are: (i) to examine the factors determining the individuals' decision making on the informal loans borrowing, (ii) to study the factors motivating people repetitively borrow informal loans, and (iii) to suggest the guidelines for reducing problems caused by the informal loans. This study is a survey research which collects data from closed-end questionnaires, developed in accordance with the research by Buddhawongsa et al. (2014) and Singhkham (2011). Descriptive statistics and inferential statistics are used to analyze data in order to fulfill the research questions.

The variables in this study were developed from related theories and literatures, and were grouped according to the objectives of the study (see Figure 3.1).

Figure 3.1 Research framework

The factors determining the individuals' decision making on the informal loans borrowing:
1) Amount of luxury spending per month
2) Savings
3) Income level
4) Debt-to-income ratio
5) Net monthly income
6) Having income and expense worksheet
7) Being a head of household
8) Proportion of household members with no-income
9) Age
10) Gender
11) Marital status
12) Education level
13) Having stable income
14) Home ownership

→ The individuals' decision making on the informal loans borrowing.

The factors influencing interest rate of informal loans:
1) Level of lender's influence over a borrower in order to recall for a loan,
2) familiarity between a lender and a borrower,
3) Amount of loan,
4) Collateral,
5) Default history,
6) Medical treatment,
7) Guarantor,
8) Savings,
9) Debt-to-income ratio,
10) Stable income, and
11) Proportion of household members who are receiving no-income

→ Dependent variable is Monthly Informal Interest Rate.

The factors motivating people borrow informal loans repeatedly:
1) Impulsive buying behavior,
2) Materialism,
3) Payday period (daily, weekly, and monthly),
4) Installment,
5) Savings,
6) Net monthly income,
7) Age,
8) Gender,
9) Marital status,
10) Income level,
11) Debt-to-income ratio, and
12) Proportion of household members who are receiving no-income

→ Dependent variable is Repeated Decisions on Making an Informal Loan.

3.2   Population and Sample Groups

The target population in this study is Thai people having an age of 20 years or older and living in the study areas such as Bangkok, Nonthaburi, Phathum Thani, and Samut Prakan. Also, they have to spent the majority of their time in the study areas without census registration concern. The reason that researcher selected such four provinces because of having ongoing highest average rate of informal debt per household between year 2009 and 2017 (The National Statistical Office: NSO, 2016) (see as table 2.3 in the chapter 2). The statistics for the population aged 20 and above from NSO can be shown in the Table 3.1, with the total number of population in these provinces are 7,032,317 individuals.

Table 3.1 Total number of population aged 20 year and over who live in 4 provinces in 2016

Province	Male	Female	Total
Bangkok	1,974,781	2,333,896	**4,308,677**
Nonthaburi	423,862	510,237	**934,099**
Pathum Thani	381,649	444,803	**826,452**
Samut Prakan	449,883	513,206	**963,089**
Total	3,230,175	3,802,142	**7,032,317**

Source: The National Statistical Office, Thailand (2016)

This study gathers data from sampled groups which are individuals older than 20 years of age, who have spent the majority of their time in these specified provinces. The authors used the formula from Taro Yamane (1967) with an error 5% and with a confidence coefficient of 95% to determine the size of these sample groups based on proportion of population in each province as follow:

$$\text{The formula is: } n = \frac{N}{\left[1 + N(e)^2\right]}. \tag{1}$$

where, n is the sample size.

N is the size of the population.

e is the error of 5 percentage points.

Total number of population aged 20 year and over who live in the 4 provinces in 2016 were equal to 7,032,317 (see Table 3.1), therefore, the number of the samples for each group of borrowers by calculation is:

$$n = \frac{7,032,317}{1+7,032,317\,(0.05)^2} = 399.9772 \approx 400 \qquad\qquad (2)$$

The calculation from a population of 7,032,317 in the equation (2) results in 400 samples, since we want the sample group to represent the population as much as possible, we have added the number of questionnaires (based on the ability and available resources of the researcher) to 4.5 times the number yielded by the Yamane Formula (which calculates the required size of the sample group given the population size), at 1,800 sets of questionnaires. Out of this number, 1,494 questionnaire sets, with a response rate of 83%, are adequately complete and can be used for statistical analysis (see table 3.2).

The data were collected with the respondents' consent and their participation were voluntary, until the required sample size has been fulfilled. The study uses the sampling method of nonprobability sampling and quota sampling, with respect to the ratios of population size for each province as shown in Table 3.2, and sampled the individuals randomly. Measures were taken to collect data from different areas in order to prevent stagnation of the samples, and to cover many respondents in terms of different sexes and jobs.

Table 3.2 The Outlined Number of Questionnaires, and the Number of Questionnaires Actually Completed

Province	Number of questionnaires		Response rate
	Quota	Actual	
Bangkok	1,103	889	80.60%
Nonthaburi	239	202	84.52%
Pathum Thani	212	185	87.26%
Samut Prakan	246	218	88.62%
Total	**1,800**	**1,494**	**83%**

Source: Number of samples compiled by the authors (2016)

The reason that we specify the age of sampled respondents at 20 years of age is because of 2 main reasons: 1.) We are interested in people of working age who should be able to support their own living financially with their own income, and 2.) The questions used in the survey require examination and authorization from the Research Ethics Review Committee for Research Involving Human Research Participants, of Chulalongkorn University, which stated that data collection from individuals below 20 years of age requires written formal permission to disclose information from the respondents' parents or guardians.

3.3   Tools for Collecting Data

This study uses a closed-end survey to gather the data it needs. The survey was constructed from literature reviews of existing academic papers and related concepts. It is divided into 2 parts which are 1.) General information of the respondents, and 2.) Information on borrowing (the questions are shown in the Appendix C).

The questionnaire's validity was confirmed through tests, including tests from 5 experts who assigned scores according to the Item Objective Congruent (IOC) Method, and uses the scores obtained to calculate the index for measuring the relationships between the questions and research objectives. The IOC numbers were satisfactory in all items. After the testing step, the questionnaires were tried out with pre-survey mock sample groups (90 people), with the obtained confidence score for the entire questionnaire standing over 0.5.

Also, to follow the measures for upholding professional ethics according to Creswell (2003), this study strictly maintains the highest privacy and confidentiality of the identities of all data sources. It will not compromise the privacy of the individuals surveyed and will keep their individual information a secret. The survey and the methodologies were checked and examined by the Research Ethics Review Committee for Research Involving Human Research Participants, Chulalongkorn University, and the researcher has been granted the Certificate of Approval (shown in Appendix A) on 30 November 2016.

3.4   Data Collection

This study collects data from individuals aged 20 and older who live in 4 selected provinces where the informal debt statistics were highest, during 3 months of survey (Dec 2016 – Feb 2017). Data collection from survey was made by meeting the respondents directly and the questionnaires were stored away and kept confidential immediately as soon as the respondents completed them. The details and importance of the research were explained to the respondents before they decide whether to participate and begin answering our questions (details of the explanations to the individuals sampled are shown in Appendix B). It took approximately 15 minutes to answer the questionnaire.

3.5   Data Analysis

After obtaining all the required data, the research then uses the data from the survey for its analysis with STATA program in doing analysis and calculating the following statistics:

1.) Demographic data of the survey respondents, analyzed by calculating the frequencies and percentage.

2.) The analysis of the personal characteristics of the borrowers, the spending behavior, and the opportunity of borrowing informally is analyzed by using multiple regression analysis through Probit with Taylor-linearized and Jackknife variance estimations and Instrumental variable method. While, to analyze the determinant factors on informal interest rates, multiple regression analysis is used through Ordered Logistic method with Taylor-linearized and Jackknife variance estimations.

3.6   Steps for Collected Questionnaire

The details of the data collection process from the survey for this research are as follows.

Step 1: The researcher specifies the quota of surveys to be used in each of the 4 provinces in the study, based on the proportions of populations who are 20 years old or older living in those provinces (see Table 2.2).

Step 2: A survey is used as the main tool for collecting data, because it can reach a huge number of people, and their identities and data are kept secret. The survey has been tested with the Content Validity Test (IOC) from 5 experts, and pre-survey rounds were also carried out to improve the questions.

Step 3: The validity of the questions in the survey, and the appropriateness of the data collection process from The Research Ethics Review Committee for Research Involving Human Research Participants, Health Sciences Group, Chulalongkorn University (see Appendix A).

Step 4: To make sure that the questions are qualified for accurately measuring the data needed in the research, the researcher conducted the data collection herself, together with a survey team from the Edunet company. The total number of the survey team was 5 persons. The selected interviewers will then enroll in the course on quantitative research and data collection by Dr. Parameth Voraseyanont, which lasted for 2 days. The team traveled with personal cars when going to various places in the 4 provinces to collect data from 1,800 people in the quota. In gathering data from respondents, the survey team provided them with the details of the research for the respondents to understand first (see appendix B).

Step 5: After the data collection for each day is completed, the interviewing team will conclude the problems that they have faced during that day, and will sort out the surveys with incomplete answers for disposal. The time frame for collecting data with surveys lasted for 3 months. Partial funding was provided by Chulalongkorn University's Graduate School, as part of the scholarship to the researcher for her dissertation.

Step 6: The researcher analyses the data from the survey answers with the STATA Program.

3.7   Data Collected from Informal Borrowers, Formal Borrowers, and No-loan People in the Study through the Questionnaires (N=1,494)

Figure 3.2 Marital status of the respondents (N = 1,494)
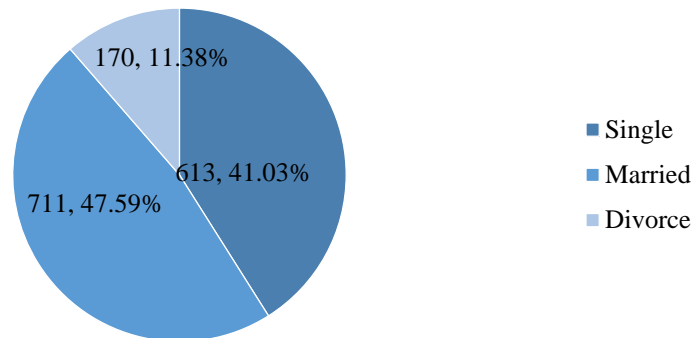
Source: Survey findings compiled by the authors (2017)

Figure 3.3 Age of the respondents (N = 1,494)
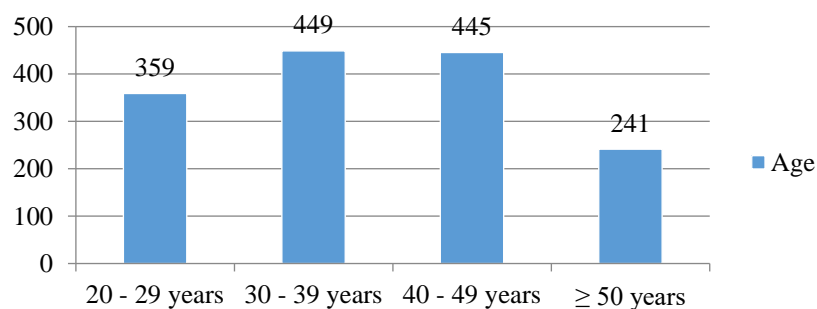
Source: Survey findings compiled by the authors (2017)

Figure 3.2 and Figure 3.3 show marital status and age of the respondents, respectively. Most of the respondents were married, with 47.59%, followed by single and divorce. While, most of the respondents had 30 to 39 years of age.

Figure 3.4 Payday frequency of the respondents (N = 1,494)
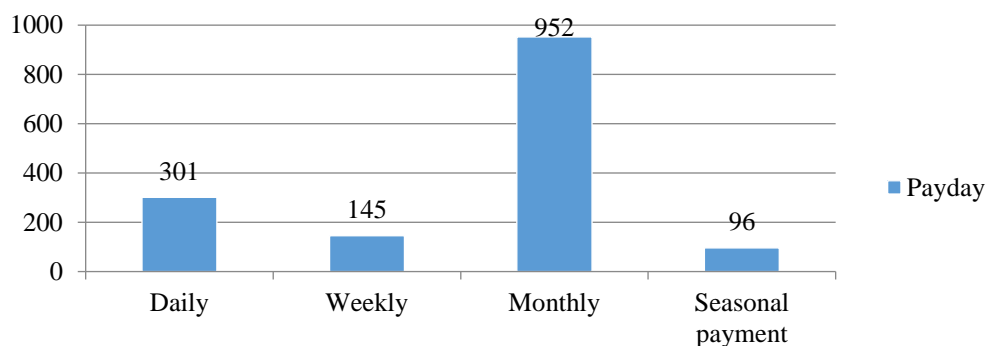
Source: Survey findings compiled by the authors (2017)

Frequently of income earned of the respondents was reported in Figure 3.4. 63.72% of them had monthly income. While, 6.43% of the respondents in the survey had seasonal payment.

Figure 3.5 shows education level, occupation, and owning house of the respondents. Most of the respondents had bachelor level, with 42.44% followed by upper secondary and higher level. There are only 0.2% of the respondents who had doctorate or Ph.D. For occupation, clerical, sales and service workers were found to be 26.91% for the respondent followed by non-farm business operators, with 22.69%. We also found from the data that 31.86% of the respondents purchased their house, whereas, 31.99% of them rent the houses.

Figure 3.5 Education level, occupation, and owning house of the respondents (N = 1,494)

Note: Education-1: below elementary, Education-2: elementary, Education-3: lower secondary, Education-4: upper secondary, Education-5: higher level, Education-6: bachelor level, Education-7: master level, and Education-8: doctorate or Ph.D.

Occupation-1: farm operations on crop production, livestock, fresh water/ marine fishing who mainly own the land, Occupation-2: farm operators on crop production, livestock, fresh water/ marine fishing who mainly rent the land/ public space/ free, Occupation-3: agricultural operators on fishery, forestry, hunting and agricultural services, Occupation-4: non-farm business operators, Occupation-5: professional, technical and administrative employees, Occupation-6: farm workers, Occupation-7: general workers, Occupation-8: clerical, sales and service workers, Occupation-9: production workers, and Occupation-10: economically inactive households.

House-1: purchased, House-2: mortgage, House-3: rent, House-4: no rent but belongs to relatives, House-4: no rent, and belongs to person who is not relatives, House-5: house located on public land, House-6: welfare house, House-7: a house which another person mortgaged to you.

Source: Survey findings compiled by the authors (2017)

3.8   Data Collected from the Informal Borrowers through the Questionnaires (N=694)

In the studies, we focus on characteristics of the borrowers and characteristics of the informal loans, therefore, personal information and purposes of loan were collected through questionnaires from 694 informal borrowers in the 4 provinces. This is done through a set of 800 questionnaires conducted by the authors in 2016, with a response rate of 86.75%, or 694 copies completed.

Figure 3.6 Province of the respondents (N = 694)
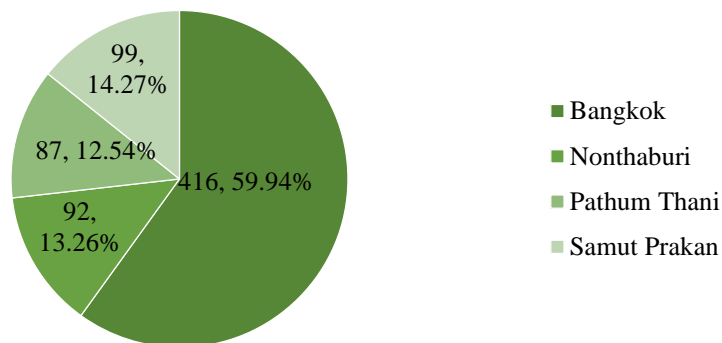
Source: Survey findings compiled by the authors (2017)

Figure 3.7 Marital status of the respondents (N = 694)
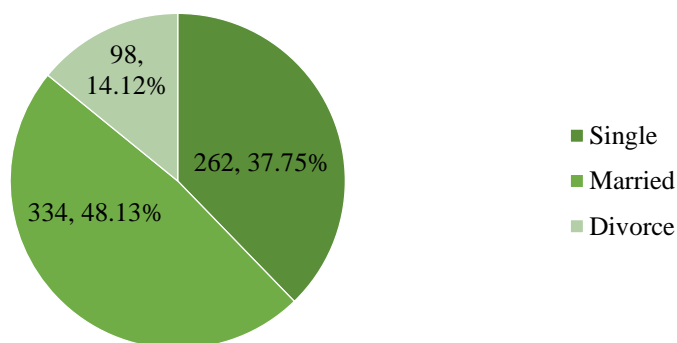
Source: Survey findings compiled by the authors (2017)

Overall, 59.94% of the informal borrowers in the study lived in Bangkok, 13.26% in Nonthaburi, 12.54% in Pathum Thani, and 14.27% in Samut Prakan. These

number were collected based on weight of total population 20+ years or over in each province (Figure 3.6). The percentage of married people was higher than single and divorce groups (Figure 3.7).

By rank, 57.93% of the informal borrowers had monthly income (402 respondents out of 694 total), followed by daily, weekly, and seasonal income payment, respectively (Figure 3.8).

Figure 3.8 Payday frequency of the respondents (N = 694)
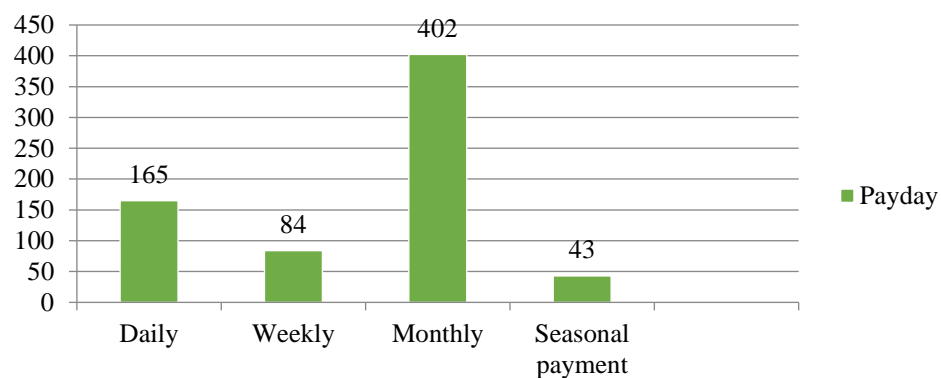
Source: Survey findings compiled by the authors (2017)

As vertical bars in the figure 3.9, most of the informal borrowers had bachelor level. While, 27.67% of them worked as clerical, sales and service workers. 37.61% rent the house, 22.48% and 22.05% of them purchased and mortgaged houses, respectively.

Figure 3.9 Education level, occupation, and owning house of the respondents (N = 694)

Note: Education-1: below elementary, Education-2: elementary, Education-3: lower secondary, Education-4: upper secondary, Education-5: higher level, Education-6: bachelor level, Education-7: master level, and Education-8: doctorate or Ph.D.

Occupation-1: farm operations on crop production, livestock, fresh water/ marine fishing who mainly own the land, Occupation-2: farm operators on crop production, livestock, fresh water/ marine fishing who mainly rent the land/ public space/ free, Occupation-3: agricultural operators on fishery, forestry, hunting and agricultural services, Occupation-4: non-farm business operators, Occupation-5: professional, technical and administrative employees, Occupation-6: farm workers, Occupation-7: general workers, Occupation-8: clerical, sales and service workers, Occupation-9: production workers, and Occupation-10: economically inactive households.

House-1: purchased, House-2: mortgage, House-3: rent, House-4: no rent but belongs to relatives, House-4: no rent, and belongs to person who is not relatives, House-5: house located on public land, House-6: welfare house, House-7: a house which another person mortgaged to you.

Source: Survey findings compiled by the authors (2017)

Figure 3.10 reports the types of document which were required by the informal lenders. Among the 694 informal borrowers examined in the study, around half of our sample (50.72%) did not require any document for making loans. A copy of personal ID and a loan contract were the popular documents among the informal lenders, at 32.13% and 26.95%, respectively. Guarantors and ATM cards were found to be important for some lenders.

Figure 3.10 Document required by the informal lenders (N = 694)
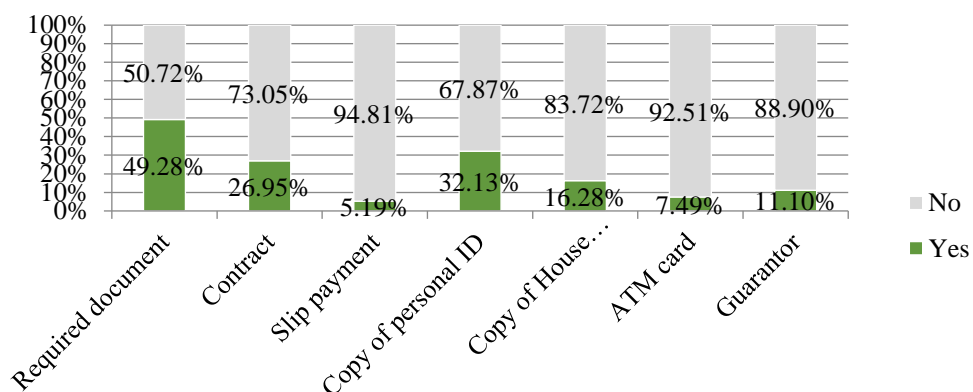
Source: Survey findings compiled by the authors (2017)

In Figure 3.11, 69.74% of the samples made a loan from a lender. While, 30.26% of them made multiple informal loans at the same time. This behavior shows financial recklessness and never-ending cycle of indebtedness. In addition, Figure 3.12 also shows that most of the lenders did not require collateral before granting a loan.

Figure 3.11 Sources of informal loans (N = 694)
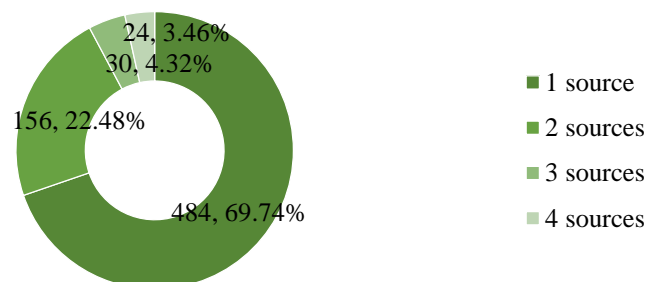
Source: Survey findings compiled by the authors (2017)

Figure 3.12 Types of collateral (N = 694)
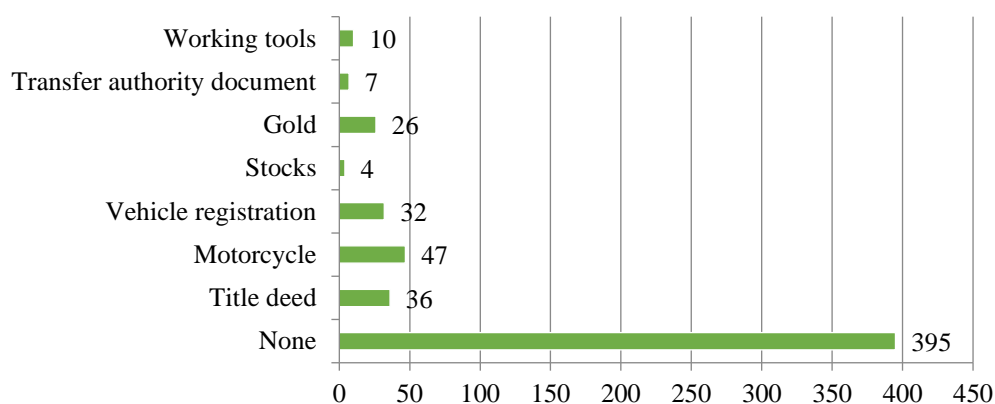
Source: Survey findings compiled by the authors (2017)

Figure 3.13 reports that more than one-third of the borrowers could not financially support themselves for longer than one month, if they were to use the money in their bank savings for spending, while 33.29% of them had money for living for no longer than 3 months. These periods of time imply shortages of money savings for most of the respondents in the study.

Figure 3.13 Months when used savings for living (N = 694)
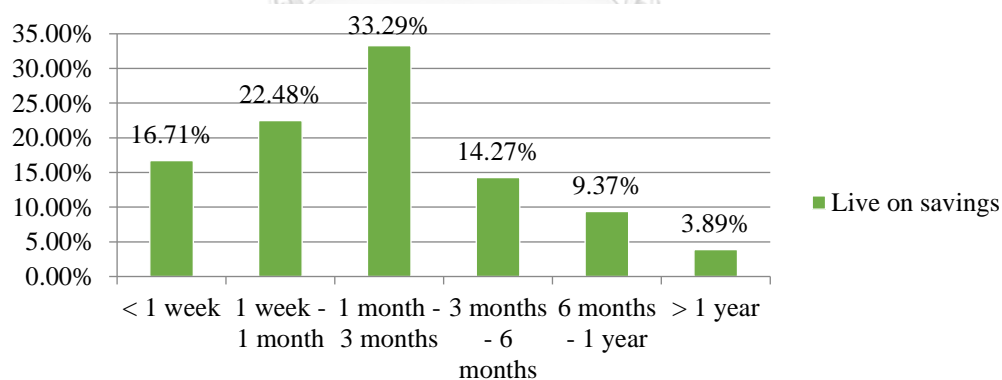
Source: Survey findings compiled by the authors (2017)

The borrowers borrowed from informal credit sources because they had low liquidity of money in their hands, with 51.44%. In addition, the education fees of their children were also found to be one necessary reason for making a loan (see Figure 3.14).

Figure 3.14 Borrowing reasons of the respondents (N = 694)
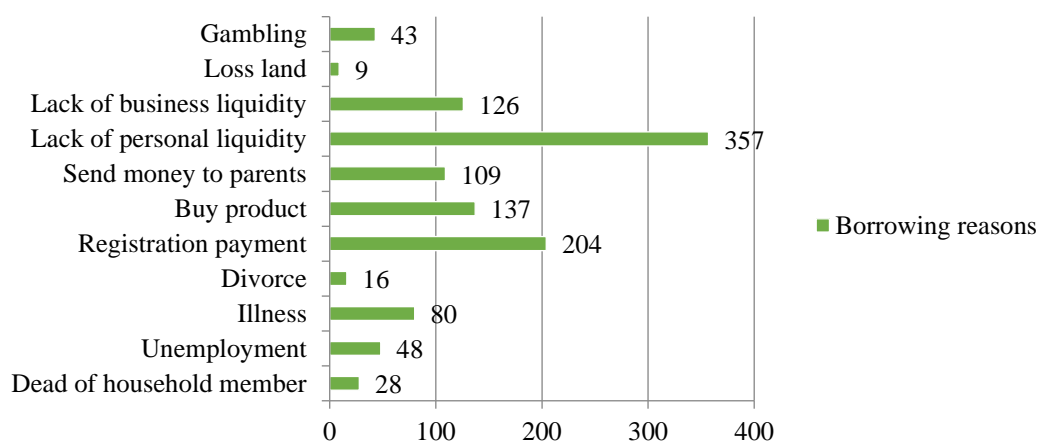
Source: Survey findings compiled by the authors (2017)

Even if some of the borrowers could borrow money from the formal credit sector, they chose to borrow on informal loans because of convenience (64.70%), no collateral (35.01%), quick cash (33.86%), no guarantor (31.41%), and the other factors (see Figure 3.15).

Figure 3.15 The reasons of preferring on the informal loans of the respondents (N = 694)
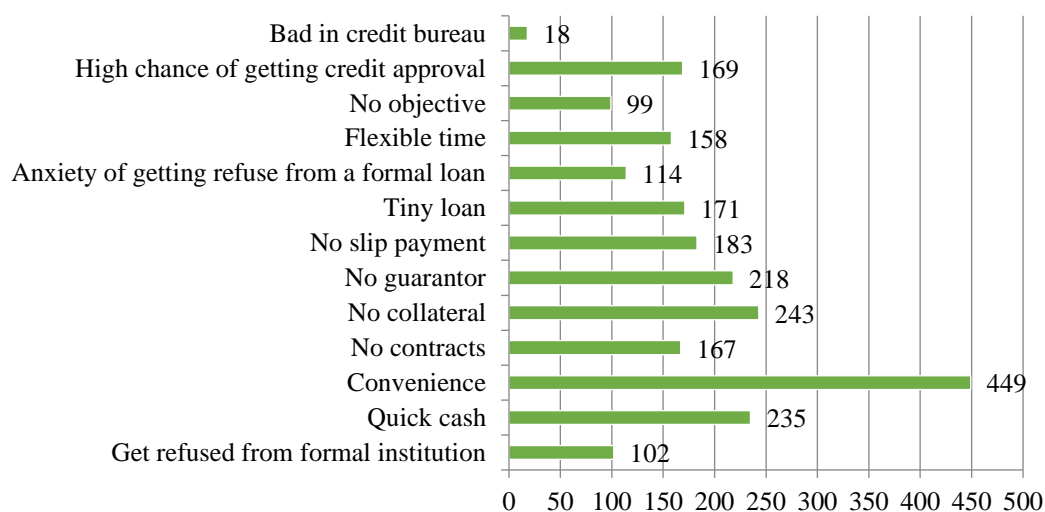
Source: Survey findings compiled by the authors (2017)

Figure 3.16 Objectives of using informal loans of the respondents (N = 694)
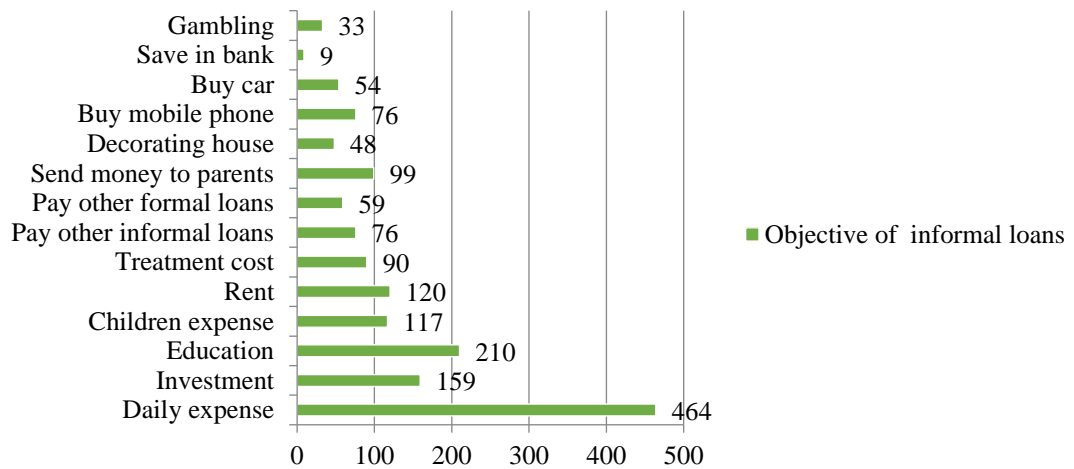
Source: Survey findings compiled by the authors (2017)

Figure 3.16 addresses the objectives of using informal loans of the borrowers. The most important reason was using the loan on daily expenditure, while, using the loan for saving in bank account was found for only 9 out of 694 samples.

Chapter 4

4 Informal Loans: Borrowing Decisions and Luxury Spending in Bangkok and Greater Bangkok, Thailand

4.1 Abstract

Many of people are refused applications from formal credit institutions. An informal credit market, therefore, becomes the last resort for funds. The study aims to investigate the probability and the significant factors affecting the likelihood of an individual getting a loan from the Thai informal credit market. The investigation into personal characteristics and personal finance were based on information collected in a survey presented to a sampled population of 1,464 participants from Bangkok, Nonthaburi, Phathum Thani, and Samut Prakan, where there has been the highest amount of informal loans during the last 7 years, compared to other regions of Thailand. In this study, we focus on income and the spending behavior of an individual who made informal credit applications. The major finding of this paper is that luxury spending, income levels, debt-to-income ratio, and having consistent savings are the factors influencing an individual's likelihood on whether to borrow money from the informal credit sector.

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4.2 Introduction

The informal credit sector has played a crucial role as an alternative source of credit apart from formal credit institutions for people in various income levels, especially, the poor, who are in the low levels of the income pyramid (Yuan and Xu 2015; Burgess et al. 2005). There are many reasons influencing people to borrow from the informal credit sector.

First, demands for credit of households exceeds the amount available from formal credit supplies (see Kashuliza 1993), particularly because, formal creditors have tried to avoid extending overly risky loans which may become non-performing loans (NPLs) that affect their balance sheet profitability and capital constraints. Credit rationing, therefore, is used as a basic strategy to limit the supply of credit within the legal interest rate ceiling, based on a borrower's creditworthiness (Stiglitz and Weiss 1981). Qualification requirements of a loan application from formal credit sectors, in practice, are a big barrier for many people, especially the poor who could not meet many of the requirements. As a result, informal credit markets seem to be the last resort of funds for people who have been refused applications from formal credit institutions.

Secondly, in case of Thailand, the informal credit market has not been pressured within the purview of the Bank of Thailand or the Thai government regulations. In fact, an informal credit lender can freely establish his interest rates due to the fact that the informal credit sources are mostly outside of government regulations and control. Legal enforcement is not practical in terms of punishment to the lenders who charge higher than the legal rates. The penalty given to those who charge rates higher than the law permits is too low.[10] Due to the fact that an informal loan agreement occurs with consent between an informal lender and an informal borrower, it is really difficult for government to control or deal with such transactions.

Thirdly, it is much easier to approach and conveniently to access informal credit sources with normally a much shorter time spent in disbursement of credit than the formal credit sector (see Chaudhuri and Gupta 1996; Kashuliza 1993).

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[10] According to the Interest Rate Control Act, B.E. 2560 (2017), an interest rate shall not exceed 15% per year. The penalty to whom charges higher than the rate will get a fine not exceeding 200,000 baht or imprisonment not exceeding 2 years, or both.

Fourthly, transaction costs for an informal loan are generally lower. In the case of a small loan, a borrower needs to pay relatively high transaction costs per unit of money lent from a formal credit institution (Guirkinger 2008; Sarap 1990). According to Aliber (2002), transaction costs occur since the application process of financial credit institutions, such as waiting in queues, producing legal documents, and waiting for approval of credit that take a long time and involve high transaction costs for applicants. Furthermore, some informal lenders, such as friends and relatives, sometimes charge relatively low interest rates than formal credit providers (see e.g. Zeller 1994; Karaivanov and Kessler 2015; Kochar 1997).

Finally, informal credits usually offer more flexibility in many terms and conditions, such as the amount of loan, purpose of loan's use, and maturity of repayment (Pearlman 2010; Mallick 2012; Ghate 1992). In addition, many informal lenders do not require collateral, guarantor, or contracts (Zeller 1994; Yuan et al. 2011; Ghosh et al. 2000).

There are great number of studies trying to explore the characteristics of informal borrowers and loans. However, the characteristics of informal borrowers with regard to spending behavior and disciplined saving which influence an individual to apply for an informal loan have yet to be clarified. This study aims to investigate the relationship between characteristics of an individual and the decision on making an informal loan in the case of Thailand, specifically, investigating whether the luxury spending behavior and consistent saving of an individual has any effect on the probability of borrowing money in the informal credit market.

4.3   Literature Review

Factors Influencing Decisions to Make an Informal Loan

Luxury Spending and Informal Loans

The definition of luxury goods is a subjective and multidimensional topic. The meaning of luxury goods in Cambridge Dictionary is "expensive things, such as jewellery and make-up, that are pleasant to have but are not necessary." In economics, a luxury good is a good for which demand increases more than proportionally as income rises, and is a contrast to a "necessity good", where demand increases proportionally less than income (Caserta 2008). She also emphasized that luxury goods exhibit high prices compared to necessity goods and thus signal an individual's wealth and position in society when they are conspicuously consumed.

Wieldmann et al. (2007) defined luxury as "the highest level of prestigious brands encompassing several physical and psychological values." While Bellaiche (2010) defined luxury products into 3 categories which are (i) hard luxury (such as watches and jewelry), (ii) soft luxury (such as fashion and clothing), and (iii) luxury experiences (such as travel, hotel, spas, smartphones). Moreover, the definition of luxury goods also extends to alcoholic beverages and cars. According to the Thai Customs Department, there are 19 listed items of imported luxury products including wine, liquor, imported fruits, flowers, perfumes and cosmetics, leather bags and belts, wool textiles, clothing and necktie, footwear made from leather and canvas, tablewares and interior decorations made from crystal, personal adornments made from crystal, lens, spectacles, cameras and related apparatus, clocks, watches and related apparatus, pens and related apparatus, and lighters.

In order to explain consumers' behavior in luxury spending in the study, we define luxury spending by summarizing the dimensions identified earlier *as a spending on non-essential purchases in following items: (i) brand-name products, (ii) perfumes and cosmetics, and (iii) accessories bought for non-investment or speculation purposes.*

Nowadays, not only adults, adolescents also have a tendency to spend more money on luxury consumption, such as luxury brand-name goods to fulfill their needs (Lin and Wang 2010; Fournier and Richins 1991; Gil et al. 2012). Luxury items are

used for showing individuality and to gain a higher social status of their owners (Gentina et al. 2016; Frank 1999). Acquiring luxury goods, for some people, is more important than the stigma attached to borrowing money and they are willing to take on debts (Brennan et al. 2011; and Watson 2003). Luxury spending, therefore, drags many people into a trap of indebtedness due to the fact that they have spent too much money for buying expensive things that they want to enjoy even though it is unnecessary (Watson 2003; Floro and Dymski 2000). In East Asia, people tend to make an informal loan for buying luxury items (Waldron 1995).

Hypothesis 1: Luxury spending behavior is positively associated with borrowing money form the informal credit market.

Income Level and Informal Loans

Khoi et al. (2013) studied the factors influencing access to formal and informal rural credits in Vietnamese market from 15 villages of 13 communes in the Mekong River Delta (MRD) of Vietnam on the household level. The 928 households were randomly selected as the respondents in this study which included 619 borrowers and 309 non-borrowing households. They found that among people of all income levels, the lowest income group is more likely to face problems of unobtainable credit from the formal credit sector due to the fact that they fail to meet the formal qualification requirements. As an example, Banerjee and Duflo (2007) studied the living conditions of those who were extremely poor by using Living Standard Measurement Surveys (LSMS) on the household level, conducted by the World Bank and the Family Life Surveys, conducted by the Rand Corporation, during 1988 to 2005, from 13 countries including Cote d'Ívoire, Guatemala, India, Indonesia, Mexico, Nicaragua, Pakistan, Panama, Papua New Guinea, Peru, South Africa, Tanzania, and Timor Leste (East Timor). The study found that over 90% of the poor in Udaipur and urban Hyderabad, India, rely on informal credit from relatives, friends, moneylenders, and shopkeepers. While less than 10% of them borrowed money from formal credit institutions. Informal credit sources, therefore, seem to be very important sources of funds for many of the world's poor in order to allow them to consume smoothly. The study by Zeller (1994), the results show that 131 households in Madagascar borrowed from formal credits,

while 182 out of 189 households had informal credit debts during October 1990 and September 1992. On the other hand, McKernan et al. (2005) investigated the difference on making borrowing decisions for formal and informal credit sectors of 1,800 households in rural Bangladesh between men and women, by using panel data from the World Bank and the Bangladesh Institute of Development Studies' Credit Programs for the Poor survey. They found that some people who earn high incomes still choose to borrow informal loans because of the high probability of being granted the, which is consistent with the study by Yuan et al. (2011) which studied farmers' borrowing decisions on formal and informal loans from both demand and supply sides, by using the 2006 Rural Household Survey data in China. Similarly, using the China Household Finance Survey (CHFS) data, conducted by the Southwestern University of Finance and Economics and the People's Bank of China in 2011 (which covered 8,438 households and 320 villages in rural areas or communities in 80 counties of 25 provinces). Yuan and Xu (2015) have shown that the poor who face credit constraints have a much lower likelihood to get formal credit because they have a high probability of defaulting in the future. However, a study by Khoi et al. (2013) showed that a high level of household income does not play a significant role in determining eligibility for informal credit.

Hypothesis 2: Income level is negatively associated with the likelihood of getting an informal loan.

Debt-to-income Ratio and Informal Loans

Based on risk premium theory, financial providers avoid granting a loan to people with high debt-to-income ratio because they have high risk of default. Kedir (2003) used the 4th round socio-economic survey of urban households in Ethiopia in 2000, collected by the Department of Economics of Addis Ababa University in collaboration with the Department of Economics of the University of Goteborg, Sweden, using questionnaires so as to detect the significant socio-economic characteristics of 1,500 urban households. The study reveals that outstanding household debt indicates liquidity problems that lead to higher demand for credit. Most recently, Zanin (2017) used a semiparametric bivariate probit model to investigate the

determinant factors of informal borrowing decision of Italian households with a household head aged between 20 and 95 years during 1995 to 2014 using a structured questionnaire which focuses on household income and wealth. He shows in his study that a person who is indebted to a bank, such as by mortgage and consumer loans, is more likely to need to be in need of making an informal loan request than a person without existing loans. Therefore, the informal credit market seems to be the last resort of funds for many people, especially for people who cannot access formal credit channels.

Hypothesis 3: Debt-to-income ratio is positively associated with the likelihood of getting an informal loan.

Net Monthly Income, Savings, and Informal Loans

Using socio-demographic characteristics of Italian household members, labor conditions, income sources, wealth composition and debt during 1995-2014 in the study by Zanin (2017), the results reveal that if liquidity ratio is close to zero, then there is a high probability for a loan to be made from a household's social networks, especially, relatives and friends. Fenwick and Lyne (1998) used the Heckman two-stage procedure to identify and to rank the determinants of internal and external credit rationing of small-scale farming households in Kwazulu-Natal. They showed in their study that savings play an essential role for substitution of credit when people lack money in their hands (1998). Based on the study by Brobeck (2008), using a survey-based analysis of emergency saving needs of low and moderate-income households from 2,000 adult and non-institutionalized Americans during 2004-2008, it has been emphasized that money in savings accounts can be used in the case of immediate emergency. It is consistent with Yuan et al. (2011) and Khoi et al. (2013) that having formal savings reduces credit demand for informal loans. Moreover, Karaivanov and Kessler (2015) study decision making on loans between formal and informal credit of rural households in Central region of Thailand, conducted by Townsend Thai Project in 1997. The results show that the likelihood of making informal loan of Thai households decreased if households had savings. Savings, hence, is a precautionary fund for unpredictable expenses that may

affect liquidity constraints of a household, which reduces demand for informal credit (Zanin 2017).

Hypothesis 4: Net monthly income is negatively associated with the likelihood of getting an informal loan.

Hypothesis 5: Having savings is negatively associated with the likelihood of getting an informal loan.

Income and Expense Worksheet, and Informal Loans

A study in Thailand by Buddhawongsa et al. (2014), people who keep records of their income and expenses on their worksheets every month can reduce their purchases of unnecessary products. A consequence of this evidence is that they can reduce the probability of requiring an informal loan.

Hypothesis 6: Having monthly income and expense worksheet is negatively associated with the likelihood of getting an informal loan.

Other Factors and Informal Loans

Yuan et al. (2011), who studied farmers' choice on borrowing money from formal credit and informal credit (friends and relatives) sources in China, points out that stable income households have less likelihood of requiring informal loans when compared to unstable income households because of the more obvious benefit of being able to manage cash flows when income is known ahead of time.

Zeller (1994) analyzed credit rationing by informal lenders and formal credit groups in Madagascar during 1990 and 1992, by using probit estimations to analyze the determinant factors of application for informal credit of individual adult household members. The study reports that a person who is the head of a household is more likely to be a borrower, especially for loans that are meant for important purposes, whereas, the marital status of a borrower has no obvious correlation with making an informal loan. Kedir (2003) used the Fourth Round Ethiopian Urban Household Survey in 2000 to investigate major-socio-economic characteristics of urban households in Ethiopia, and found that a borrower's marital status is not consistent with credit constraints. This

is in contrast to Kughur et al. (2016) who study the role of informal credit among small-scale farmers in the Otukpo local government area of Benue State, Nigeria, by using purposive random sampling method to collect the data from 80 people who borrowed money from the informal sector, observing that unmarried individuals incurred less informal debts than married people.

According to the life-cycle theory, young people have higher demands for credit because they think that their future earnings can be used to cover all of their current debt. When their age increases, their salaries also increase, so they have a lower probability of needing to borrow at the time. The relationship between age and borrowing needs can be represents by a U-shaped curve. Zeller (1994) confirms the explanation of the theory in his study that younger people are more likely to make a loan than older people. Similarly, Duong and Izumida (2002) studied rural credit market participation of rural households in Vietnam on the household level, by using cross-section data from 300 randomly selected households by survey in three provinces, which were Ninh Binh (North), Quang Ngai (Center), and An Giang (South). They found that the demand for informal credit of Vietnamese has an inverse relationship to borrowers' ages.

Aliber (2002) studied informal finance among the poor working class in India and Uganda by surveys. The results in the paper showed that women in Kampala, Uganda, and Nagpur in India during 1988 to 2001 relied more on informal credit sources from friends and family than from formal credit institutions, while men were informal borrowers from moneylenders and commercial banks more than women in the same areas. While McKernan et al. (2005) investigated whether the decision to rely on formal and informal credit sectors in Rural Bangladesh depends on the gender of an individual. They reported in the article that relatives is the most important source of credit for men in rural Bangladesh. Nevertheless, the results suggested by Yuan et al. (2011), Zeller (1994), and Nwaru et al. (2011) reveal that gender of an informal borrower does not have an effect on informal credit demands.

Yuan and Xu (2015) used micro data of rural China obtained from the China Household Finance Survey (CHFS), conducted by Southwestern University of Finance and Economics, and The People's Bank of China in 2011, to find that the poor are often excluded from formal credit institutions. They found that a household which has a

greater number of no-income members in China has encountered difficulties in asking for informal loans.

The studies about the effect of education level on decision making regarding informal loans are still not very clear. Kedir (2003) finds that a very low education level is a factor affecting people confronted with credit constraint in the long term. In contrast, Zeller (1994) and Nwaru et al. (2011) have found that the number of years of study has a positive effect on demand for loans, in contrast to the result by Chisasa (2016), which studied the determining factors affecting demand for credit of smallholder farmers in South Africa, by using survey data from 362 samples in Mpumalanga and North West Provinces, and analyzed the data with the ordinary least squares (OLS) method, while Yuan et al. (2011) argued that the education level of a borrower is not correlated with informal borrowings. On the other hand, Zanin (2017) find that a house is considered as collateral to guarantee a loan from formal creditors. Hence, a household without house ownership will be more likely to take informal loans.

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4.4 Methodology

Data and Summary Statistics

The data used in the study is collected from 694 informal borrowers, 400 informal borrowers, and 400 people without loans, who were aged 20 or over, and lived in the 4 provinces - including Bangkok and Greater Bangkok - which are Bangkok, Nonthaburi, Phathum Thani, and Samut Prakan, from surveys without census registration concerns.

The sample includes 1,494 observations by questionnaires. This is done through a set of 1,800 questionnaires conducted by the authors in 2016, with a response rate of 83% or 1,494 copied completed.

We define informal loans as all loans from sources that are not formal credit institutions following Islam et al. (2015), but in the study, informal loans include loans from relatives, friends, and moneylenders.

Our dependent variable is the types of loan which is equal to 1 if an individual chose to make an informal debt. Meanwhile, the key independent variables consist of luxury spending, income level, debt-to-income ratio, net monthly income, consistent saving, and income and expense accounting. Our specific control variables are stable income, age, gender, marital status, head of household, proportion of household members who are receiving no income, level of education, and home ownership, which are defined as in previous studies, such as Khoi et al. (2013), Zanin (2017), and Buddhawongsa et al. (2014).

The lists of luxury goods in the study include (i) amount of spending on brand name products, (ii) perfumes and cosmetics, (iii) accessories which are bought for non-investment or speculation purposes, which followed the items of luxury goods classified by the Thai Customs Department,[11,12] so as to detect the luxury spending behavior of the respondents.

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[11] http://dataservices.mof.go.th/Dataservices/IELuxury?language=EN

[12] According to the Thai Customs Department, there are 19 listed items of imported luxury products including wine, liquor, imported fruits, flowers, perfumes and cosmetics, leather bags and belts, wool textiles, clothing and necktie, footwear made from leather and canvas, tablewares and interior decorations made from crystal, personal adornments made from crystal, lens, spectacles, cameras and related apparatus, clocks, watches and related apparatus, pens and related apparatus, and lighters.

Respondents in the survey were asked a yes-no question: "Do you usually buy brand name products?," so as to detect brand name purchasing behavior which we use as an instrument for representing the luxury spendings. The luxury goods of 8 products included wine, imported liquor, beer, perfumes and cosmetics, leather bags and belts, clothing and necktie, footwear made from leather and canvas, and personal adornment made from crystal. The data for the total value of imported items from the Thai Customs Department, consisting of 8 types of luxury products in Thailand, shows that the value of luxury product imports have dramatically increased from 23,450 million baht in 2007 to 81,732 million baht in 2016. This evidence addresses the tendency to be addicted to luxury goods among Thai people during the past decade.

Figure 4.1 shows the summary statistics for the variables employed in our analysis. 77.98% of the respondents had stable income, while 26.37% of them had greater monthly expenses than monthly income. The data shows that only 13.59% and 18.47% kept financial records and allocate budgets for their disciplined each month, respectively. Moreover, there is merely one-third who had had consistent savings in their bank accounts, which reflects the low liquidity after paying all expenses in each month.

Figure 4.1 Basic personal information of the respondents (N= 1,494)
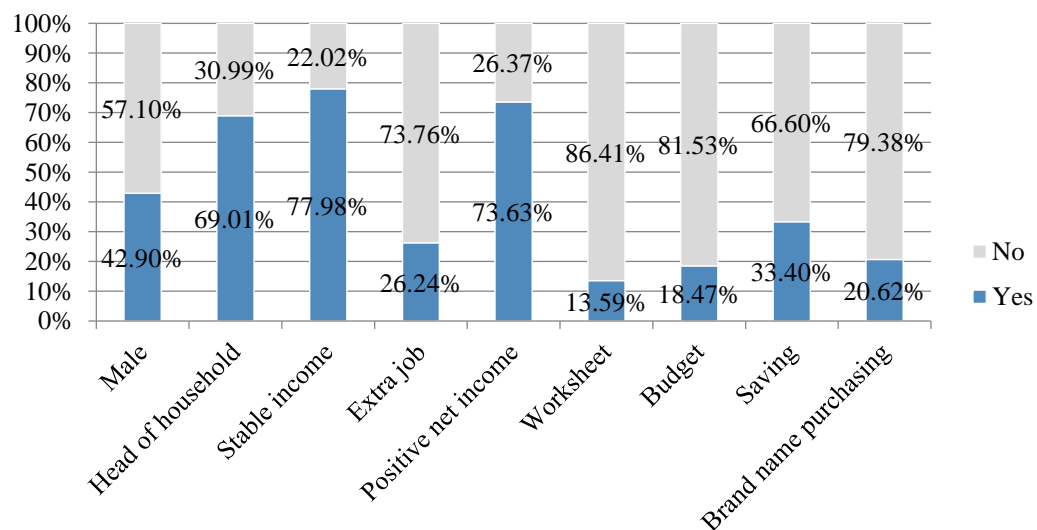
Source: Survey findings compiled by the authors (2017)

Table 4.1 Description of variables

Variable	Description	Mean	Std.Dev.	Min	Max
Key variables					
Types of loan	=1 if an individual borrows in the informal credit market, =0 if an individual does not borrow from the informal credit market (formal loan or no loan)	0.465	0.499	0	1
Brand name (IV)	=1 if a person usually purchases brand name products	0.206	0.405	0	1
Luxury	Luxury spending = (Monthly luxury spending / Monthly total income) x 100	10.257	18.061	0	353.333
Income	Total income per month (Baht)	28,075	32,410	500	500,000
DTI	Debt-to-income ratio (DTI) = (Monthly fixed expense / Monthly total income) x 100	31.976	48.618	0	1,000
Net income	Net monthly income = (Monthly incomes – Monthly expenses)	0.736	0.441	0	1
Saving	=1 if a person had savings without withdrawing for 3 months or longer	0.334	0.472	0	1
Account	=1 if a person makes income and expense worksheet every month	0.136	0.343	0	1
Control variables					
Head of hh.	=1 if a person is a decision-making person in a household	0.690	0.463	0	1
No-income	No-income member = (Number of no income member / Total number of members) x 100	33.913	24.574	0	100
Age	Age-1: 20-29 years old,	0.240	0.427	0	1
	Age-2:30-39 years old,	0.301	0.459	0	1
	Age-3: 40-49 years old, and	0.298	0.457	0	1
	Age-4: 50 years old or over	0.161	0.368	0	1
Gender	=1 if a person is a female, =0 if a person is a male	0.429	0.495	0	1
Marital status	Marital-1: single,	0.410	0.492	0	1
	Marital-2: married, and	0.476	0.500	0	1
	Marital-3: divorced	0.114	0.318	0	1

Table 4.1 (continued)

Variable	Description	Mean	Std.Dev.	Min	Max
Education level	Edu-1: below elementary,	0.014	0.118	0	1
	Edu-2: elementary,	0.112	0.315	0	1
	Edu-3: lower secondary,	0.098	0.297	0	1
	Edu-4: upper secondary,	0.179	0.383	0	1
	Edu-5: higher level,	0.106	0.308	0	1
	Edu-6: bachelor level,	0.424	0.494	0	1
	Edu-7: master level, and	0.063	0.243	0	1
	Edu-8: doctorate or Ph.D.	0.004	0.063	0	1
Stable income	=1 if a person had stable income per month	0.780	0.415	0	1
Home ownership	=1 if a person has home ownership	0.319	0.466	0	1

Source: Survey findings in Bangkok and Greater Bangkok (compiled by the authors, 2017)

Figure 4.2 shows that most of the respondents had the proportion of household members without any income between 0% to 20% followed by range between 41% to 60%. On the other hand, 30.19% had debt-to-income ratio greater than 40% which reflects the low level of ability to repay debt of this group of people.

Figure 4.2 Proportion of household members who are receiving no income, and the debt-to-income ratio of the respondents (N= 1,494)
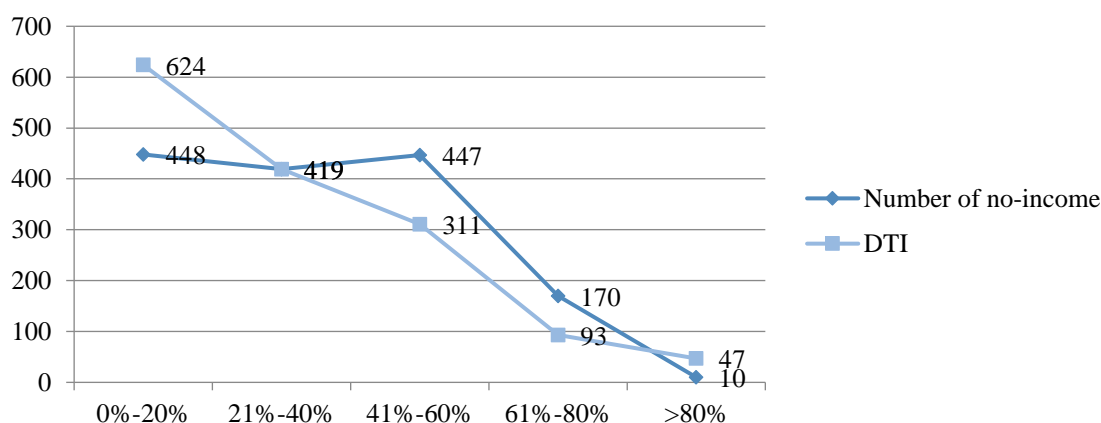
Source: Survey findings compiled by the authors (2017)

Figure 4.3 Income level of the respondents (N= 1,494)
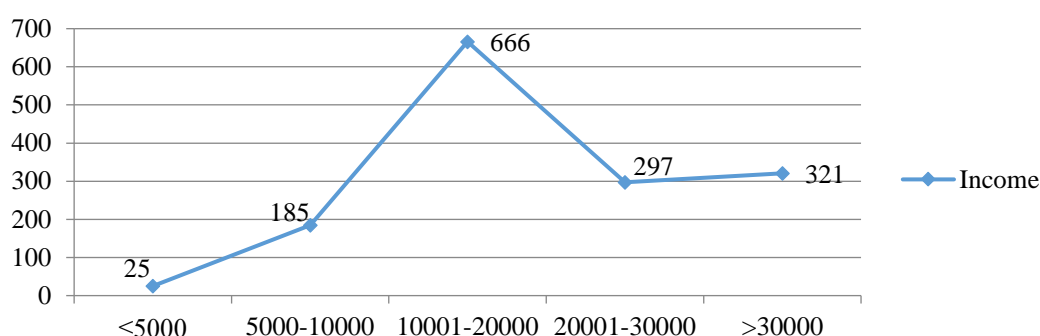
Source: Survey findings compiled by the authors (2017)

Figure 4.3 shows that most of the respondents had monthly income between 10,001 baht to 20,000 baht. According to The Siam Commercial Bank (2017) and Bank of Ayudhya (2017), the minimum level of salary of potential borrowers should not be less than 20,000 baht per month. Therefore, at least 14.05% of the respondents need to rely on informal credit because their qualifications are lower than the levels required.

Table 4.2 Correlation Coefficients between the Informal Loans and Independent Variables.

	Infor	Luxury	Brand	Income	DTI	Net inc.	Saving	Account
Infor	1.000							
Luxury	0.033	1.000						
Brand	0.036	0.126	1.000					
Income	-0.108	0.510	0.003	1.000				
DTI	0.199	-0.032	-0.013	-0.058	1.000			
Net inc.	-0.298	0.031	-0.003	0.090	-0.198	1.000		
Saving	-0.241	0.119	0.000	0.114	-0.103	0.311	1.000	
Account	-0.127	0.077	0.068	0.119	0.003	0.100	0.245	1.000

Note: *Infor* = Making an informal loan, *Luxury* = Luxury spending per month, *Brand* = Brand name product, *Income* = Income level, *DTI* = Debt-to-income ratio, *Net inc.* = Net monthly income, *Saving* = Consistent saving, and *Account* = Income and expense worksheet.

Source: Survey findings in Bangkok and Greater Bangkok (compiled by the authors, 2017).

Empirical Models

In order to examine the effects of luxury spending on informal loan decisions of an individual, we first consider separate binary Probit models (PROBIT) which is a type of probabilistic statistical classification model as follows:

$$Y = \alpha + \beta_1 DTI_i + \beta_2 Income_i + \beta_3 Saving_i + \beta_4 Net_i + \beta_5 Acc_i + \beta_6 X_{K_i} + \beta_7 C_i + \varepsilon_i \quad (1)$$

There are two possible cases for the values of Y, which are Y=1 and Y=0 – in other words, Y = (0, 1). We specify the data as such. Here, Y = 1 if an individual has made debt from the informal credit market. We set Y=0 if an individual did not borrow in the informal credit market, where the case of Y=0 includes: (i) borrowing from formal credit institutions, and (ii) the person doesn't have any debt or loan during the time of answering the questionnaire. Hence, Prob(Y=1) is interpreted as the probability of the dependent variable equaling a case where an individual chose to borrow money from the informal credit market rather than from the formal credit market or having no loan at all.

The main independent variables are the debt-to-income ratio (DTI), income level (Income), consistent saving (Saving), net monthly income (Net), the presence of income and expense accounts (Acc), and luxury spending (X_K). We also include a vector of control variables (*C*), i.e., stable income, a head of household, gender, age, marital status, proportion of household members who are receiving no income, education levels, and home ownership to capture the effects from other factors on making an informal loan.

We are also concerned about the possibility of an inconsistent parameter estimation due to endogeneity, therefore, an instrumental variable is used. A useful instrumental variable for our study must be correlated with the luxury spending behavior of an individual, but should not directly affect decision making on an informal loan. We use purchasing behavior of brand name products as an instrument in IV Probit model (IVPROBIT) for luxury spending behavior, because it has occupied over 38% of the total value of imported luxury goods in Thailand during the past 10 years. The general specifications of our IV Probit model is:

$$Y_i^* = \alpha + \sum_{i=1}^{K-1} \beta_i X_i + \beta_K X_{K_i} + u_i \qquad (2)$$

where eq. (2) is the structural equation and Y* is the unobservable latent variable. X_i represents the exogenous variables, X_K is the suspected endogenous variable. Given that we expect luxury spending to be endogenous, the first stage equation is estimated as

$$X_{K_i}^* = \gamma + \sum_{i=1}^{K-1} \lambda_i X_i + \phi_1 z_i + v_i \qquad (3)$$

where z is an instrumental variable. The models assume that the error term u_i and v_i are independent and identically distributed multivariate normal for all i. After estimating the first stage equation, we put the predicted values of endogenous variable (X_K^*) into the structural equation:

$$Y_i^* = \sigma + \sum_{i=1}^{K-1} \pi_i X_i + \pi_K X_{K_i}^* + \mu_i \qquad (4)$$

The eq. (4) shows the second stage equation, which is assumed that the instrumental variable is not correlated with the error term.

4.5   Empirical Results

Model (1) in Table 4.3 shows the regression results from our main equations, while models (2), and (3) are tested in order to do a robustness check and to confirm the results of the key variables in Model (1). The test of the Wald test of exogeneity in Model (1) addresses that there is sufficient information in the sample to reject the null hypothesis of no endogeneity, because 0.0356 is a significant result. The values of the prediction squared from the link test in the three models are not significant, which indicate that no problems with our specification. Also, we detect the presence of multicollinearity by using variance inflation factors (VIF). The values of VIFs shown in all models do not indicate the persistence of the multicollinearity problem. Moreover, the F-statistic shown in the 1st stage IV exceeds than 10. It reveals that our instrument is not weak.

On the whole, we find qualitatively similar results regarding the key variables by using Probit and IV methods. Namely, our results in the column 1 address that increasing the amount of monthly spending by an individual on brand name products, perfumes and cosmetics, and accessories for none-investment purposes by Probit (or brand name purchasing by the IV analysis) leads to an increasing probability of needing an informal loan for the person. It implies that luxury spending of some people is funded by going into debt. Spending money that a spender doesn't actually have with no real financial ability to afford luxury goods is an activity that has a negative effect when that person faces with financial problems, due to the fact that they do not have adequate financial knowledge or discipline or when they face emergencies where they do not have enough money to buy necessary items, such as food, accommodation or rental payments, or medical treatment expenses. Informal credit sources, therefore, play an important role for smoothing consumption and/or investment in the Thai society.

The income level in the IV estimation is negatively associated with the likelihood of making an informal loan, which is consistent with Khoi et al. (2013) and Nwaru et al. (2011). Income levels of a borrower also influence the decision whether to turn to informal loans. A person with monthly income below financial credit institutions' minimum requirement levels for potential might need to borrow from the informal credit market instead.

Interestingly, the estimated coefficient on the variable DTI (debt-to-income ratio) is positive and statistically significant at the 1% level of significance. It implies that the high level of outstanding debt is consistent with decision in favor of a borrower, consistent with findings from Kedir (2003) that outstanding debt affects the demand for credit. People with high DTI levels will face much difficulty in getting formal credits since their existing debt-to-income ratio is a clear evidence that they have low ability to pay off their debts. Consequently, the informal loan market is the last resort of funds for this group of people.

If the net monthly income is zero or negative, that person may have insufficient money to spend on daily or emergency expense. The data for net income per month of all groups of borrowers from the survey (in this study) shows that 40.49% of the informal borrowers have negative balance sheets or no income left after deducing tax and other payroll deductions, because of their very high debt ratio or imbalances in management of income and expenditures. The net monthly income, therefore, is an important factor which has an effect on decisions of a person in requesting an informal loan. This result is similar to Zanin (2017) that uses liquidity ratio to measure the ratio between household liquid assets and net annual income. The results show that low liquidity levels correspond to high likelihood of requesting informal loans.

The decision on borrowing from the informal loan sector is negatively associated with having money saved up every month without making any withdrawals for 3 continuous months or longer, providing a 99% confidence interval of the coefficient. To have money in saving accounts reflects personal financial stability in terms of reducing a negative effect from unexpected expenditures, because that money can be withdrawn to pay for those unexpected needs when there is a lack of cash in hand. As a result, the lack of disciplined savings will increase the likelihood of borrowing from the informal credit market by such an undisciplined person. This result is similar to Babiarz and Robb (2014) and Goenka and Henley (2011) that the absence of emergency savings might lead households to borrow from family or friends when an urgent need occurs.

The estimated coefficient on the variable of having income and expense worksheets is negative and statistically significant at the 10% level of significance in binary probit estimation, but not in IV estimation which is consistent with

Buddhawongsa et al. (2014). Actually, we have many occasions of buying goods and services within a month that we cannot always remember every one of our transactions. A person rarely realizes the extent of overspending and often fail to reckon what expenses are unnecessary unless by examining his daily income earned and daily expenses. Such a person can reduce or avoid those kinds of unaffordable or unnecessary purchasing. The lack of collecting income and expense records on worksheets seems to have a negative indirect effect on managing personal finance that may lead to higher likelihood of borrowing from informal sources.

Table 4.3 Determinants of decision making on an informal loan – Probit with Taylor-linearized variance estimation and IV estimates

Variable	Model 1		Model 2		Model 3	
	Probit	IV	Probit	IV	Probit	IV
Key variables						
Luxury	0.000***	0.000**	0.000***	0.000**	0.000**	0.000**
	(0.008)	(0.020)	(0.006)	(0.011)	(0.017)	(0.014)
Income level	-0.000	-0.000***	-0.000	-0.000***	-0.000	-0.000***
	(0.129)	(0.001)	(0.116)	(0.000)	(0.136)	(0.000)
DTI	0.008***	0.009***	0.008***	0.009***	0.008***	0.009***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Net income	-0.633***	-0.454***	-0.609***	-0.444***	-0.619***	-0.462***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Saving	-0.217**	-0.326***	-0.227**	-0.331***	-0.269***	-0.360***
	(0.023)	(0.001)	(0.017)	(0.001)	(0.004)	(0.000)
Account	-0.223*	-0.187	-0.220*	-0.190		
	(0.073)	(0.140)	(0.077)	(0.132)		
Control variables						
Head of hh.	-0.035	-0.091				
	(0.707)	(0.323)				
No-income	0.003	0.001	0.003	0.002	0.003	0.002
	(0.153)	(0.382)	(0.135)	(0.304)	(0.142)	(0.329)
Age						
30-39 years	-0.072	0.118				
	(0.545)	(0.367)				
40-49 years	-0.168	0.093				
	(0.209)	(0.554)				
50 years or over	-0.267*	0.004				
	(0.097)	(0.984)				
Gender	0.113	0.205*	0.113	0.208*		
	(0.182)	(0.084)	(0.181)	(0.068)		
Marital status						
Single	-0.334**	-0.357**	-0.220	-0.344**	-0.217	-0.329**
	(0.037)	(0.018)	(0.137)	(0.021)	(0.139)	(0.024)
Married	-0.291**	-0.319**	-0.266*	-0.302**	-0.261*	-0.281**
	(0.044)	(0.018)	(0.060)	(0.026)	(0.062)	(0.032)
Education level						
Element-ary	0.381	0.468	0.373	0.466	0.342	0.395
	(0.312)	(0.185)	(0.292)	(0.187)	(0.341)	(0.255)
Lower second	0.483	0.554	0.513	0.561	0.488	0.532
	(0.201)	(0.120)	(0.147)	(0.115)	(0.177)	(0.131)
Upper second	0.017	0.210	0.068	0.220	0.024	0.167
	(0.963)	(0.544)	(0.842)	(0.523)	(0.945)	(0.622)
Higher level	-0.233	-0.110	-0.176	-0.090	-0.210	-0.116
	(0.534)	(0.757)	(0.613)	(0.800)	(0.557)	(0.740)
Bachelor level	0.043	-0.034	0.097	-0.017	0.050	-0.068
	(0.906)	(0.922)	(0.773)	(0.960)	(0.885)	(0.843)

Table 4.3 (continued)

Variable	Model 1		Model 2		Model 3	
	Probit	IV	Probit	IV	Probit	IV
Master level	-0.390 (0.340)	-0.775* (0.060)	-0.355 (0.358)	-0.754* (0.065)	-0.417 (0.289)	-0.787* (0.054)
Ph.D.	0.168 (0.816)	-0.553 (0.482)	0.245 (0.729)	-0.553 (0.479)	0.093 (0.892)	-0.651 (0.401)
Stable income	-0.022 (0.829)	0.032 (0.747)	-0.033 (0.749)	0.024 (0.811)		
Home owner	-0.340*** (0.000)	-0.339*** (0.001)	-0.362*** (0.000)	-0.349*** (0.000)	-0.361*** (0.000)	-0.347*** (0.000)
Observati	1,494	1,494	1,494	1,494	1,494	1,494
Mean VIF	3.72		4.17		4.57	
Wald test, p-value		0.0356		0.0216		0.0286

*Notes: p-values are reported in brackets below the coefficients. * Significant at the 10%, ** at the 5%, *** at the 1% levels, respectively. The 1ˢᵗ stage IV estimates are shown in Table 1.1F (Appendix F). The coefficient number of luxury spending by using probit and IV estimates in Model (1) are equal to 0.0000463 and 0.0002539, respectively. While, the coefficient number of income level in Model (1) by using IV estimation is equal to -9.76 x 10⁻⁶.*

Source: Own elaboration

The results shown in Models (2) and (3) are consistent with our main model (Model 1) that each key variable except the income level in the models is statistically significant at the same level. The coefficient numbers of luxury spending, income level, debt-to-income ratio, net monthly income, consistent saving, and income and expense account are not very different among whole models. An interesting control variable in the study is home ownership which was found to affect the probability to borrow informal loans in the opposite direction, namely, an individual who has home ownership is less likely to borrow informally because a house can be used as collateral to guarantee a loan from the formal credit sector, consistent with findings from Zanin (2017).

Report Standard Error and Significance

We performed sensitivity analyses to check robustness of the results by using Probit method with jackknife variance estimation in Table 4.4 which is compatible method for the svyset command in the study in order to compare whether the regression results differed from Taylor-linearized variance estimation (Table 4.3).

Table 4.4 Determinants of decision making in an informal loan – Probit with Jackknife Variance Estimation

Variables	Coefficients	Jackknife Std. Err.	*p-values*
Luxury	0.000**	0.000	0.018
Income level	-0.000	0.000	0.311
DTI	0.008***	0.002	0.000
Net income	-0.633***	0.109	0.000
Saving	-0.217**	0.098	0.027
Account	-0.223*	0.130	0.086
Head of hh.	-0.035	0.097	0.716
No-income member	0.003	0.002	0.173
30-39 years	-0.072	0.122	0.557
40-49 years	-0.168	0.141	0.234
50 years or over	-0.267	0.173	0.123
Gender	0.113	0.088	0.197
Single	-0.334**	0.169	0.048
Married	-0.291*	0.152	0.055
Elementary	0.381	0.440	0.387
Lower second	0.483	0.440	0.272
Upper second	0.017	0.427	0.968
Higher level	-0.233	0.436	0.594
Bachelor level	0.043	0.426	0.920
Master level	-0.390	0.475	0.412
Ph.D.	0.168	1.224	0.891
Stable income	-0.022	0.108	0.836
Home ownership	-0.340***	0.097	0.000
Observations		1,494	
Prob > F		0.000	

* significant at the 10%, ** at the 5%, *** at the 1% levels, respectively.

Source: Survey findings compiled by the authors (2017)

All key regressors in Table 4.4 report qualitatively similar signs to the estimation results in Table 4.3.

Table 4.5 Determinants of decision making in an informal loan adding occupation –
Probit with Jackknife Variance Estimation.

Variables	Coefficients	Jackknife Std. Err.	*p-values*
Luxury	0.000**	0.000	0.028
Income level	-0.000	0.000	0.407
DTI	0.008***	0.002	0.000
Net income	-0.638***	0.111	0.000
Saving	-0.233**	0.099	0.019
Account	-0.231*	0.131	0.079
Head of hh.	-0.051	0.097	0.604
No-income member	0.003	0.002	0.152
30-39 years	-0.069	0.124	0.579
40-49 years	-0.192	0.145	0.187
50 years or over	-0.245	0.184	0.183
Gender	0.144	0.091	0.112
Single	-0.330*	0.173	0.057
Married	-0.305*	0.157	0.051
Occupation			
Farm (own land)	-0.512	0.333	0.124
Farm (rent land)	-0.345	0.459	0.452
Agricultural operators	-0.153	0.628	0.808
Non-farm business	0.002	0.258	0.993
Professional employees	-0.011	0.254	0.965
Farm workers	0.416	0.501	0.406
General workers	-0.502*	0.270	0.063
Service workers	-0.115	0.244	0.638
Production workers	-0.206	0.275	0.454
Stable income	-0.023	0.124	0.851
Home ownership	-0.322***	0.101	0.002
Observations		1,494	
Endogeneity		Yes	
Prob > F		0.000	

* significant at the 10%, ** at the 5%, *** at the 1% levels, respectively.

Source: Survey findings compiled by the authors (2017)

Table 4.5 reports empirical results when occupations is added as a control
variable instead of education levels. The reason why the authors used borrowers'
occupation in our model in this table is because, based on the study by Ekchariyakon
(2011), many Thai people are merchants and peddlers who have small size of
increments of savings, or relatively short saving periods, and have no an operating
license which is a required document from formal credit sources. All of these makes

borrowing from formal credit institutions difficults for these groups of people. Jumneanpol (2014) and Buddhawongsa et al. (2014) show that some people working in farming operations, retailers, and non-farm business sector chose to borrow from informal sources because formal credit programs do not match their demands. Also, Meechart et al. (2013) show that many Thai merchants who have need for emergency credits have entered the informal credit sector.

Table 4.6 Determinants of decision making in an informal loan adding occupation – by using 2nd stage IV estimates. (Brand name purchasing is used for luxury spending).

Variables	Coefficients	p-values
Luxury spending	0.000**	0.024
Income level	-0.000***	0.001
DTI	0.009***	0.000
Net income	-0.459***	0.000
Saving	-0.341***	0.001
Account	-0.198	0.121
Head of hh.	-0.099	0.284
No-income member	0.002	0.339
30-39 years	0.117	0.377
40-49 years	0.074	0.643
50 years or over	0.016	0.939
Gender	0.223*	0.073
Single	-0.354**	0.019
Married	-0.334**	0.015
Occupation		
Farm (own land)	-0.227	0.486
Farm (rent land)	-0.165	0.673
Agricultural operators	-0.196	0.723
Non-farm business	0.104	0.662
Professional employees	0.090	0.708
Farm workers	0.352	0.396
General workers	-0.239	0.350
Service workers	-0.015	0.949
Production workers	-0.071	0.784
Stable income	-0.051	0.642
Home ownership	-0.334***	0.002
Observations		1,494
Wald test, p-value		0.0401
Prob > F		0.000

* significant at the 10%, ** at the 5%, *** at the 1% levels, respectively.

Source: Survey findings compiled by the authors (2017)

However, the test of exogeneity in Table 4.5 shows that there is sufficient information in the sample to reject the null hypothesis of no endogeneity. Hence, we test the same set of variables by using IV estimation as shown in Table 4.6. The regression results shown in Table 4.6 report that the occupation variable was not statistically significant, which shows that the borrowers' occupations in the study areas are not related to the decision on making an informal credit loan. This may have been caused by the very low ratio of people who work in farming operations in the study areas when compared to the other regions in the country, that focused more on agriculture. Moreover, income levels and spending behavior of the respondents may be different from data in the previous studies because of different areas and the year of the studies. In addition, in this study we divided classifications of the borrowers' occupations following the categories by the National Statistical Office (NSO) which may not be entirely suitable for detecting the correlation between those two factors.

Table 4.7 studies whether the decision on borrowing informal credit depends on marital status by using binary Probit analysis. We categorized marital status into three groups: Single, Married, and Divorced. The total number of single respondents was 613, while the married group was 711, and only 169 for the divorced group.

Model (2), (4), and (6) in Table 4.7 show that DTI is relevant for all type of marital status, namely, a higher DTI is associated with greater likelihood of making an informal credit, which is consistent to the results in Table 4.3. Luxury spending behavior which is a highlighted factor in the study gives a higher probability of accessing informal loans for single and married people, but not for the divorced group.

Next, net monthly income is highly significant with the probability of borrowing an informal loan for both single and married groups, which was also similar to the results in Table 4.3, however, the results do not show correlation between these two factors for the divorced group.

Table 4.7 Regression results on making decision on an informal loan when focus separately on marital status.

Variable	Single		Married		Divorce	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Key variables						
Luxury	0.000*	0.000**	0.000	0.000	0.000	0.000
	(0.058)	(0.011)	(0.728)	(0.194)	(0.300)	(0.421)
Income	-0.000**	-0.000**	-0.000	-0.000	-0.000**	-0.000**
	(0.011)	(0.043)	(0.532)	(0.409)	(0.046)	(0.043)
DTI	0.009***	0.009***	0.009***	0.007**	0.010**	0.010**
	(0.002)	(0.004)	(0.002)	(0.012)	(0.047)	(0.033)
Net income	-0.660***	-0.707***	-0.612***	-0.628***	-0.489	-0.286
	(0.000)	(0.000)	(0.000)	(0.000)	(0.067)	(0.348)
Saving	-0.175	-0.090	-0.356***	-0.332**	-0.349	-0.376
	(0.231)	(0.542)	(0.007)	(0.017)	(0.238)	(0.230)
Account	-0.250	-0.197	-0.369**	-0.287	0.053	-0.032
	(0.168)	(0.280)	(0.049)	(0.133)	(0.915)	(0.945)
Control variables						
Head of hh.		-0.080		-0.069		0.085
		(0.571)		(0.633)		(0.785)
No-income		-0.001		0.005		0.009*
		(0.601)		(0.102)		(0.075)
Age						
30-39 years		0.112		-0.566**		0.268
		(0.460)		(0.020)		(0.637)
40-49 years		-0.344		-0.522**		0.235
		(0.111)		(0.028)		(0.659)
50 years or over		-0.698**		-0.651**		0.446
		(0.020)		(0.014)		(0.438)
Gender		0.153		0.066		0.068
		(0.263)		(0.583)		(0.800)
Education level						
Elementary		-0.388		0.705*		0.279
		(0.543)		(0.079)		(0.654)
Lower second		-0.484		0.957**		0.147
		(0.461)		(0.017)		(0.814)
Upper second		-1.425**		0.545		0.041
		(0.017)		(0.166)		(0.947)
Higher level		-1.663***		0.221		0.111
		(0.008)		(0.585)		(0.860)
Bachelor level		-1.352**		0.434		0.543
		(0.021)		(0.263)		(0.375)
Master level		-2.299***		0.317		0.612
		(0.000)		(0.506)		(0.499)

Table 4.7 (continued)

Variable	Single		Married		Divorce	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Ph.D.		-0.652		0.680		-
		(0.504)		(0.459)		
Stable income		0.035		-0.003		-0.206
		(0.842)		(0.982)		(0.447)
Home ownership		-0.115		-0.442***		-0.482*
		(0.416)		(0.002)		(0.099)
N	613	613	711	711	169	169
Mean VIF	2.28	5.23	1.11	4.20	1.15	2.95
Endogeneity	No	No	No	No	Yes	Yes
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

*Notes: p-values are reported in brackets below the coefficients. * Significant at the 10%, ** at the 5%, *** at the 1% levels, respectively. The Stata program does not report the result on Ph.D. level because there is only one Ph.D. respondent in the divorce group.*

Source: Own elaboration

In particular, the parameter measuring the effects of disciplined savings and keeping a monthly income and expense account on making an informal loan are negative and significant only in the married group, providing support that savings seem to be an important source of money when married people lack liquidity in hands, while having records on the account helps married people to manage their income and expenses more easily. However, those kinds of relationships were not found for single and divorced people.

4.6 Concluding Remarks

The questions about the factors influencing an individual to borrow money from an informal credit source have not been very clear in the case of Thailand. Many people who can access lower cost funds from formal credit institutions chose to borrow from the informal credit market due to the fact that there is more flexibility in terms of requirements and conditions from these informal sources of funds.

The purpose of this paper aims to provide a better understanding about the factors that lead an individual to make decisions on an informal loan in Thailand by investigating the probability of borrowing informal credit using Probit and instrumental variable (IV) methods.

Based on empirical data collected through surveys in 4 provinces of the country, some of the answers given in the study emphasize that the luxury spending of an individual is a very important factor influencing the likelihood of informal borrowing. In addition, the characteristics of an individual such as the income level, debt-to-income ratio, and net monthly income are also factors influencing the tendency of making an informal loan. Moreover, disciplined savings, showed by having consistent savings every month without withdrawing for 3 months, and keeping a monthly income and expenses account are also consistent with higher financial disciplines and, consequently, less need for making informal debts.

Chapter 5

5 Dependence of Informal Interest Rates and Level of Lenders' Influence in The Informal Loan Market in Thailand[13]

5.1 Abstract

Informal finance with usurious interest rates seem to be the last resort for the poor in many developing countries. In the case of Thailand, informal credit lenders can freely set up these extortionate interest rates and use controversial enforcement actions to pressure their borrowers to repay their loans, due to the fact that legal enforcement is not practical in terms of the low punishment levels for those lenders. Despite widespread interest in the determinants of the informal interest rates, it remains a largely unexplored area. This study investigates whether level of lenders' influence over the borrower, and some characteristics of the borrowers, can be related to informal interest rates, enabling the rates to be classified into particular categories. The ordered logistic regression is used to carry out the data analysis. The investigation was based on information collected in a survey presented to a sampled population of 694 participants from Bangkok, Nonthaburi, Phathum Thani, and Samut Prakan where the number of informal loans during the last 7 years is highest when compared to other regions of the country. The results suggest that the level of lenders' influence over the borrower in order to obtain a loan correlate highly with the informal interest rates applied. Moreover, some characteristics of a borrower, i.e., debt-to-income ratio and high level of familiarity between an informal lender and a borrower also significantly affect the rates.

5.2   Introduction

For a long time, governments have attempted to create programs so as to distribute subsidized credits to people in a country, but in practice, the poor tends to have a higher probability to get their applications refused by formal institutions. Moreover, formal credit programs in many countries have not truly met household demands (see e.g. Boucher and Guirkinger 2007, Pellegrina 2011, Mallick 2012). This problem is the main factor leading to the creation of an informal credit market, which is the alternative lending source with more flexibility in many of the terms and conditions, although the interest rates charged are usually significantly higher than in formal credit sectors (Mohieldin and Wright 2000, Ghate 1992).

Many existing studies argue that informal lenders can freely determine their lending interest rates. Even if they know about the legal cap on interest rate, many of them are not concerned with these legal rates. Some are charged at low rates, but most of the time the lenders charged the rates above the maximum ceiling interest rates announced by the central banks (Andersen and Malchow 2006), and at times much more than the value of the loans (Haugen 2005) that surpass their marginal costs (Aleem 1990, Bolnick 1992). According to Siamwalla et al. (1990), there has been huge gaps between formal and informal interest rates in Thailand, where the latter are mostly charged twice as much, with as high as 25% per year in the Central areas, and 60% annually or above elsewhere.

Informal loan problems may not have a direct effect on the economic growth of a country, but high rates lead to severe problems to indebted citizens in terms of well-being, through dramatic decreases in purchasing power, standards of living, and liquidity, which in turn lead to personal strain, family and social problems, such as crime or suicide problems (Bridges and Disney 2010, Jeromi 2007).

Informal finance exists today in many countries such as India, South Africa, Madagascar, Nepal, Myanmar, Cambodia (Finmark Trust 2017) and Thailand (Sondergaard et al. 2016, p.32). However, the informal loan problem is outstandingly huge in the case of Thailand, namely, Thai governments have tried to eliminate or reduce the number of loan sharks who seem to set up his high interest rates, but the problems have not been controlled or dealt with due to the fact that the punishment is

so light that legal enforcement is not practical in practice in terms of sufficient pressure either within the purview of the Bank of Thailand (BOT) or the Thai government sectors. Even though, in January 2017, the Thai government issued new regulations and controls regarding higher punishment to the informal lenders who charged higher interest rate than 1.25% per month, it has apparently not resulted in much concern from the lenders' side. The number of loan shark cases shown in newspapers have been found to increase dramatically in both 2016 and 2017. Informal loans are so widespread that advertisements, contact information, and pamphlets can be spotted almost anywhere, and while these aren't formal, they still signify the abundant supply of such loans which can tempt those in need of money to contact the lenders. (Bangkok Post 2017b). Whereas the average amount of informal debt per household in Bangkok and Greater Bangkok have reduced merely 31% during 2007 to 2015 (National Statistical Office of Thailand 2016). According to a survey by The University of the Thai Chamber of Commerce (2016), the household debt of Thai people in 2016 was highest during the last 9 years where 38% of such debts are from informal debt. Unsurprisingly, the public sector has not only failed to eliminate the informal loan market, but the market has also retained its high credit demands from households every year (National Statistical Office of Thailand 2016).

Debt collection behaviors and enforcement measures of many informal lenders in Thailand are illegal; they frequently use physical violence and/or harassment as major tools to recover the principle and extortionate interest rates (Robert et al. 2013, p.21, Bangkok Post 2017a). Helmet gangs are broadly known as motorcycle-driving hoodlums or gangsters who are hired by some informal lenders to act as representative debt collectors. Those people normally do monitoring and take violent enforcement actions to borrowers in lists when the borrowers make late payments or trying to escape without paying. This phenomenon is found in many areas in Thailand (Robert et al. 2013, The Nation 2016).

It is still an unclear question regarding the factors which determine the informal interest rates. One key question being: "Are there some factors which determine the rates differently to the formal credit sector?". Why do some lenders charge at a free rate? Are their borrowers risk-free people? In addition, whether the levels of lenders' influence over their borrowers affect the informal interest rates.

In this paper, we empirically investigate the effect of levels of lenders' influence on informal interest rates in the case of Thailand where the debt enforcement actions are outstanding. The level of lenders' influence includes using physical violence, harassment, forceful seizure of collaterals, and the no reaction when default occurs. Moreover, in order to develop a better understanding regarding the factors influencing the informal interest rates, the borrower's characteristics, i.e., debt-to-income ratio, income stability, income levels, and familiarity level between a lender and a borrower are tested to investigate whether those factors affect the rates. Overall, our results indicate that the level of lenders' influence over the borrower has a positive effect on the informal interest rate. The result is robust across different methods.

5.3   Literature Review

Factors Influencing Informal Interest Rates

Level of Lenders' Influence and Informal Interest Rates

Basu (1983) was interested in why there are no strong effects of the arbitrage between credit sectors on interest rate convergence and in lowering the informal rates in backward agricultural sectors. He shows in his paper that a lender has *ex ante* judgement about the levels of default risk in the future of a potential borrower and the former will then grant a loan to the borrower with manageable or no default risks. Whereas Stiglitz and Weiss (1981) who studied credit rationing in markets with imperfect information, which focused on the role of interest rates as a screen tool for distinguishing between high and low risk borrowers reported that at high lending interest rates, low risk borrowers will not apply for a loan and lenders know that only risky borrowers will accept these loans. In order to reduce risk or avoid losing debt, each lender has monitoring and enforcement methods if there is a high probability of default (Li and Hsu 2009[14], Román 1999[15]). The cost of lending is different based on types of enforcement actions. Some types of enforcement action can be costly for informal lenders, such as using violence or harassment. Hence, an informal lender has to establish an interest rate which covers his cost of lending including enforcing costs.

According to Robert et al. (2013, p.21), who studied major consumer protection concerns from unethical debt collection by moneylenders in Thailand, these actions were commonly found in many slums in Bangkok areas, where the informal lenders have used public humiliation, and, if that fails to deliver their debt, they used physical violence to recover the loans. This situation is also found in the study by Finnegan and Singh (2004, p.44) which studied the informal sectors in Thailand and Zambia. The

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[14] Li and Hsu (2009) wrote the book "Informal Finance in China: American and Chinese Perspectives" which focuses on the overview of informal credit sector in China through research in historical, cultural, regional, micro-economic, and macro-economic perspectives.
[15] Román (1999) studied the effects of enforcement actions on bank loan contracting by using loan-level data and multidimensional information on loan contracts in the U.S. banking system.

results show that Thai informal lenders generally hire motorcycles or gangsters to be representors in case that they intend to use physical violence to recall the loan from their borrowers. Harassment, threats, and seizure of collateral by lenders are also used to avoid losing debt.

Hypothesis 1: The influence level of a lender over the borrower, in terms of repayment enforcement, is positively associated with the informal interest rate.

Familiarity Level and Informal Interest Rates

Ghosh and Ray (2016) investigated the cases of markets with no sharing of knowledge of borrowers' credit histories between the lenders, particularly on the topics of information and enforcement within the informal sector. By deriving the dynamics of relationship-based lending with respect to size of loans and the rates charged, they confirmed that information asymmetry has always occurred in formal credit markets due to the fact that a borrower does not reveal honestly his personal information relating to risk level of default to a lender, and, collecting information on a borrower's credit history is costly and imperfect. In addition, Bose (1998) studied interactions between formal and informal credit sectors in rural markets when moneylenders faced asymmetric information about their clients and borrowers had different levels of default probability. He shows in his paper that a formal creditor is not a close acquaintance; therefore, he cannot access certain important hidden personal information of a potential borrower.

Whereas, there is less problem of an information asymmetry in informal credit markets because informal lenders are closer to their borrowers than formal credit institutions which can reduce the problem of adverse selection and moral hazards (Orso 2009).[16] This result is similar to the study by Charles and Mori (2016), which used a dataset of 835 borrowers on the firm level in Tanzania during 2012-2014, based on a

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[16] Orso (2009) investigated the interaction between moneylenders and traditional banks in the rural credit market in India through a theoretical approach. The paper reports that in the presence of strong and consolidated social ties, the knowledge about potential borrowers would spread quickly among lenders which could reduce costs for the lenders.

simple random method. Another study by Turvey and Kong (2010) also studied the correlations between formal and informal (friends and relatives) lending in rural China by using survey data from 1,565 farm households in Yangling, Henan, Gansu, and Qianyang during 2007-2008. The results showed that informal lenders who are not active money-lenders usually lend money to people with whom they are familiar with, and whose personal financial information is known. These results are also supported by Onchan (1985) who investigated role of informal credit sector in Thailand in terms of structure, operations, and performance of the market.

This phenomenon leads to a competitive advantage regarding the borrower's characteristic information, for relatives and friends rather than other money-lenders. On the other hand, Karlan et al. (2009) built a theory of trust as an important social collateral to secure the loans in informal contract enforcement in social networks. Therefore, trust can be used as one type of collateral in which occurs when a lender and a borrower have high enough familiarity levels whereby lower interest rates follow due to the fact that the lender believes that his borrower will certainly repay the debt in the future. Turvey and Kong (2010) who studied the connection between trust and informal lending also confirmed such a relationship that relationship-lending is often found when money is loaned by relatives and friends.

According to Yuan and Gao (2012), who studied farmers' borrowing decisions on choosing between formal credit institutions (banks) and informal credit sources (relatives and friends) by using data from Rural Household Survey in 2006, and estimated the determinant factors of borrowing through three-stage least squares, the results show that friends and relatives who are close to their borrowers generally charge very low rates or at a zero rate, which is consistent with the study by Zeller (1994). Kislat (2015) studied he use and benefit of informal loans for different income level of 1,151 households in North-east Thailand by during 2007-2008 by using a difference-in-differences estimation approach. The results show that moneylenders in Thailand charged very high rates, while family charged lower rates. The same results were shown in the study by Kochar (1997) which forecasted the demand and costs of credit in formal and informal credit markets of 7,053 rural households in India during 1981-1982.On the other hand, more distant lenders who are mostly active money-lenders by trade

usually request higher interest rates and sometimes rely on physical violence to call in loans (Li and Hsu 2009, Román 1999).

Hypothesis 2: The familiarity level between a lender and a borrower is negatively associated with the informal interest rate.

Debt-To-Income Ratio (DTI) and Informal Interest Rates

The DTI is used to represent a borrower's ability to manage monthly payments and repay debts. According to Risk-based Pricing theory, a borrower will certainly be charged higher interest rates if they have a high level of DTI, as to cover the risk of default, because the high number represents a problem of likely being unable to repay debt of the person in the future. In addition, Kedir (2003) who studied factors influencing households in urban Ethiopia on access to credit, confirmed that high DTI borrowers have high probability to resort to the extending of loan repayment periods from a formal credit sector due to credit constraints. Consequently, their financial demand in the informal credit market, which is an alternative source of lending will be higher.

Hypothesis 3: The debt-to income ratio of a borrower is positively associated with the informal interest rate.

Stable Income and Informal Interest Rates

Gestel and Baesens (2008)[17] reported in their book that borrowers with unstable income have a higher default probability because of lower financial security than those who have income stability.

In Thailand, stable income is an important requirement for loan applications from formal credit institutions. People who are denied by the formal institutes frequently try to find another source from friends or relatives who are the first important

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[17] Gestel and Baesens (2008) wrote the book named "Credit Risk Management: Basic Concepts: Financial Risk, Components, Rating Analysis, Models, Economic and Regulatory Capital," which dealt with issues that people needed to consider when undertaking credit risk management.

informal source, but it is also possible they might not be able to access a loan need to rely on money-lenders, therefore, the greater the demand for informal loans, the higher interest rate charged (Yuan and Gao 2012). These results are similar to the results found by Ghate (1992), who studied the interaction between formal and informal credit sectors in Bangladesh, China, India, Korea, Malaysia, Nepal, Pakistan, Philippines, Sri Lanka, and Thailand, as well as the study by Pellegrina (2011) which conducted a study in rural Bangladeshi villages. Pellegrina's research in 2011 compared the effects of various credit types on the investment behavior of the rural households by using data from 1,798 households during 1991-1992 through survey.

Hypothesis 4: Stable income of a borrower is negatively associated with the informal interest rate.

Income Level and Informal Interest Rates

Based on the study by Bhattacharjee and Rajeev (2010), which investigated how informal interest rates were formulated in India where informal lending is popular among the poor because 50% of the population are denied credit from formal credit institutions, it was found that many households in the studied areas certainly need to rely on informal funds. The results show that borrowers with higher income levels could obtain loans at lower rates than those in the low and middle income groups, because economic conditions reflect the potential of defaults. This is related to the results in the study by Hoff et al. (1993), which studied characteristics of rural credit markets in Nigeria, Thailand, India, Pakistan, and Israel, because interest rates are used as an indirect screening mechanism of potential borrowers. Similarly, Yotopoulos and Floro (1992) studied income distribution, transaction costs, and market fragmentation in informal credit markets where there were 2 types of informal lenders in the Philippines market: those who are trader-lenders and farmer-lenders. The results showed that both group of lenders sort their borrowers and organized their credits in a systematic way while lower income groups are charged higher rates than the ones with higher income.

Hypothesis 5: The income level of a borrower is negatively associated with the informal interest rate.

5.4   Methodology

Data and Summary Statistics

The data used in the study is collected from 694 informal borrowers aged 20 or over in 4 provinces (including Bangkok and Greater Bangkok) which are Bangkok, Nonthaburi, Phathum Thani, and Samut Prakan, from surveys without census registration concerns. This is done through a set of 800 questionnaires conducted by the authors in 2016, with a response rate of 86.75%, or 694 copies completed.

All variables categories, name, detailed definitions, and some basic summary statistics of all characteristics of the data used in our analysis are presented in Table 5.1. Our dependent variable is the informal interest rates, while the key independent variables consist of the influence level of a lender, debt-to-income ratio (DTI), income level, stable income, and familiarity level. Our specific control variables are defined as in previous studies, such as Yuan and Xu (2013), and Siamwalla et al. (1990).

The collateral in the study includes both tangible and intangible assets: namely land, vehicles, gold, diamond, stocks, bonds, and working tools. Guarantors, on the other hand, make up an important substitute for collateral to ensure the loan (Charles and Mori 2016, Menkhoff et al. 2012).

The first important summary statistics for Table 5.1 is 2.869 in the average informal interest rate rank, which implies that most of the lenders charged above the legal rate, which is 1.25% per month. Secondly, the minimum and maximum amount of loans vary from very small to large amounts which is consistent with the study by Turvey and Kong (2010) and Siamwalla et al. (1990). Thirdly, the DTI is 42.376% on average, which reveals that most of the informal borrowers are high-risk borrowers (see Figure 5.1).

Table 5.1 Variable definitions and summary statistics.

Name	Definition	Mean	Std.Dev	Min	Max
Dependent variable					
Informal interest rate	The monthly rates charged by an informal lender in the 5 ranks; Rank 1: 0%-2% Rank 2: 2.01%-4% Rank 3: 4.01%-6% Rank 4: 6.01%-8% Rank 5: more than 8%	2.869	1.655	1	5
Key independent variables					
High influence	= 1 if using physical violence	0.056	0.230	0	1
Medium Influence	= 1 if making shames	0.269	0.444	0	1
Low influence	= 1 if seizure collateral	0.519	0.500	0	1
Lowest influence	= 1 if an informal lender has no reaction when default	0.156	0.363	0	1
Debt-to-income ratio (DTI)	$= \dfrac{\text{Monthly fixed expense}}{\text{Monthly total income}} \times 100$	42.376	65.251	0	1000
Income level	Total income per month of a borrower (Baht)	21770.6	20253.3	500	300000
Stable income	= 1 if a person had stable income per month	0.751	0.433	0	1
High familiarity	= 1 if a high familiarity level	0.415	0.493	0	1
Medium familiarity	= 1 if a medium familiarity level	0.393	0.489	0	1
Low familiarity	= 1 if a low familiarity level between a lender and a borrower	0.141	0.348	0	1
Lowest familiarity	= 1 if a lender and a borrower do not know each other before	0.050	0.219	0	1
Other variables (Data on a borrower side)					
Amount of loans	Total amount of informal loans (Baht)	36043.2	95916.9	200	1000000
Savings	= 1 if a borrower has bank savings	0.602	0.490	0	1

Table 5.1 (continued)

Name	Definition	Mean	Std.Dev	Min	Max
Default History	= 1 if a borrower used to default on past loans	0.026	0.159	0	1
Collateral	= 1 if a collateral requirement	0.431	0.496	0	1
Medical treatment	= 1 if money usage for treatment	0.115	0.320	0	1
Guarantor	= 1 if a guarantor requirement	0.111	0.314	0	1
No income member	$= \dfrac{\text{Number of no income member}}{\text{Total number of members}} \times 100$	35.511	24.937	0	100

Source: Survey findings in Bangkok and Greater Bangkok (compiled by the authors, 2017)

Figure 5.1 Proportion of household members who are receiving no income and debt-to-income ratio (N = 694)
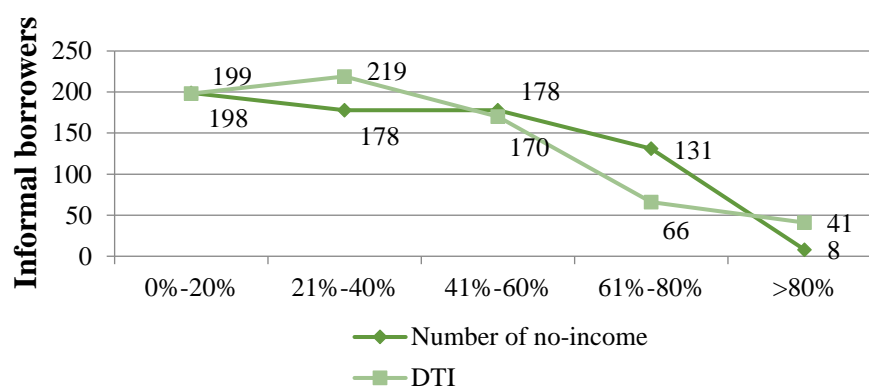
Source: Survey findings compiled by the authors (2017)

Figure 5.2 Basic characteristics of the informal borrowers in the study (N = 694)
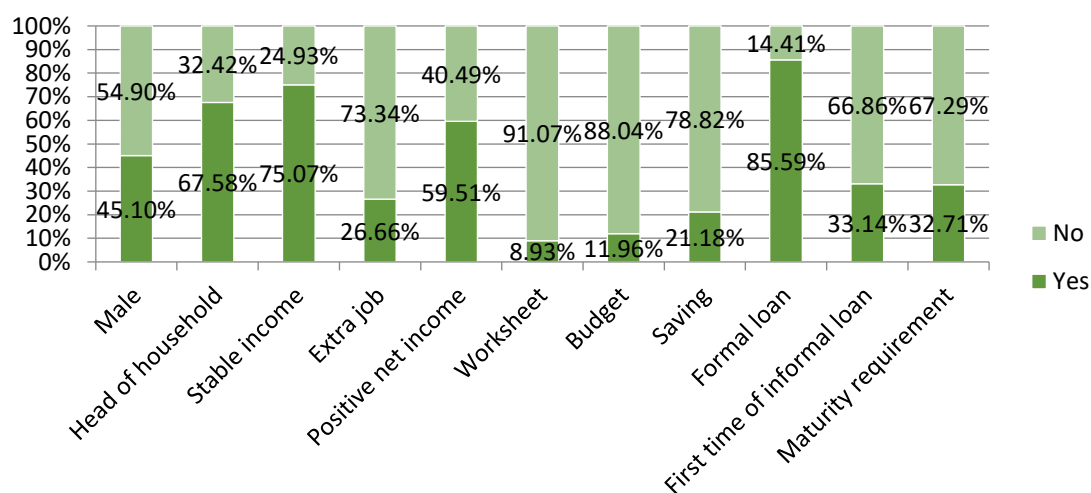
Source: Survey findings compiled by the authors (2017)

Figure 5.2 shows some interesting findings, namely, 40.49% of the informal borrowers in the study areas had negative net monthly income, which shows the financial constraint and low liquidity of money in hands. Only 8.93% and 11.96% of the observations had repayment records and setting cash budget each month, respectively. In addition, 78.82% of the informal borrowers in the study had not money savings and 85.59% of them had formal loan at the same time during being indebtedness on informal loans.

We divide the lenders' influences over the borrower in order to call for loans into 4 levels. The first level is a lender who uses physical violence. The second level is a lender who does not use physical violence, but actively uses humiliating measures against his borrower. The third one is a lender does not use physical violence or make humiliations, but seizes the collateral. The final level is a lender who takes no aggressive action if his borrower does not repay. The lenders' influences in the study reflect enforcement costs to the lenders to receive money from their clients. Informal lenders who hire helmet gangs (motorcycles and gangsters) to act as debt collectors have to pay the latter a salary or payments based on the number of clients they recover money from for dirtying their hands in illegal actions. Those collectors normally use physical violence to recall the loans.

While humiliating harassments from lenders includes "spamming" phone calls to borrowers and/or their relatives, making brochures and flyers to discredit borrowers, to openly humiliating them in front of the borrowers' peers, and other discrediting or disturbing pressures. In the study, we focus on enforcement costs which informal lenders have to incur related to each level of influence. We assume that if a lender uses physical violence to obtain repayment, their costs will be higher than lenders who merely use harassment or seizure of collateral.

If the recovery costs are anticipated to be high, then the interest rate charged will also be high and the lender will take into account the costs of enforcement in advance, before actually lending the money. We do not consider the costs that lenders may end up paying for fines or costs in the form of legal penalty because of the illegal enforcement actions.

Figure 5.3 Informal interest rate rank (N = 694)
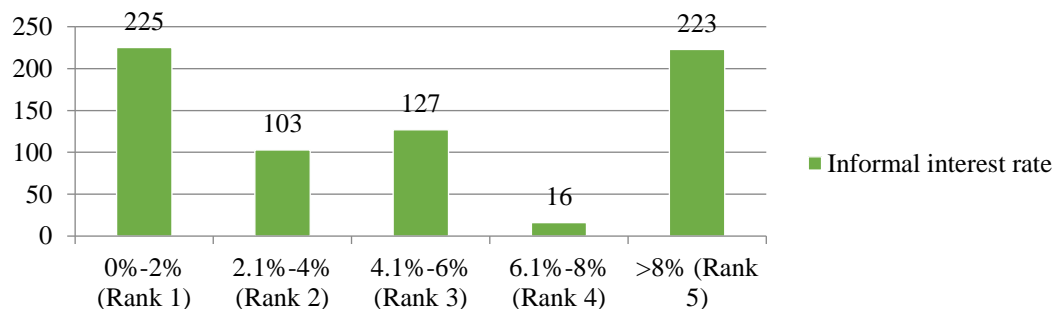
Source: Survey findings compiled by the authors (2017)

Figure 5.3 shows that more than 67.58% of the informal borrowers were charged than the legal lending interest rate, which 1.25% per month.

We are interested in how well the borrower is known to the lender when the informal interest rate is set. Hence, there are 4 levels of familiarity between a lender and a borrower in the study. These are categorized into "high", "medium", "low", and "have never met before granting a loan".

Figure 5.4 Influence level of the informal lenders and familiarity between a lender and a borrower (N = 694)
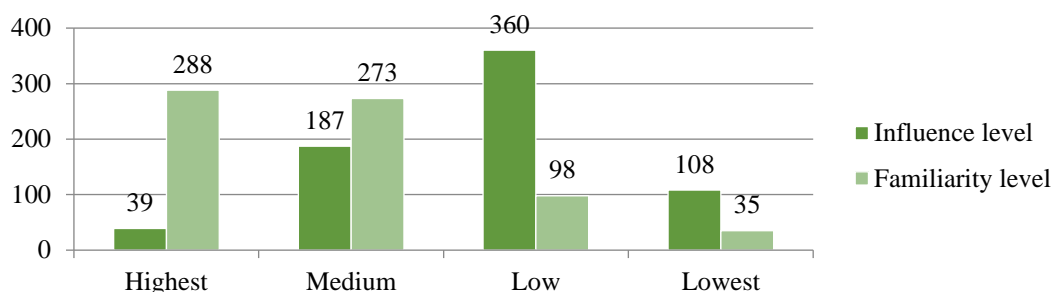
Source: Survey findings compiled by the authors (2017)

Figure 5.4 shows the influence level of the informal lenders over the borrowers in order to recall for their loans and familiarity level between them. The data reports that most of the lenders had influence at medium and low level. While, the lenders and the borrowers had close relationship to each other when they granted the loans.

Figure 5.5 Average interest rate rank by sources of loan (N = 694)
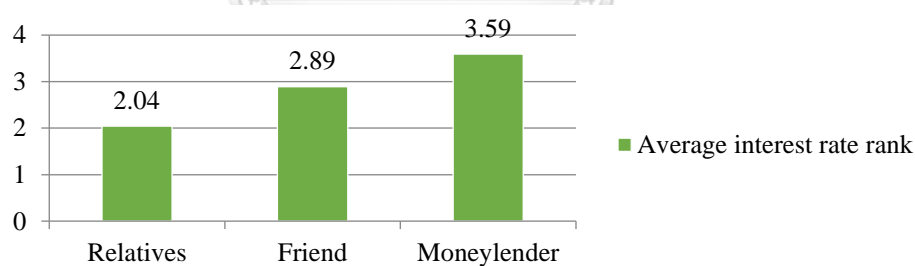
Source: Survey findings compiled by the authors (2017)

Figure 5.5 addresses that moneylenders asked for the highest informal interest rates, followed by friends and relatives, respectively.

Figure 5.6 shows that a dominant portion of informal loans come most frequently from borrowers' own friends. Family members rank the second, and the informal moneylenders are the least frequent source in this figure.

Figure 5.6 Amount of informal loans from family, friend, and moneylender
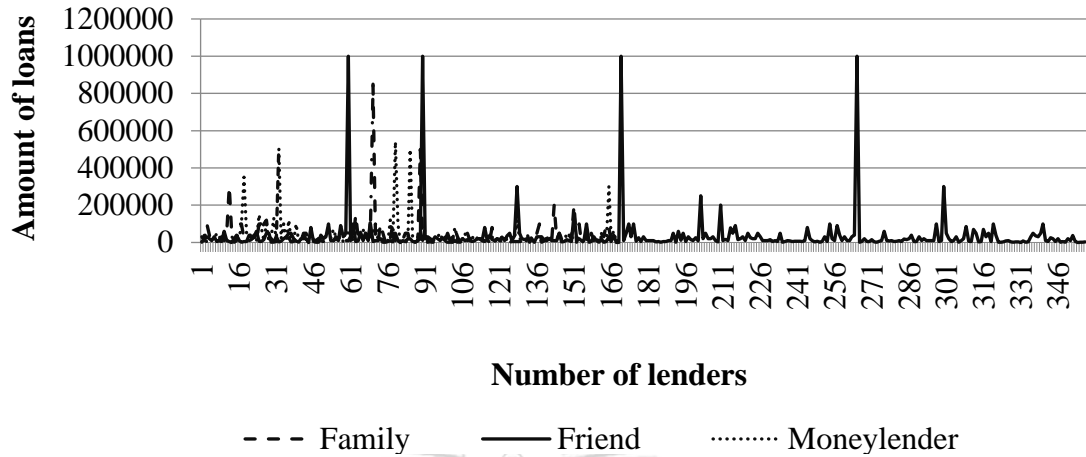
Source: Survey findings compiled by the authors (2017)

Figure 5.7 Income level, remaining informal debt, and amount of informal loan
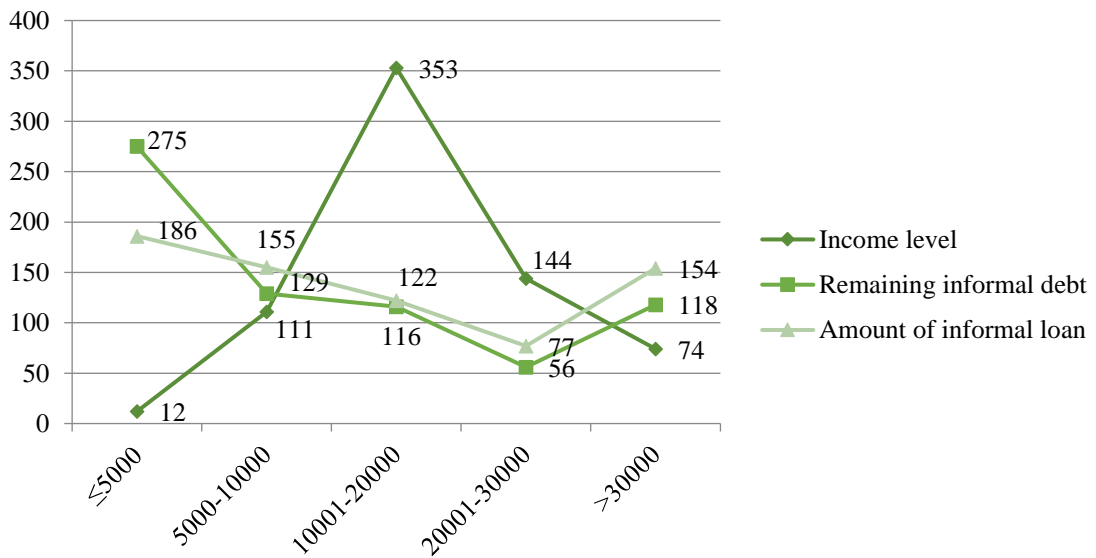
Source: Survey findings compiled by the authors (2017)

Figure 5.7 shows that the average income level per month of the respondents lies on between 10,001 baht to 20,000 per month. While, merely 275 of 694 of the respondents had remaining informal debt less than 5,001 baht. The data of amount of informal credit reports that approximately 45% borrowed less than 10,001 baht on informal loans.

Table 5.2   Correlation Coefficients between the Informal Interest Rates and Independent Variables.

	Inter est	Influ -h	Influ -m	Influ -l	DTI	Inc	Stable	Fa-h	Fa-m	Fa-l
Interest	1.00									
Influ-h	0.26	1.00								
Influ-m	0.11	-0.15	1.00							
Influ-l	-0.06	-0.25	-0.63	1.00						
DTI	0.07	0.01	0.00	-0.06	1.00					
Inc	-0.08	-0.03	-0.08	0.03	-0.09	1.00				
Stable	-0.10	-0.00	-0.09	0.03	-0.06	-0.02	1.00			
Fa-h	-0.31	-0.13	-0.25	0.09	-0.03	0.14	0.04	1.00		
Fa-m	0.16	-0.03	0.03	0.10	0.01	-0.07	-0.01	-0.68	1.00	
Fa-l	0.13	0.15	0.21	-0.17	0.02	-0.07	-0.02	-0.34	-0.33	1.00

Note: *Interest* = Monthly interest rates, *Influ-h* = High influence of lenders, *Influ-m* = Medium influence, *Influ-l* = Low influence, *DTI* = Debt-to-income ratio, *Inc* = Income level, *Stable* = Stable income, *Fa-h* = High familiarity, *Fa-m* = Medium familiarity, and *Fa-l* = Low familiarity.

Source: Survey findings in Bangkok and Greater Bangkok (compiled by the authors, 2017).

Table 5.2 shows the correlation coefficients and indicates that informal interest rates and influence levels of a lender at using physical violence and harassment levels are positively correlated.

Empirical Model

To examine the characteristics of both the borrowers and the loans which related to informal interest rates, we set the following econometric model by using the ordered logistic regression:

$$Informal\ interest\ rate_i = \alpha + \beta_1 Influ\_high_i + \beta_2 Influ\_medium_i + \beta_3 Influ\_low_i + \beta_4 DTI_i$$
$$+ \beta_5 Stable_i + \beta_6 Inc_i + \beta_7 Fa\_high_i + \beta_8 Fa\_medium_i + \beta_9 Fa\_low_i$$
$$+ \beta_{10} X_i + \varepsilon_i$$

The dependent variable (monthly informal interest rate) has five categories (see Table 5.1 for details of this variable). The main independent variables are influence level (*Influ*), debt-to-income (*DTI*), income level (*Inc*), stable income (*Stable*), and familiarity level (*Fa*). We also include a vector of control variables (*X*), i.e., amount of loan, savings, collateral, default history, medical treatment, guarantor, and proportion of household members who are receiving no income to capture the effect from other factors on informal interest rates. ε_i is the error term assuming logistic distribution. The limitation of this paper is that the interest rate data was collected as ordinal categories because most of the respondents were not willing to reveal their exact value of informal interest rate charged. This is the main reason why OLS is not an appropriate tool for analyzing the data, while the ordered logistic regression is fit with the data than multinomial logistic regression which the latter suffers from loss of number of categories.

One of the important assumptions underlying the ordered logistic regression method is that the relationship between each pair of outcome groups is the same; therefore, the proportional odds assumption is tested by using Stata. We are also concerned with the problem of multicollinearity in our models, hence, variance inflation factors (VIF) is used to test the multicollinearity problem of each model.

5.5 Empirical Results

In Table 5.3, we report the estimation results of the ordered logit models by using Taylor-Linearized Variance Estimation. The dependent variable is the informal interest rate which is measured on an ordinal scale: Rank 1: 0%-2%, Rank 2: 2.01%-4%, Rank 3: 4.01%-6%, Rank 4: 6.01%-8%, and Rank 5: over 8%. Model (5) in Table 5.3 shows the results from the main equation, while models (1), (2), (3), and (4) are tested in order to do a robustness check and to confirm the results of the full model. The test of the proportional odds assumption in Model (5) addresses that the model has not violated the assumption, because 0.1218 is a non-significant result. Also, we detect the presence of multicollinearity by using variance inflation factors (VIF). The values of VIFs shown in all models do not indicate the persistence of the multicollinearity problem.

The parameter estimates on each levels of influence of an informal lender are strongly significant in Model (5). Every influence level of an informal lender significantly raises the increase in the informal interest rates, consistent with findings from Aleem (1990) and Haugen (2005) who found that high enforcement costs lead to high interest rates. This kind of relationship may be explained from two perspectives. Firstly, informal lenders realize the higher probability of default when they charge higher interest rates (Stiglitz and Weiss 1981), but the lenders also have the confidence that they can use enforcement actions over their borrowers to pressure them to repay the money owed. Some perspectives of high interest rates reflect the monopoly power of the lender. Secondly, at very high rates, the lenders use high pressure to their borrowers through using violence or harassment. These unsavoury actions threaten the borrowers when they do not pay on time or when the borrowers try to escape their debt obligations altogether. These actions cause fear of harm and they are less likely to escape payment. In case of seizure of collateral, the data in the study shows that the average amount of loan is approximately 47% of collateral at market price. To lose collateral is not worthy in the borrowers' view and it is a powerful incentive for the borrowers to repay their debt in time. Every enforcement actions cause different level of enforcement costs which the lenders include in their rates in advance before lending the money out. Hence, lenders at the level of using physical violence, who have higher

enforcement costs due to chasing delinquent loans or enforcing repayment than harassment and collateral seizure lenders, respectively, charged higher rates to their clients. In other words, the higher the cost of recovery, the higher the interest rate charged.

The estimated coefficient on the variable DTI is positive and statistically significant at the 10% level of significance. This result indicates that, with a one unit increase in the DTI, we expect a 0.002 increase in the log odds of being in a higher level of informal interest rate, given that all of the other variables in the model are held constant. Basically, high DTI reflects high monthly debt compared to a person's income. At higher levels of DTI, the person is more likely to face difficulties in making monthly payments, meaning that their ability to repay the debt is low. The high DTI person is less likely to getting approved for a formal loan, because formal creditors will avoid incurring overly risky loans which may become non-performing loans (NPLs) that affect their balance sheet profitability and capital constraints. In such cases, the demands for credit exceed the available amount from formal credit supplies within the range of interest rate floor set by central banks. Consequently, informal credit markets seem to be the last resort of funds for people who have been refused applications from most formal funds. Informal lenders who set their interest rate outside of the legal rate will then need to set very high rates in order to cover risks of default of his borrower. Higher informal interest rates, therefore, reflect higher risk premium value on potential default rates that may occur after granting an informal loan.

Although borrowers with higher income levels could obtain loans at lower rates than those in the low and middle income groups, because economic conditions reflect the potential of defaults (see Bhattacharjee and Rajeev 2010, Hoff et al. 1993, Yotopoulos and Floro 1992), but in this study, this is statistically insignificant. It implies that the level of income factor by itself is not a solid guarantee of the actual risk of default and the ability to repay; for example, the borrower who earns high income may also have high expenditures and debt. On the other hand, other factors related to default risk, such as having savings in a bank account, is considered a much more important indicator for debt repayment than income level, due to the fact that money savings reflects personal financial stability as these can be used to guarantee loan payment when a borrower lacks of cash in hand to repay.

We obtained statistically insignificant coefficient of income stability of a borrower. Even though the stable income borrowers have an obvious benefit of being able to manage their cash flows because their income is known ahead of time, which could reduce probability of default in the future (Gestel and Baesens 2008), these relationship is not clearly observed in our case of Thailand. This may be due to the lenders adjusting the frequency of repayment to match their borrowers' period of income receipt, such as daily, weekly, or monthly. A noteworthy measure for recalling an informal loan is that the informal lenders will require a borrower's ATM card as collateral to guarantee a loan. Those lenders will withdraw money from their borrowers' deposit accounts through ATM machine on payday. This behavior relates to certainty for reducing risk of defaults for both stable and instable income groups of borrowers.

The familiarity between a lender and his borrower, at high and medium levels, is shown to negatively affects the rates, which is consistent with Yuan and Xu (2013). On the other hand, the "unfamiliar" level is not related to the rates. It implies that only high levels of familiarity can have an effect on the rates. If lenders and their borrowers do not know much about each other, in other words, the rates will not depend on the level of familiarity. This situation can be explained by two reasons. Firstly, a close relationship between a lender and his borrower means that they will know each other well enough, specifically, regarding borrowing and repayment records in the past. This level of relationship reduces both the cost of collecting a borrower's personal and financial information, as well as the asymmetric information which could reduce the interest charged on informal loans. Secondly, high level of familiarity creates trust between a lender and a borrower which plays a role as collateral (Karlan et al. 2009). Approximately, 67% of the respondents in the study have turned to consecutive borrowings from the informal lenders after the old arrangement was completely repaid.

Table 5.3 Ordered logistic regression results with Taylor-linearized Variance Estimation. The dependent variable is the informal interest rate.

Variables	Model 1	Model 2	Model 3	Model 4	Model 5
Key variables					
High influence	2.705***	2.723***	2.760***	2.770***	2.717***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Medium influence	0.722**	0.914**	0.963**	0.939**	0.916**
	(0.021)	(0.003)	(0.003)	(0.003)	(0.004)
Low influence	0.631**	0.710**	0.736**	0.700**	0.670**
	(0.021)	(0.009)	(0.007)	(0.010)	(0.013)
Debt-to-income	0.002*	0.002*	0.002*	0.002*	0.002*
	(0.086)	(0.053)	(0.056)	(0.057)	(0.055)
Income level	-0.000	0.000	0.000	0.000	0.000
	(0.265)	(0.668)	(0.694)	(0.700)	(0.739)
Stable income	-0.340*	-0.303	-0.307	-0.297	-0.260
	(0.071)	(0.109)	(0.105)	(0.119)	(0.171)
High familiarity	-1.453***	-1.446***	-1.484***	-1.498***	-1.499***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Medium familiarity	-0.528	-0.601	-0.626	-0.634*	-0.629*
	(0.173)	(0.136)	(0.120)	(0.087)	(0.083)
Low familiarity	-0.522	-0.553	-0.555	-0.539	-0.580
	(0.206)	(0.198)	(0.193)	(0.178)	(0.143)
Control variables					
Amount of a loan		-0.000**	-0.000**	-0.000**	-0.000**
		(0.016)	(0.025)	(0.024)	(0.016)
Savings		-0.839***	-0.824***	-0.799***	-0.779***
		(0.000)	(0.000)	(0.000)	(0.000)
Collateral			-0.121	-0.176	-0.179
			(0.522)	(0.363)	(0.355)
Default history				0.838	0.795
				(0.135)	(0.161)
Medical treatment				-0.099	-0.122
				(0.744)	(0.689)
Guarantor				-0.683**	-0.642**
				(0.005)	(0.010)
No-income member					0.004
					(0.231)
Observations	694	694	694	694	694
Prob > chi2	0.0285	0.0603	0.0618	0.0985	0.1218
Mean VIF	2.64	2.39	2.34	2.08	2.03
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000

Source: Survey findings compiled by the authors (2017).

These borrowers might be charged at lower rates because the lenders believe that the borrowers are more likely to fully pay amount of debt like they did in the past.

Interestingly, the results confirm that the interest rates charged are higher in case of lower amount of loans. The rationale behind this result is that, moneylenders who charged higher interest rate granted small loans comparative to family and friends (see Figure 5.6).

Guarantor is negatively associated with the rate which is consistent with Charles and Mori (2016). It implies that the guarantor plays as collateral to ensure loan repayment.

Table 5.4 Ordered logistic regression results with Jackknife Variance Estimation.

Variables	Coefficients	Jackknife Std. Err.	p-values
High influence	2.717***	0.665	0.000
Medium influence	0.916**	0.324	0.005
Low-influence	0.670**	0.279	0.016
Debt-to-income	0.002*	0.001	0.098
Income level	0.000	0.000	0.821
Stable income	-0.260	0.197	0.189
High familiarity	-1.499***	0.408	0.000
Medium familiarity	-0.629	0.391	0.108
Low-familiarity	-0.580	0.424	0.172
Amount of a loan	-0.000	0.000	0.115
Savings	-0.779***	0.182	0.000
Collateral	-0.179	0.199	0.371
Default history	0.795	0.632	0.209
Medical treatment	-0.122	0.316	0.700
Guarantor	-0.642**	0.262	0.015
No-income member	0.004	0.004	0.245
Observations		694	
Prob > F		0.000	

* significant at the 10%, ** at the 5%, *** at the 1% levels, respectively. The informal interest rate is the dependent variable.

Source: Survey findings compiled by the authors (2017)

For a robustness check, ordered logistic regression results with Jackknife Variance Estimation is used to investigate whether the results are different from the Taylor-linearized Variance Estimation from Table 5.3. We show the result of standard errors of the model coefficients and significance levels by using Jackknife Variance

Estimation (in Table 5.4) which performs well in terms of stability as much as the linearized method (Krewski and Rao 1981) and is also a compatible method with the data in the study, which are collected through complex survey design defined by the svyset command. All regressors in Table 5.4 show the qualitatively similar signs with the estimates in Table 5.3.

Sensitivity Analysis

We performed sensitivity analyses so as to check the robustness of our results. Firstly, we segmented the levels of the lender's influence into three groups which are (i) using physical violence and/or harassment (high influence), (ii) seizure of collateral (medium influence), and (iii) no action if a borrower does not repay debt (low influence), so as to estimate the correlation with the five ranks of informal interest rate (see Table 5.5).

The ordered logistic regression with Taylor-linearized Variance Estimation and the same set of the variables are used similar to Table 5.3. Results reported in Table 5.5 are robust in terms of signs, magnitudes, and levels of significance to the exclusion of any part of the control variables. Influence levels are also highly correlated with the informal interest rates.

Secondly, we change the range of informal interest rate charged of each rank. Regression results are reported in Table 5.6 that robustness checks yield consistent evidence and seem to reinforce confidence in the results presented in Table 5.3. However, the ranges of the monthly rates which are 0%-2% in the first rank, 2.1%-4% in the second rank, 4.1%-6% in the third rank, 6.1%-8% in the fourth rank, and over 8% in the fifth rank (in Table 5.3), perform the most clearly regarding correlation between key dependent variables and the informal interest rates.

Table 5.5 Robustness check: Ordered logistic regression results with Taylor-linearized Variance Estimation. The dependent variable is the informal interest rate: Rank 1: 0%-2%, Rank 2: 2.01%-4%, Rank 3: 4.01%-6%, Rank 4: 6.01%-8%, and Rank 5: > 8%.

Variables	Model 1	Model 2	Model 3	Model 4	Model 5
Key variables					
High influence	1.280***	1.380***	1.424***	1.431***	1.390***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Medium influence	0.613**	0.724**	0.756**	0.716**	0.685**
	(0.023)	(0.007)	(0.005)	(0.008)	(0.011)
Debt-to-income	0.002*	0.002*	0.002*	0.002*	0.002*
	(0.087)	(0.052)	(0.055)	(0.058)	(0.057)
Income level	-0.000	-0.000	-0.000	-0.000	-0.000
	(0.277)	(0.615)	(0.645)	(0.647)	(0.688)
Stable income	-0.312*	-0.284	-0.291	-0.284	-0.245
	(0.091)	(0.126)	(0.118)	(0.132)	(0.192)
High familiarity	-1.522***	-1.551***	-1.599***	-1.604***	-1.610***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Medium familiarity	-0.621	-0.719*	-0.750*	-0.753**	-0.753**
	(0.101)	(0.062)	(0.050)	(0.033)	(0.028)
Low familiarity	-0.574	-0.617	-0.617	-0.588	-0.636*
	(0.156)	(0.133)	(0.129)	(0.125)	(0.092)
Control variables					
Amount of a loan		-0.000**	-0.000**	-0.000**	-0.000**
		(0.003)	(0.007)	(0.004)	(0.002)
Savings		-0.851***	-0.834***	-0.813***	-0.790***
		(0.000)	(0.000)	(0.000)	(0.000)
Collateral			-0.135	-0.190	-0.191
			(0.469)	(0.317)	(0.314)
Default history				0.828	0.781
				(0.132)	(0.161)
Medical treatment				-0.071	-0.096
				(0.813)	(0.750)
Guarantor				-0.697**	-0.654**
				(0.004)	(0.008)
No-income member					0.005
					(0.196)
Observations	694	694	694	694	694
Prob > chi2	0.0074	0.0235	0.0300	0.0650	0.0823
Mean VIF	2.68	2.40	2.33	2.06	2.00
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000

Source: Survey findings compiled by the authors (2017)

Table 5.6 Robustness check: Ordered logistic regression results with Taylor-linearized Variance Estimation. The dependent variable is the informal interest rate which is segmented into different ranges within the total of 5 ranks.

Variables	Model 1 Rank 1: 0%-1%, Rank 2: 1.01%-2%, Rank 3: 2.01%-3%, Rank 4: 3.01%-4%, Rank 5: more than 4%	Model 2 Rank 1: 0%-3%, Rank 2: 3.01%-6%, Rank 3: 6.01%-9%, Rank 4: 9.01%-12%, Rank 5: more than 12%
High-influence	2.831***	2.220***
Medium-influence	0.857**	0.757**
Low-influence	0.632**	0.486*
Debt-to-income	0.001	0.003**
Income level	-0.000	0.000
Stable income	-0.332	-0.356*
High-familiarity	-1.322**	-1.360**
Medium-familiarity	-0.486	-0.460
Low-familiarity	-0.236	-0.381
Control variables	Yes	Yes
Observations	694	694
Likelihood-ratio test of proportionality of odds across response categories		
Prob > chi2	0.0039	0.0830
Mean VIF	2.03	2.03
Prob > F	0.0000	0.0000

* significant at the 10%, ** at the 5%, *** at the 1% levels, respectively.

Note: The levels of lender's influence are divided into four groups (the same levels as used in Table 5.3) which are using (i) physical violence, (ii) harassment, (iii) seizure of collateral, and (iv) no reaction if a borrower does not repay debt.

Source: Survey findings compiled by the authors (2017)

5.6   Concluding Remarks

We know little about what factors determine informal interest rates. In Thailand where the qualification of a potential borrower in formal institutions is notably high, namely, a potential borrower needs to have a stable income of no less than 20,000 baht per month, a minimum of one year of employment record or operation, and/or collateral requirement, many people, especially those with low income, who are earning less than the required levels, have no other sources of funds other than informal loans with usurious interest rates. More than two-thirds of the informal lenders in Thailand have charged above the legal rate and many of them also use different enforcement actions, which are frequently controversial, in order to force their borrowers to repay.

The purpose of this paper is to provide a better understanding of the relationship between level of lenders' influence over the borrower so as to recall for their loans and the informal interest rates. Also, the study investigates the correlation between some characteristics of the informal borrowers and these rates.

Based on empirical data collected through surveys in Bangkok and Greater Bangkok, where the amount of informal loans was highest during the last 7 years compared to the other areas of the country, the results presented in this paper suggest that the factor relating to default risk, which is the debt-to-income ratio of informal borrowers, affects informal interest rate charged. Whereas the income level is not significantly related to the interest rate level. This may show that the informal lenders do not merely consider income by itself, but they may also be concerned with the borrower's expenditures and debt (not all high income borrowers can always be charged with the low rates). Income levels, therefore, cannot be an obvious indicator to present the default risk levels of the borrowers. Moreover, income stability is not found to be related to the rates, due to the fact that lenders in Thailand adjust their frequency of repaying requirement when the loans are granted. For instance, a borrower who earns daily income needs to pay daily interest.

The key variable in the study is the level of the lender's influence which was found to highly correlate with the interest rates because enforcement costs are included in the rates in advance, before the actual money is loaned out. Also, high rates imply monopoly power of lenders in the informal credit market in studied areas.

High level of familiarity between an informal lender and a borrower are also found to affect the rates because of the competitive advantage of a borrower's information in collecting cost and reducing asymmetric information.

Chapter 6

6 Informal Credit Traps in Bangkok and Greater Bangkok, Thailand

6.1 Abstract

Repeated process of borrowing informal loans is a big problem for many borrowers because it sometimes show that they are trapped within a never-ending cycle of indebtedness. The explanations on the factors influencing people to repeatedly seek informal loans are still not very clear. This study, therefore, investigates whether some characteristics of the borrowers and people's spending behavior have effects on the behavior of making repeated informal loans in the case of Thailand. The data used in the study is collected from 1,152 informal borrowers from Bangkok, Nonthaburi, Pathum Thani, and Samut Prakan where the amount of total informal loans was the highest compared to the other regions during the last 7 years. The major finding of this paper is that consistent saving plays a crucial role on the likelihood of making repeated informal loans for individuals. Moreover, impulsive buying behavior, net monthly income, and paydays are also found to have correlations with people's probability of returning to the informal credit market.

6.2 Introduction

Informal loans have been found in Thailand for over four decades (Onchan 1985; Siamwalla et al. 1990; Giné 2011) for a positive contribution to smoothing household consumption and production activities in both urban and rural areas. Some borrowers have the ability to repay their informal debt and completely exists the market once their one-time debt has been paid, but over one-third of the respondents in this study who live in Bangkok and Greater Bangkok have returned to repeated borrowings again after repaying their first obligation. This phenomenon shows a problem of the failure to manage one's own personal finance of many individuals. This group of people faces a trap of chronic indebtedness, and are unable to escape from the very high interest rates charged by most informal credit lenders. The higher the interest rate charged, the lower a person's liquidity and purchasing powers in the long term (Bridges and Disney 2010, Jeromi 2007).

Many Thai governments have attempted to increase the GDP through government campaigns focusing on promoting domestic consumption; in the process of doing so, overspending habits and excessive borrowing behavior that followed were encouraged in the Thai society (Bank of Thailand 2014; Patmasiriwat and Hengpatana 2016). A materialistic lifestyle seems to be very popular among Thais, which results in Thai people being accustomed to spending large amounts of money on unnecessary commodities (Sangkhawasi and Johri 2007; Naruetharadhol et al. 2015; Likitapiwat et al. 2015). This spending behavior was previously not addressed on whether it has an effect on borrowing behavior of informal borrowers.

According to Trading Economics and CEIE data (2018), Thailand households' saving ratio has dropped from 10.3% in 2009 to 8.7% in 2016, while household debt in Thailand has reached 79.0% of the country's nominal GDP in December 2016. The lack of disciplined saving causes people to seek loans instead of using their own savings to self-insure against unexpected income shortfalls. However, existing literatures have not provided much clear explanation on whether savings affect the likelihood of people borrowing from the informal sector.

The phenomenon of re-entering the cycle of informal credit borrowing is still much unexplained. There exists only a small amount of research that investigates the

relevant factors of repeated informal loans of an individual. This paper sheds light on investigating the relationship between some characteristics of an individual and the decisions on going back to rely on informal credit. Consistent saving, materialism, impulsive buying behavior, net monthly income, and paydays are tested to clarify whether those factors influence an individual's tendency to get stuck in perpetual informal credit trap. In sum, we find that repeated borrowing behavior from informal credit sources is strongly associated with the lack of savings. Moreover, spending behaviors, such as installments, impulsive buying, and income factors, i.e. net monthly income and payday basis (i.e. daily or weekly), affect the likelihood of returning to informal debt borrowing after paying off the first debt. The result is robust across different methods.

6.3   Literature Review

Factors Influencing Repeating Informal Loan

Consistent Savings and Repeated Loans

Yuan et al. (2011) studied Chinese farmers' choice whether to borrow from formal or informal credit sources using the 2006 Rural Household Survey. In order to test the relationship of borrowers' characteristics and demand for informal loans, they used savings as one of the parameters in the study. The results show that having disciplined savings reduces demand for informal credit because it can be used as precautionary funds for unpredictable expenses of an individual, which is consistent with the study by Khoi et al. (2013) which investigated factors influencing informal credit borrowing behaviour of rural households in Vietnam. The analysis confirms that savings is an important factor which have an effect on borrowing decision of informal loans of households.

Moreover, Brobeck (2008) who studied the importance of savings needs for low-income and moderate-income households through a survey on 2,000 representative adults and non-instutionalized Americans in order to get information about the attitudes on making loans, together with a question on emergency savings – "Do you feel you have adequate savings for unexpected expenses like car repairs or emergency dental treatment?." The results show that having low levels of emergency savings leads to more difficulties in managing regular monthly bill payments, or other expenses such as credit card fees, which increases the demand for high-cost loans, including payday, car title, and pawnshop loans. Another study by Mohieldin and Wright (2000), used 200 samples on the household level from 4 Egyptian villages in Kalyoubbiya Governorate, collected by face-to-face interviews during December 1992 to April 1993. The probit analyses were used to analyze relationships between the level of savings and the decision to make an informal loan. The results show that many people were forces to access informal credit when they have no precautionary savings or insufficient savings to meet their financial deficits.

Hypothesis 1: Consistent savings is negatively associated with the likelihood of repeated informal loan borrowings.

Materialism and Repeated Loans

Materialism can be defined in many ways. The Cambridge Dictionary of English defined materialism as "the belief that having money and possessions is the most important thing in life." Oxford Dictionaries gave definition of materialism as "a tendency to consider material possessions and physical comfort as more important than spiritual values." Daun (1983) defined materialism as being a way of living that focuses on having high amounts of material consumption. Richins and Dawson (1992) stated that materialism is the pursuit of happiness which results from the acquisition of items, emphasizing on the physical and material aspects of satisfaction. According to Flouri (1999), materialism is the desire to possess things that one wishes to have. Durvasula and Lyonski (2008) defined materialism as the situation when an individual is devoted to "obtaining and spending on earthly needs and material desires" (Durvasula and Lyonski, 2008).

Mady et al. (2011) mentioned that materialism creates desires for buying modern items which consistent with O'Cass (2004) who concluded that materialism relates to purchasing decisions on in-trend products, such as fashionable clothes. By summarizing the definitions and viewpoints identified earlier, *we refer to materialism in this study as the constant decision to purchase–in-trend products that a person desires, often out of impulse*.

According to Richins and Dawson (1992), materialism is defined as a tendency to view material possessions as the most important things in life. Not only adults but also adolescents, nowadays, have a tendency to spend more money for buying products that they desire, and much less focused on the perceived benefits gained from owning such products (Mason 1981), such as luxury brand-name items or unnecessary products, in order to fulfill their mental needs (Lin and Wang 2010; Fournier and Richins 1991; Gil et al. 2012) to show individuality and to gain a higher social status compared to other people (Gentina et al. 2016; Frank, 1999). The acquisition of their desired goods, to some people, is more important than the stigma attached to borrowing money, and they are willing to take on debts to get money for buying such goods (Brennan et al., 2011; Watson, 2003; Banerjee and Duflo 2007).

Hypothesis 2: Materialism behavior of an individual is positively associated with the likelihood of repeated informal loan borrowings

Impulsive Buying and Repeated Loans

Traditionally, "impulse purchasing" is considered very similar to "unplanned purchasing" (Clover 1950 and West 1951) and were frequently used interchangeably. This behavior is contrasted to the concept of "intelligent shopping", which refers to the situation where people prudently and patiently examines their purchasing prospects, seeking out information, promotions, and maximize their purchasing power by selecting the best packages with the information they have acquired. (Nesbitt 1959). In addition, Rook (1987) explains that "impulse purchasing" is when people are overtaken by the urge to purchase a given product or item, where this urge can occur suddenly, is often powerful, and can persist in their minds. Faber (2010) defined impulse buying as sudden and powerful mental urges to buy what they desire immediately. It occurs when the desire for a product or brand-name items outweighs one's willpower to resist.

By summarizing the dimensions identified earlier, *we define impulse purchasing (in this study) as a behavior of a person which buys a product that he desires immediately (with unplanned purchase) at the first time he sees it and feel the need to own it.*

Pirog and Robert (2007) used survey data from 254 college students to study whether impulsive behavior affect decision of the students in incurring debts. The results show that these impulsive behavior and financial recklessness are associated with higher tendency to make debts since unplanned purchases from impulsive generates extra expenses that may not be covered normally by one's income. In addition, Rook (1987) studied how individuals deal with their impulsive urges to buy products, as well as the types of disadvantages caused by impulsive buying behavior. Using content analysis of 20 respondents, the results showed that 56% of the respondents in the study faced financial problems because of their impulsive purchasing.

Hypothesis 3: Impulsive buying behavior of an individual is positively associated with the likelihood of repeated informal loan borrowings.

Net Monthly Income and Repeated Loans

Zanin (2007) investigated the determinants of the conditional probability that a household has informal loans, given liquidity constraints, by using a semiparametric bivariate probit model. The data used in his study was the Italian microdata on household income and wealth during 1995 to 2014. The results emphasize that if a person's consumption expenses exceeds his income, the demand for an informal loan from relatives and friends, which is an emergency source of credit will increase in order to allow everyday spending. Based on the study by Schindler (2010), informal credit is used as a strategy by female workers in Northern Ghana in order to manage risks. Repeated dependency on informal credits were found when people in Northern Ghana (especially women) had imbalances between incomes and expenditures, therefore, they have tried to maintain the relationship with informal credit providers since they must continue to rely on them for future loans.

Hypothesis 4: Net monthly income is negatively associated with the likelihood of repeated informal loan borrowings.

Payday Periods and Repeated Loans

There are many existing studies which observed that many people who earned income on daily basis, such as merchants, were in a circle of repeated informal loan, because of the need of money to generate investment (Buddhawongsa et al. 2014 and Lewis 2007).[18] Based on the study by Zeller (1994), many low-salaried workers who received monthly income in Madagascar had higher likelihood to apply for an informal

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[18] Lewis (2007) studied decision on borrowing informal loans of Dominican microenterprises where informal interest rates are much higher than from formal credit. He used interviews as a major tool for collecting data from 3 formal microfinancial institutions, 5 prestamistas, and 18 microenterprises in Los Alcarrizos, the Dominican Republic.

credit in order to maintain the household's consumption smoothing. Adams and Fitchett (1992) studied informal credit in low-income countries (LICs). They reported in the paper that most farmers, merchants, and businessman have difficulties in predicting their actual income, because their earnings depend on varying situations or some economic factors; hence, they had high need of money, which leads to high demand levels of informal loan.

Hypothesis 5: Payday periods are associated with the likelihood of repeated informal loan borrowings.

6.4   Methodology

Data and Summary Statistics

The data used in the study is collected from 1,153 borrowers who had borrowed from informal credit lenders (completely exited the informal credit sector more than one year before the time of answering the questionnaire) or repeatedly borrow from informal credit sources, and aged 20 or over, in 4 provinces (including Bangkok and Greater Bangkok), which are Bangkok, Nonthaburi, Phathum Thani, and Samut Prakan, from surveys without census registration concerns. The reason why the 4 provinces have been chosen as the study area is because these provinces had the highest amounts of total informal loans during 2009 and 2015, from 6,214 baht per household in 2009 to 4,226 baht per household in 2015 compared to other regions in the same year (National Statistical Office of Thailand 2016). This data implies that the problems of being unable to access formal credits of people in these 4 provinces may be more prominent than in the other provinces.

Respondents in the survey were asked a yes-no question: "If you would like to own some products, do you usually buy them at the first time you see them?" so as to detect impulsive buying behavior. Whereas, another yes-no question: "Do you usually buy in-trend products?" is used to detect materialism behavior of individuals. Moreover, in the study we also use the amount of buying commodities per month as one measurement of detecting materialism.

Table 6.1 Borrowing behavior of the respondents in the survey

	Yes	No
Repeating informal loan	464	689
	(40.24%)	(59.76%)
Have both formal and informal loans at the same time	594	559
	(51.52%)	(48.48%)
Paying off some of the informal debts	437	257
	(62.97%)	(37.03%)

Source: Survey findings in Bangkok and Greater Bangkok (compiled by the authors, 2017).

Table 6.1 reports the respondents' behavior on making informal loans and on paying them. The data shows that approximately 40.24% of borrowers have turned to informal loans when they run out of cash in hand. Moreover, 51.52% of the respondents made multiple loans from both formal and informal credit sources at the same time. 62.97%, on the other hand, were trapped within a never-ending cycle of indebtedness. This phenomenon reflects the problems of being unable to manage one's own income and expenditures, which may lead to the perpetual inability to repay the money they have borrowed.

All variables categories, name, detailed definitions, and some basic summary statistics of all characteristics of the data used in our analysis are presented in Table 6.2. Our dependent variable is the repeated informal loan behavior, while the key independent variables consist of age, gender, marital status, proportion of household members who are receiving no income, income level, and debt-to-income ratio (DTI). Our specific control variables are defined as in previous studies, such as Khoi et al. (2013), and Zeller (1994).

Table 6.2 Variable definitions and summary statistics

Name	Definition	Mean	Std.Dev	Min	Max
Dependent variable					
Repeating loan	= 1 if a borrower repeatedly makes informal loans	0.4024	0.4906	0	1
Key independent variables					
Consistent saving	= 1 if saving without withdrawing for at least 3 months	0.3643	0.4814	0	1
Net income	= (Monthly incomes – Monthly expenses)	4071.193	17327.53	-142000	400000
Payday-daily	= 1 if received daily income	0.2238	0.4169	0	1
Payday-weekly	= 1 if received weekly income	0.1067	0.3088	0	1
Payday-monthly	= 1 if received monthly income	0.5993	0.4903	0	1
Installments	Amount of installments on commodities per month (Baht)	777.18	2069.27	0	31000
Materialism	= 1 if a person had tendency to purchase popular goods	0.1986	0.3991	0	1
Impulsive	= 1 if a person had tendency to buy products at first sight if he would like to own.	0.7077	0.4550	0	1
Other variables (Data on borrowers' side)					
Age2	= 1 if 30 – 39 years old	0.2376	0.4258	0	1
Age3	= 1 if 40 – 49 years old	0.3070	0.4615	0	1
Age4	= 1 if 50 years old or over	0.3044	0.4604	0	1
Gender	= 1 if a person is a female	0.4536	0.4981	0	1
Single	= 1 if a person is single	0.3842	0.4866	0	1
Married	= 1 if a person is married	0.4883	0.5001	0	1
No-income member	$= \frac{\text{No income member}}{\text{Number of members}} \times 100$	34.7270	24.6275	0	100
Income level	Total income per month (Baht)	23996.74	22787.39	500	300000
Debt-to-income ratio (DTI)	$= \frac{\text{Monthly fixed expense}}{\text{Monthly total income}} \times 100$	35.0307	53.8258	0	1000

Source: Survey findings in Bangkok and Greater Bangkok (compiled by the authors, 2017).

Figure 6.1 shows the important characteristics of the respondents in the study. There are 40.24% have borrowed money from the informal credit market repeatedly. Moreover, merely 10.75% and 15.18% of them had repayments record and setting cash budget each month, which reflects personal's financial recklessness. The percentage of having impulsive buying behavior of the observations was founded very high, which 70.77%.

Figure 6.1 Characteristic of the respondents (N = 1,153)
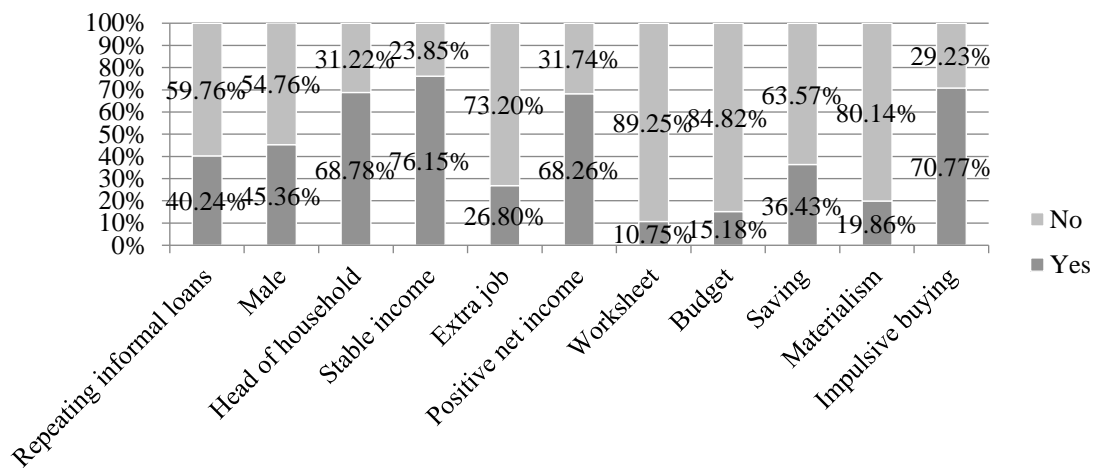
Source: Survey findings compiled by the authors (2017)

Figure 6.2 Income level of the respondents (N = 1,153)
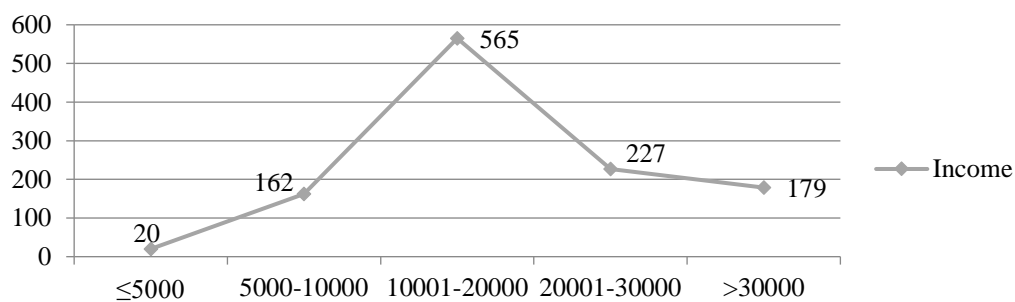
Source: Survey findings compiled by the authors (2017)

Figure 6.2 shows the information similar to survey in the first article, that is the most of the respondent had monthly income between 10,001 to 20,000 baht per month.

Figure 6.3 Proportion of household members who are receiving no income and debt-to income ratio of the respondents (N = 1,153)
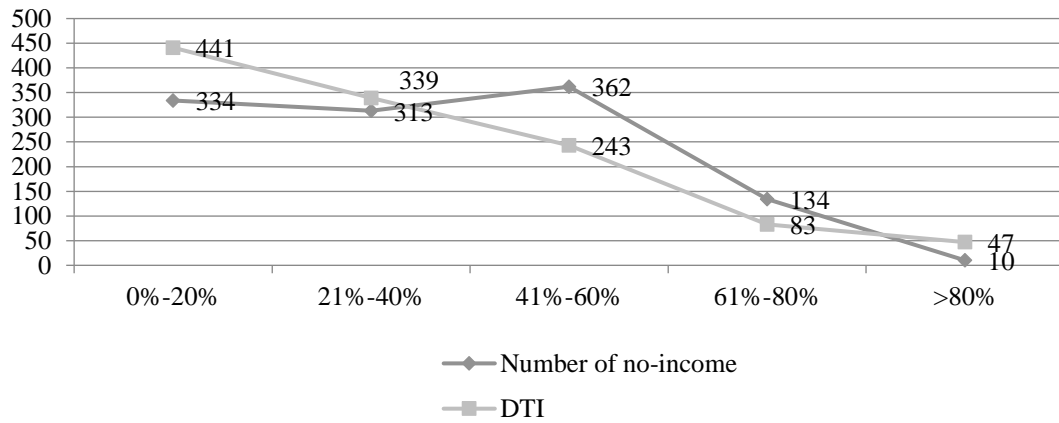
Source: Survey findings compiled by the authors (2017)

Figure 6.3 shows the low ability of the most respondent through the level of debt-to-income ratio, namely, about one-third of them had the DTI than 40%. While, most of the observations had proportion of household members who are receiving no income between 0% to 20%.

Figure 6.4 Amount of installments on commodities per month and amount of savings of the respondents (N = 1,153)
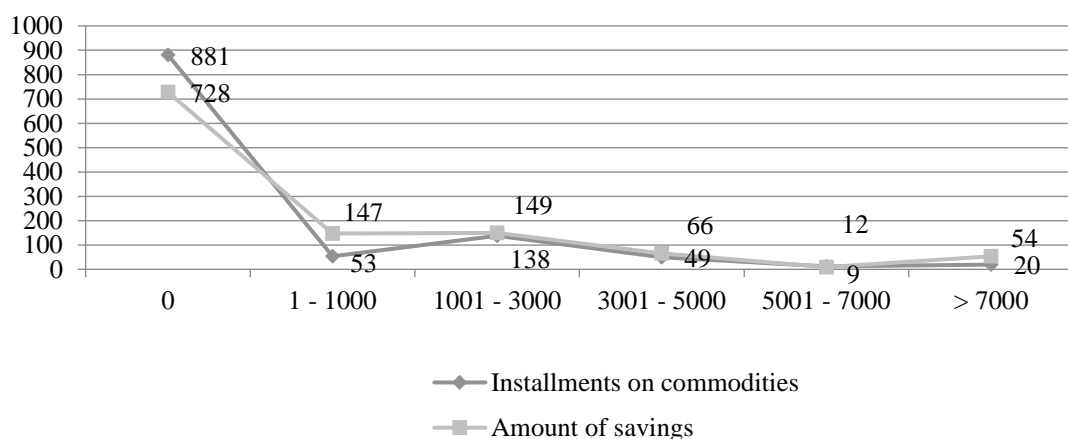
Source: Survey findings compiled by the authors (2017)

Figure 6.4 address the expenses per month of the respondents that 272 of 1,153 had installments on commodities. While, 63.57% of them had no savings in their bank accounts.

Table 6.3 Correlation Coefficients between repeating loan and independent variables

	Rept	Sav	Net	Dai	Week	Mont	Inst	Mater	Impul	Age2	Age3	Age4
Rept	1.0											
Sav	-0.4	1.0										
Net	-0.2	0.1	1.0									
Dai	0.1	0.0	0.1	1.0								
Week	0.1	-0.1	-0.0	-0.2	1.0							
Mont	-0.1	0.0	-0.0	-0.7	-0.4	1.0						
Inst	0.1	-0.0	-0.0	-0.0	0.0	0.0	1.0					
Mater	0.0	0.0	0.0	-0.0	-0.0	0.1	-0.0	1.0				
Impul	0.1	-0.1	-0.1	-0.0	-0.0	0.0	0.0	-0.0	1.0			
Age2	-0.1	0.1	-0.1	-0.1	0.1	0.1	0.0	0.2	-0.0	1.0		
Age3	0.0	-0.0	-0.0	-0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.3	1.0	
Age4	0.0	-0.0	-0.0	0.1	-0.0	-0.0	-0.0	-0.1	-0.0	-0.3	-0.4	1.0
Gen	-0.0	-0.1	0.0	0.0	0.1	-0.1	-0.0	-0.0	0.1	-0.0	0.0	0.0
Single	-0.1	0.1	-0.0	-0.1	0.0	0.1	0.0	0.2	-0.0	0.5	0.1	-0.3
Marr	0.1	-0.1	0.1	0.1	-0.0	-0.1	-0.0	-0.1	-0.0	-0.4	-0.0	0.3
No-inc	0.0	-0.1	0.0	0.1	-0.0	-0.1	0.0	-0.1	-0.01	-0.2	-0.1	0.2
Inc	-0.1	0.1	0.8	0.0	-0.0	0.0	0.1	0.0	-0.0	-0.1	-0.0	0.0
DTI	0.1	-0.1	-0.1	-0.0	0.0	0.0	0.1	-0.0	0.0	0.0	0.0	-0.0

	Gen	Single	Marr	No-inc	Inc	DTI
Gen	1.0					
Sta1	-0.0	1.0				
Sta2	0.0	-0.8	1.0			
No-inc	-0.0	-0.3	0.2	1.0		
Inc	0.1	-0.1	0.1	0.1	1.0	
DTI	0.1	-0.0	0.0	-0.0	-0.1	1.0

Source: Survey findings complied by the authors (2017)

Table 6.3 shows the correlation coefficients between repeated informal loans and independent variables which are *Rept* = repeated informal loans, *Sav* = consistent saving, *Net* = monthly net income, *Dai* = daily payment, *Week* = weekly payment, *Mont* = monthly payment, *Inst* = monthly installments on commodities, *Mater* = materialism, *Impul* = impulsive buying behavior, *Age2* = age between 30-39 years old, *Age3* = age between 40-49 years old, *Age4* = age between 50 years old or over, *Gen* = female person, *Single* = marital status as single, *Marr* = marital status as married, *No-inc* = proportion of household members who are receiving no income, *Inc* = income level, and *DTI* = debt-to-income ratio.

Empirical Model

In order to examine the effects of the characteristics of a borrower on making repeated decisions on making an informal loan, we first consider separate binary Probit models (PROBIT) which is a type of probabilistic statistical classification model. Our baseline model takes the following form:

$$Y = \alpha + \beta_1 Saving_i + \beta_2 Net_i + \beta_3 Daily_i + \beta_4 Weekly_i + \beta_5 Monthly_i + \beta_6 Install_{K_i}$$
$$+ \beta_7 Materia_i + \beta_8 Impulsive_i + \beta_9 C_i + \varepsilon_i$$

(1)

where Y are binary variables that stand for repeated informal loans (Y=1), and no repeated informal loans (Y=0) in the informal credit market.

The classification of chronic and repetitive borrowers in this study uses the criteria that the individuals have borrowed from informal credit sources at any point in life, and, within 12 months before answering our questionnaire, the individuals have returned to borrowing from informal credit source in Thailand, incurring new informal debt (Y=1). Those who are not considered chronic borrowers in our study are those who have borrowed informally in life, but have successfully paid off all of their informal debts entirely *and* did not incur any new informal debt within 12 months before answering our questionnaire.

The main independent variables are consistent saving (*Saving*), net monthly income (*Net*), daily payday (*Daily*), weekly payday (*Weekly*), monthly payday (*Monthly*), installments (*Install*), Materialism (*Materia*), and Impulsive buying behavior (*Impulsive*). A vector of control variables at the individual level (*C*) were the following 6 variables: age, gender, marital status, proportion of household members who are receiving no income, income level, and debt-to-income to capture the effect from other factors on repeated making an informal loan. ε_i is the usual error term.

We are concerned about the possibility of an inconsistent parameter estimation due to endogeneity, therefore, an instrumental variable is used. A useful instrumental variable for our study must be correlated with the consistent savings of an individual, but should not directly affect the decision to make repeated informal loans. We use the amount of money saving per month (baht) as an instrument in IV Probit model

(IVPROBIT) for consistent saving behavior. We obtained IV estimates of the probability of making repeated loans from Wald estimates. For the robustness check, we conducted additional analyses by using jackknife variance estimation.

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6.5 Empirical Results

In Table 6.4, we report the estimation results of the Probit and IV Probit models. Model (3) in Table 6.4 shows the results from the main equation, while models (1) and (2) are tested in order to do a robustness check and to confirm the results of the full model. The test of the Wald test of exogeneity by The Hausman Test in Model (3) addresses that there is not sufficient information in the sample to reject the null hypothesis of no endogeneity, because 0.3186 is a non-significant result. However, we also used IV estimates in this case to do the robustness check of the results.

The values of the prediction squared from the link test in the three models are not significant, which indicate that no problems with our specification. Also, we detect the presence of multicollinearity by using variance inflation factors (VIF). The values of VIFs shown in all models do not indicate the persistence of the multicollinearity problem. Moreover, the F-statistic shown in the 1st stage IV exceeds than 10, with 14.98. It reveals that our instrument is not weak.

The results from both the Probit and IV Probit models in Model (3) show that the estimated coefficient on the variable having consistent saving without withdrawing for at least three months and repeated process of borrowing informal loans is negative and statistically significant at the 1% level of significance, which is consistent with Khoi et al. (2013). Savings can be considered as one of the most important sources of funding when a person runs out of his cash, before needing to take loans. The lack of savings; therefore, prompt individuals to incur loans and debt. Due to financial credit institutions setting certain criteria for those eligible to apply for formal loans, as well as the length of process before such loans are actually granted and received, many people are compelled to turn to informal loans due to the urgency of their needs for cash, or due to refusal of formal loans from financial credit institutions. Thus, it is argued here that the shortage of savings is a key factor which forces individuals into seeking financial assistance from informal loans. This is often a repeated process when those people are in need of urgent cash and do not have money savings they can depend on in time.

Net monthly income is associated with making repeatedly on informal loans which reflects that if a person cannot manage his income to match his expenses each

month, and cannot change the amounts of income and expenses within a short time period, the likelihood of turning to informal loans for assistance will be higher. People can take up informal loans repeatedly even after successfully paying off one or more arrangements of such loans, as long as they are unable to manage their own balances between income and expenses.

Paydays which indicate frequency of income streams per month of an individual at level of daily payment and weekly payment have an effect on repeated borrowing on informal loans. Namely, from the data collected in the survey for the daily payment group, 46.12% of sampled individuals depend on unstable income streams. Such uncertainty in revenue leads to difficulties in managing the monthly incomes and expenditure, and it is more likely for such individuals to have insufficient income for paying off their monthly expenses. This creates a demand for loan. In the case of formal loans from financial credit institutions, applicant for loan needs to pass the specified criteria. One of these criteria is that, if a person has an unstable income, that person will need to have at least 30,000 baht of cash flows per month, where 84.43% of respondents who have unstable income have no savings at all. This means they cannot access the formal loan market, and they will have higher demand for informal loans as their only remaining choice to turn to. For the scenario of weekly payment, most regular expenses such as home or accommodation rent payments, including installment payment for durable goods, electricity and water bills, or credit card payments, are usually paid on a monthly basis. This means that weekly revenues are more likely to result in inconsistence of time periods. Incomes are more likely to be divided into smaller fragments which then fail to be used for large payments each month. Our survey shows that 72.36% of people with weekly income have no money savings. They are likely to turn to informal loans when they run out of cash for their monthly expenses.

Monthly installment payments (Installments) and tendency to purchase popular goods (Materialism) are shown to positively affect the behavior of repeated informal loans. The rationale behind this result is that many people buy goods out of their popularity and follow other people's purchasing behavior, spending much on items which are "in trend" at the moment, and often act on impulse even though this leads to financial problems afterwards.

Table 6.4 Determinants of making repeated informal loans using Probit and the 2nd stage IV estimates. The dependent variable is a repeated informal loan.

Variables	Model 1		Model 2		Model 3	
	Probit	IV	Probit	IV	Probit	IV
Key variables						
Consistent	-1.095***	-1.466***	-1.091***	-1.462***	-1.085***	-1.421***
Saving	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Net income	-0.000**	-0.000***	-0.000**	-0.000***	-0.000**	-0.000***
	(0.021)	(0.000)	(0.016)	(0.000)	(0.044)	(0.002)
Payday-daily	0.396**	0.526***	0.390**	0.506***	0.403**	0.522***
	(0.042)	(0.004)	(0.047)	(0.005)	(0.040)	(0.004)
Payday-weekly	0.356*	0.386*	0.372*	0.400**	0.380*	0.413**
	(0.089)	(0.053)	(0.079)	(0.047)	(0.073)	(0.041)
Payday-monthly	0.036	0.185	0.031	0.169	0.048	0.179
	(0.840)	(0.274)	(0.862)	(0.315)	(0.794)	(0.289)
Install	0.000**	0.000**	0.000**	0.000**	0.000*	0.000**
	(0.030)	(0.012)	(0.036)	(0.011)	(0.070)	(0.021)
Materia	0.190	0.194*	0.212*	0.222**	0.207*	0.219**
	(0.103)	(0.056)	(0.075)	(0.034)	(0.083)	(0.038)
Impulsive	0.269***	0.137	0.301***	0.163*	0.300***	0.164*
buying	(0.009)	(0.143)	(0.003)	(0.081)	(0.004)	(0.081)
Control variables						
Age 30-39			0.028	0.070	0.013	0.047
			(0.876)	(0.651)	(0.942)	(0.764)
Age 40-49			-0.073	0.044	-0.086	0.032
			(0.630)	(0.741)	(0.573)	(0.810)
Age 50 or over			-0.077	0.054	-0.090	0.051
			(0.605)	(0.678)	(0.549)	(0.694)
Gender			-0.152	-0.170**	-0.157	-0.175**
			(0.111)	(0.048)	(0.101)	(0.042)
Single			-0.211	-0.185	-0.193	-0.191
			(0.200)	(0.253)	(0.245)	(0.238)
Married			-0.401	0.021	-0.044	0.020
			(0.777)	(0.870)	(0.759)	(0.878)
No-income member					0.001	-0.001
					(0.685)	(0.626)
Income level					-0.000	-0.000
					(0.863)	(0.867)
Debt-to-income					0.001	0.001
					(0.149)	(0.196)
N	1,153	1,153	1,153	1,153	1,153	1,153
Mean VIF	1.77		1.91		2.20	
Wald test, p-value		0.2793		0.2621		0.3186
Linktest	0.808		0.775		0.831	
Prob > F	0.0000		0.0000		0.0000	

Note: The 1st stage IV estimates are shown in Table 1.2F and Table 1.3F (Appendix F)

Source: Survey findings complied by the authors (2017)

Lack of cash soon follows and raises the likelihood of turning to informal loan. We have observed that 22.84% of people with repeated or chronic tendency to borrow

informally have been using their borrowed money to buy goods they want at the moment but do not have enough money for. This reflects the lack of concern for debt creation from unreasonable spending which also does not create income in the future afterwards. People with this materialistic trend tend to turn to informal loans repeatedly.

The results confirm the correlation between impulsive buying behavior and repeated informal credit. It implies that when some people buy something they want immediately without considering the future consequences of their spending, this is called impulsive buying. It creates large volumes of expenses regularly. If this spending is large compared to that person's monthly income, it will lead to the lack of cash and savings which will raise the likelihood of informal borrowing.

Even though many previous research findings have confirmed that low income levels are associated with higher probability of borrowing informally, our research does not find the statistical correlation between income levels and repeated informal borrowing. This may be because income is only a single dimension of financial well-being, as monthly expenses as a fraction of income are an important determinant to be considered when examining individuals' financial statuses.

Report Standard Errors and Significance

We performed sensitivity analyses to check robustness of the results by using Probit method with jackknife variance estimation in Table 6.5 in order to compare with the results from Taylor-linearized variance estimation (Table 6.4). The results in Table 6.5 show qualitatively similar signs to the estimation results in Table 6.4

Table 6.5 Determinants of making repeated informal loans – Probit with Jackknife Variance Estimation. The decision making on repeated informal loans is the dependent variable.

Variables	Coefficients	Jackknife Std. Err.		p-values
Consistent Saving	-1.085***	0.115		0.000
Net income	-0.000**	0.000		0.040
Payday-daily	0.403*	0.206		0.051
Payday-weekly	0.380*	0.222		0.087
Payday-monthly	0.048	0.192		0.804
Install	0.000	0.000		0.101
Materia	0.207	0.127		0.104
Impulsive buying	0.300***	0.106		0.005
Age 30-39	0.013	0.193		0.946
Age 40-49	-0.086	0.160		0.590
Age 50 or over	-0.090	0.156		0.567
Gender	-0.158	0.100		0.114
Single	-0.193	0.172		0.263
Married	-0.044	0.149		0.768
No-income member	0.001	0.002		0.703
Income level	0.000	0.000		0.911
Debt-to-income	0.001	0.002		0.367
Observations			1,153	
Prob > F			0.000	

* significant at the 10%, ** at the 5%, *** at the 1% levels, respectively.

Source: Survey findings compiled by the authors (2017)

Table 6.6 Regression results of making decision on repeated informal loans, divided by gender, using Probit binary estimations

Variables	Male		Female	
	Model 1	Model 2	Model 3	Model 4
Key variables				
Consistent Saving	-1.088***	-1.025***	-1.134***	-1.160***
	(0.000)	(0.000)	(0.000)	(0.000)
Net income	-0.000	-0.000	-0.000***	-0.000***
	(0.127)	(0.320)	(0.001)	(0.000)
Payday-daily	-0.079	-0.111	1.003***	1.001***
	(0.760)	(0.673)	(0.001)	(0.002)
Payday-weekly	0.200	0.149	0.615*	0.633*
	(0.465)	(0.595)	(0.072)	(0.069)
Payday-monthly	-0.157	-0.156	0.340	0.329
	(0.504)	(0.515)	(0.241)	(0.264)
Install	0.000*	0.000*	0.000	0.000
	(0.064)	(0.077)	(0.200)	(0.356)
Materia	0.291*	0.309*	0.140	0.107
	(0.082)	(0.081)	(0.397)	(0.529)
Impulsive buying	0.399***	0.404***	-0.169	0.119
	(0.005)	(0.005)	(0.255)	(0.429)
Control variables				
Age 30-39		0.176		-0.023
		(0.519)		(0.929)
Age 40-49		-0.011		-0.077
		(0.963)		(0.705)
Age 50 or over		-0.046		-0.093
		(0.845)		(0.648)
Single		-0.226		-0.179
		(0.370)		(0.437)
Married		0.081		-0.140
		(0.726)		(0.472)
No-income member		0.002		-0.003
		(0.385)		(0.369)
Income level		-0.000*		-0.000***
		(0.064)		(0.007)
Debt-to-income		0.003*		-0.000
		(0.050)		(0.554)
Observations	523	523	630	630
Mean VIF	1.65	2.46	1.95	2.13
Linktest	0.331	0.761	0.782	0.727
Prob > F	0.0000	0.0000	0.0000	0.0000

* significant at the 10%, ** at the 5%, *** at the 1% levels, respectively.

Source: Survey findings compiled by the authors (2017)

Table 6.6 displays the estimation results when we divided the respondents into 2 groups by gender: Male and Female. We compare the main results in Models (2) and

(4) with the results in Table 6.3 in order to explore whether there are differences between the characteristics of gender on the likelihood of returning to borrow more debt from the informal credit market.

The effect of having consistent savings on repeatedly making informal loans are not quite different between male and female groups, i.e., the interaction term of savings is significant at the 1% level in Models (2) and (4). Therefore, having savings seems to be the important deterrent for people which discourages them before they decide to make a loan from the informal credit market.

Impulsive buying behavior, materialism, and the habit of buying products by installments were found to correlate with likelihood of accessing the informal credit market again for the male group, but not for the female group studied. This evidence may imply that men have a higher tendency than women to spend more money on desirable products and/or prefer to buy products by installments beyond their means, which subsequently leads to liquidity problems.

Net monthly income and payday period (daily or weekly) are reported to be statistically significant for females, but not for males. This may suggest that women may have more difficulties in managing their income and expenditures compared to men, at least in our group of respondents.

6.6   Concluding Remarks

The factors affecting re-entry of informal borrowers into the informal debt market are still not clear. 40.24% of the respondents in the study have turned to informal loans when they run out of cash in hand. Using data from 1,153 informal borrowers in Bangkok and Greater Bangkok by surveys, we investigate which characteristics of borrowers and spending behavior are consistent with higher likelihoods of making repeated informal loans.

Results from the empirical analysis show that consumption expenses, when they exceed income levels, and the lack of disciplined savings were highly correlated with the likelihood of returning to the informal credit market, because a person has no money in their hands, and no money savings to spend when they need. Daily payment and weekly payment periods are also significantly related to the higher probability of returning to the informal credit sector, because most regular expenses are usually paid on a monthly period basis, hence, it is much more difficult for people who earn their income on daily or weekly basis (especially without money savings) to balance their monthly incomes and expenditures.

A key factor examined in the paper is the spending behaviors of the respondents, which are impulsive buying and installments, has been found to play an essential role on re-entry and persistent dependence on informal credits. The unawareness of spending too much on unnecessary items or through installments method can lead people to liquidity problems and raises the likelihood of turning to informal loan repeatedly.

Chapter 7

7 Conclusion

7.1 Main Findings and Policy Implications

In the study, the factors associated with borrowing decisions of informal loans, repeated informal loans, and the levels of informal interest rates are focused on in order to provide a better understanding of the informal credit market mechanisms.

People who lack disciplined saving behavior and/or keep no record of their income and expenses for planning have higher probability to depend on informal credits and they have higher likelihood to turn to informal loans repeatedly. The spending behavior on luxury products beyond one's means was also found to be an important factor leading to liquidity problems. Also, impulsive buying behavior, materialism, and the habit of buying products by installments play very important roles on repeated dependency on informal credits. While the unawareness of having too high debt-to-income ratio is a major barrier for people to apply for formal credits, which usually offers much lower costs than informal credit. When people have high expenses relative to their income, unsurprisingly, the informal credit source seems to be an unavoidable option as well as being easily caught in the informal credit trap.

Being indebted on an informal loan is frequently followed by serious problems. The most apparent problem is extortionate interest rates which drag many informal borrowers into a cycle of endless debt. Particularly, the high levels of lenders' influence can sometime be due to the use of physical violence or harassment. The extortionate interest rates problem in the Thai informal credit market is an important issue that government authorities need to address, so as to help informal borrowers who are trapped in chronic indebtedness as follows:

- On the basis of the findings, we have observed that spending behavior, such as luxury spending, materialism, impulsive buying, and purchasing of goods through partial initial payments are the main factors forcing many people to turn

to debt and end up with excessive debt burdens that they cannot get themselves out of.

A way to promote effective financial discipline among Thai people is for government and public agencies to educate people on managing their money and resources frugally but effectively, spending on things that are beneficial and in proper amounts to suit their income levels and affording abilities, and refraining from impulsive or unproductive spending of money which leads to high household debt burdens in the first place. This will prevent chronic dependency on informal debt, and will also help the people maintain a healthy financial status as a whole.

- The findings also show that the lack of savings is the driving cause of the increasing demand for informal loans of Thai people. To deal with this problem, government agencies can encourage people to set goals for their monthly savings and follow them. For example, the government can focus on parents and household leaders as they can set examples to other family members in consistent saving.

For many years, the Thai governments and related organizations have been trying to solve the informal debt problem through many channels. The "Financial Education Project" for Thai people is one of the key initiatives of the Fiscal Policy Research Institute Foundation since 2013. It has dedicated its operations to providing financial knowledge to the general public through its website,[19] and organizes events where people with financial literacy (designated at approximately 130,000 individuals per year) can relay their knowledge to those with low income levels and the poor, especially those who faced financial problems. The aim of this project is to promote financial discipline through reducing unneeded expenses. Also, the government has launched the television programme "The Money", and the TV show "Papajumpen", in order to disseminate financial knowledge to the general public and encourage prudent financial management in household and individual levels. These projects are consistent with our findings that the reduction of luxury and overreaching

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[19] http://www.financialeducation.or.th

expenses can reduce the likelihood of informal borrowing of individuals. As such, we consider these projects as penetrating directly to the root causes of the informal debt problem, and their rationale are valid. Continued implementation and effective management of such programs can alleviate the severity of the problem in the long run.

- Collecting income and expenditure records in household financial accounts or worksheets is also found to have an effect on informal loan decisions of Thai people. Financial worksheets are useful for households in keeping track of their financial balances, and help them realize and reduce unnecessary spending.

    Therefore, an important way to help people reduce the likelihood of borrowing informal credit is to educate them about income and expense worksheets, which will allow them to keep track of their income and spending records, leading to higher awareness of their own financial statuses, and the motivation to maintain financial discipline and cut down unnecessary spending. This will not only reduce the chronic dependency on informal debts, but will improve the people's living standards and promote efficient management of household wealth, which will be beneficial to the Thai people's welfare.

    Among all of projects, a very important project related to solving the informal loan problem has been the Happy Money Project, implemented by the Stock Exchange of Thailand, and the Cooperative Auditing Department, which promotes people's habit of making worksheets and financial accounts. The project has invited famous actors, actresses, and musicians to be its presenters, promoting financial accounting for households and prudent financial management, which leads to positive savings. This project corresponds to our findings that the presence of income and expense worksheets is one factor reducing the likelihood of informal debt dependency, through awareness of one's own financial statuses. Our findings support the rationale of this program which should be continued and its should be expanded to cover a broader range of people, so as to expand the benefits of the project to greater numbers of Thai people.

- Lastly, in order to effectively deal with the informal debt problem in the long-term, the government and the citizens themselves should work together in improving the financial literacy[20,21] of the people, since having adequate levels of financial literacy will promote the awareness, understanding, attitudes, and behavior needed for making prudent financial decisions, which will be a key solution for the informal debt problem for the people in the long run.[22,23]

The financial literacy of citizens is an important consideration for the Thai governments. Needless to say, people's financial skills and the augmentation of such skills are parts of an important dimension in dealing with the problem. Examples of projects contributing to these improvements are the financial knowledge promotion program by the Thai Bankers' Association, which began in 2018 through many commercial banks, the "Train the Trainer" Program offers pedagogical skills to 500 employees of commercial banks who would teach other people in terms of financial literacy, as well as the economics knowledge training program[24] that augments financial literacy to economics teachers in Bangkok and other regions, conducted by the Bank of Thailand since 2011. These projects emphasize the importance of uplifting the peoples' financial literacy and discipline, which can contribute significantly to the reduction of informal debt burdens and dependency. At any rate, we are of the viewpoint that the government should expand the coverage of these projects towards other more remote areas, since the coverage of such projects has been limited to the more accessible areas. They should be able to access more people

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[20] The Organization for Economic Co-operation and Development (OECD) defines financial literacy as "a combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing."

[21] The basic financial knowledge scores of 10,000 Thai adults aged 18 to 79 provided by the OECD in 2017 was much lower than the average scores of other 29 countries in almost all sections, such as time value of money, interest paid on loan, calculation of interest plus principal, compounding over 5 years actual response, combined simple interest and compounding, and definition of inflation. (https://www.oecd.org/daf/fin/financial-education/OECD-INFE-International-Survey-of-Adult-FInancial-Literacy-Competencies.pdf).

[22] This concept is consistent with findings from Santos (2016) which studied the determinants for using informal credit sources based on 2,023 Brazilian. The results show that low level of financial literacy of people affect an increasing in likelihood of using informal loans.

[23] Panos (2012) also addresses that financial literacy of people in Russia was negatively related to the use of informal borrowing.

[24] https://www.1213.or.th/th/aboutfcc/pages/teachertraining.aspx

who are underprivileged. One case of the limited coverage problem is the program for educating teachers in financial literacy, where only approx. 5,700 teachers from as many as 3,586 schools nationwide have enrolled. This highlights the current limitations in terms of access of the government's financial training and enhancement programs.

7.2   Limitations and Future Research

The studies faced some limitations on acquiring statistical data from informal lenders. Therefore, the empirical results are analyzed mainly from the side of borrowers. In addition, it should be noted that one question on impulsive buying in our survey was not totally clear to some respondents, since it is possible to interpret the question differently between individuals, and can be misunderstood. As such, the data collectors needed to verbally clarify the details and purpose of the said question to each respondent in order to avoid confusion and interpretation problems.

Future studies should develop data collection techniques that allow researchers to access huge statistical data on informal lending through questionnaires. In addition, some papers have found that borrowers' occupations are associated with decision making on an informal credit, but such relationships were not detected in this study. This may have been caused by the divided classifications of the borrowers' occupations in the study, following the categories by the National Statistical Office (NSO). Therefore, further studies may attempt organizing occupations with various different techniques.

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APPENDICES
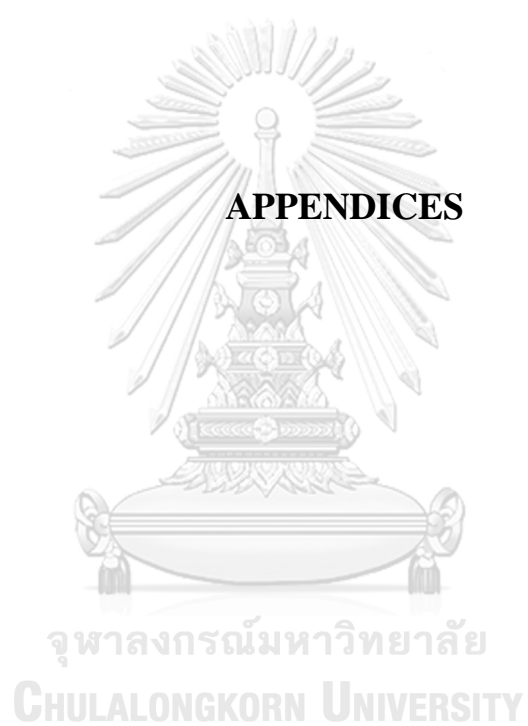
APPENDIX A

CERTIFICATE OF APPROVAL FROM THE ETHIC COMMITTEE

AF 02-12

The Research Ethics Review Committee for Research Involving Human Research Participants, Health Sciences Group, Chulalongkorn University
Jamjuree 1 Building, 2nd Floor, Phyathai Rd., Patumwan district, Bangkok 10330, Thailand,
Tel/Fax: 0-2218-3202 E-mail: eccu@chula.ac.th

COA No. 213/2016

Certificate of Approval

Study Title No. 148.1/59   :   INFORMAL LOAN, DEPENDENCE OF OCCUPATIONS AND LOAN AGREEMENTS IN THE INFORMAL LOAN MARKET IN THAILAND

Principal Investigator   :   MISS WICHYADA TANOMCHAT

Place of Proposed Study/Institution :   Faculty of Economics,

           Chulalongkorn University

      The Research Ethics Review Committee for Research Involving Human Research Participants, Health Sciences Group, Chulalongkorn University, Thailand, has approved constituted in accordance with the International Conference on Harmonization – Good Clinical Practice (ICH-GCP).

Signature: ....   Signature: ....

(Associate Professor Prida Tasanapradit, M.D.)   (Assistant Professor Nuntaree Chaichanawongsaroj, Ph.D.)

          Chairman   Secretary

Date of Approval   : 30 November 2016   Approval Expire date : 29 November 2017

The approval documents including

   1)   Research proposal

   2)   Patient/Participant Information Sheet and Informed Consent Form

                 Protocol No 148.1/59

   3)   Researcher   Date of Approval .... 3 0 NOV 2016

   4)   Questionnaire   Approval Expire Date .... 2 9 NOV 2017

The approved investigator must comply with the following conditions:

1. *The research/project activities must end on the approval expired date of the Research Ethics Review Committee for Research Involving Human Research Participants, Health Sciences Group, Chulalongkorn University (RECCU). In case the research/project is unable to complete within that date, the project extension can be applied one month prior to the RECCU approval expired date.*
2. *Strictly conduct the research/project activities as written in the proposal.*
3. *Using only the documents that bearing the RECCU's seal of approval with the subjects/volunteers (including subject information sheet, consent form, invitation letter for project/research participation (if available).*
4. *Report to the RECCU for any serious adverse events within 5 working days*
5. *Report to the RECCU for any change of the research/project activities prior to conduct the activities.*
6. *Final report (AF 03-12) and abstract is required for a one year (or less) research/project and report within 30 days after the completion of the research/project. For thesis, abstract is required and report within 30 days after the completion of the research/project.*
7. *Annual progress report is needed for a two- year (or more) research/project and submit the progress report before the expire date of certificate. After the completion of the research/project processes as No. 6.*

APPENDIX B

INFORMATION FOR THE DEMOGRAPHIC GROUP OR PATICIPANTS OF THE SURVEY

1. We would like to invite you to participate in this research survey. Before you decide whether to join the research or not, please read through the following information so that you can understand all of them. You can always ask for more information before participating, and can ask for explanations from the interviewers at any time.

2. This research project is a study about informal debts in Bangkok, Nontha Buri, Pathum Thani, and Samut Prakarn. It's objective is to find the relationships between people's personal characteristics, loan types, and the likelihood of borrowing from informal credit sources.

3. The participants of this research are 1,800 Thai people who are 20 years old or older, with different debt statuses. Some may have borrowed from informal credit sources, while some may borrow from formal sources, or may have no debt at all. Both male and female participants are welcome. They must be people currently living in Bangkok, Nontha Buri, Pathum Thani, and Samut Prakarn, but it is not necessary to have a household registration in those provinces. To participate, you can be registered in any province of Thailand as long as you are living in these four provinces being studied.

4. The research process is to

    4.1 Describe the details of the study first, and then we will ask for your willingness and permission to participate in answering the survey. The interviewer will be ready to answer any questions you may have, and will provide the information for participants for you to read.

    4.2 After the details are described, the researcher will ask you to answer an anonymous survey (your name will not be included and it will not be possible to trace the answers back to you). The survey is divided into two parts.

Part 1: Personal data, with 26 questions.

Part 2: Information on debt and loans, with 26 questions.

There are 52 questions, and you will answer the survey one time. The time for doing the survey is around 15 minutes. The data is received by the researcher and the data team from Edunet Co. Ltd..

4.3 About the confidentiality of the survey, please know that as soon as you finish answering the survey, it will be immediately stored into the envelope, and the interviewer is not allowed to read from it. The data you give us will be combined with other people's data and will be presented as a big group of data from many people mixed together. You and your information will not be identified in any way. The survey you answered and your data will be destroyed as soon as this study is finished.

5. During the survey, it is possible that you may feel uncomfortable or distressed, since there may be some questions that are about personal matters in your past that you may not feel comfortable with. In the case that the researcher observes that you are not feeling well, the survey can be stopped immediately, and we will talk about other things instead to make you feel better. Another survey can be issued for other days in the future, if you are still willing to participate in the research.

6. About the benefits of this study, the researchers and participants will not benefit directly from being part of the project, but the results and findings of the project will help the society understand more about factors leading to a person's dependence on informal credit. These findings can be used in the future to deal with the problems of chronic dependence of many Thai people on informal credit debts, and will lead to ways to provide help to these people, and to promote financial well-being of the Thai people, so that they will not end up in the cycle of perpetual informal debts in the future.

7. Your participation is entirely voluntary, and you can refuse to participate or can withdraw yourself from this research at any time you wish, without any consequences whatsoever to you, and if you choose to back out, you don't need to give any reasons why and will not lose any benefits.

8. If you have any questions, you can always contact and ask the researcher at any time at the address: 99/142 Samet, Meaung, Chonburi, 2000 and telephone number: 038-102397-8 ext. 105.

9. This research is voluntary and done by the willingness and consent of the respondents, therefore, there are no money compensations for answering the research questions, and there are no souvenirs provided for answering them.

10. If you feel that you are not receiving fair treatment according to this document's information, you can always file a complaint report at The Research Ethics Review

Committee for Research Involving Human Research Participants, Health Sciences Group, Chulalongkorn University, 254 Phayathai Road, Pathumwan, Bangkok, 10330. Telephone number: 0-2218-3202, E-mail: eccu@chula.ac.th.

APPENDIX C

QUESTIONNAIRES

แบบสอบถามเพื่อประกอบการทำวิจัย เรื่อง หนี้นอกระบบ ความเชื่อมโยงระหว่างอาชีพของผู้กู้นอกระบบและ
ข้อตกลงในการกู้เงินในตลาดเงินกู้นอกระบบของประเทศไทย

    แบบสอบถามชุดนี้จัดทำขึ้นเพื่อประกอบการทำวิจัยของผู้ศึกษาในหลักสูตรปริญญาเอก คณะ
เศรษฐศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย โดยข้อมูลจากแบบสอบถามนี้จะถูกนำมาใช้ในการศึกษาวิจัยในเชิง
วิชาการ และนำเสนอในภาพรวม โดยจะ <u>ไม่มีการเปิดเผยข้อมูลหรือนำเสนอในระดับรายบุคคล</u> จึงขอความกรุณา
ท่านโปรดให้ข้อมูลตามความเป็นจริง ผู้วิจัยขอขอบพระคุณท่านเป็นอย่างสูงที่ได้กรุณาสละเวลาให้ข้อมูลมา ณ
โอกาสนี้

     สอบถามเฉพาะ**ผู้ที่มีหนี้นอกระบบ** หรือมีหนี้นอกระบบพร้อมกับหนี้ในระบบ

โดย

1. ในช่วง 12 เดือนที่ผ่านมา ผู้ตอบแบบสอบถามมีการกู้ยืมเงินนอกระบบ (ผ่อนชำระครบแล้ว หรือยังไม่
ครบก็ตาม) หรือ

2. ผู้ตอบแบบสอบถามมีการกู้ยืมนอกระบบในปีใดก็ตาม แต่ภายใน 12 เดือนที่ผ่านมายังมีหนี้นอกระบบ
ที่ยังค้างชำระอยู่

<u>คำศัพท์</u>: *ครัวเรือน* หมายถึง บุคคลที่มาอยู่รวมกัน ร่วมกันจัดหาและใช้สิ่งอุปโภคบริโภคที่จำเป็นแก่การ
ครองชีพร่วมกัน อาจจะเป็นญาติหรือไม่เป็นญาติกันก็ได้ (คำนิยาม สำนักงานสถิติแห่งชาติ, 2547)

    สมาชิกของครัวเรือน หมายถึง บุคคลซึ่งอาศัยอยู่เป็นประจำในครัวเรือน รวมทั้งคนที่เคยอยู่ใน
ครัวเรือน แต่ได้จากไปที่อื่นชั่วคราว โดยไม่มีวัตถุประสงค์จะไปอยู่ประจำที่อื่น (แนวคิดและคำนิยาม
สำนักงานสถิติแห่งชาติ, 2547)

    หนี้นอกระบบ หมายถึง การกู้ยืมสิ่งของ หรือเงินจากแหล่งที่ไม่ใช่สถาบันการเงินในระบบ
ซึ่งอยู่นอกเหนือการควบคุมของรัฐบาล ได้แก่ กู้ยืมจากญาติ เพื่อน เพื่อนร่วมงาน คนรู้จัก เจ้านาย ร้านค้า
นายทุน หรือแก๊งค์หมวกกันน็อค (เรย์, 2541 และ จำเนียรพล, 2557)

    อาชีพหลัก หมายถึง ประเภทของงานซึ่งบุคคลใช้เวลาทำเป็นส่วนมากในระยะเวลาที่กำหนด
(แนวคิดและคำนิยาม สำนักงานสถิติแห่งชาติ, 2559)

    อาชีพเสริม หมายถึง อาชีพที่มีชั่วโมงการทำงานน้อยกว่าอาชีพหลัก หรือเป็นอาชีพที่ให้รายได้
น้อยกว่าอาชีพหลักในกรณีที่มีชั่วโมงการทำงานเท่ากัน (คำนิยาม สำนักงานสถิติแห่งชาติ, 2559)

  แบบสอบถามชุดนี้มี 2 ส่วน ได้แก่
ส่วนที่ 1: ข้อมูลของผู้ตอบแบบสอบถาม
ส่วนที่ 2: ข้อมูลเกี่ยวกับการกู้ยืม

<u>คำชี้แจง</u> กรุณาทำเครื่องหมาย ✓ ลงใน ☐ หน้าข้อที่ท่านเลือก และเติมข้อมูลตัวเลขหรือข้อความลงบนเส้นประ
ให้ตรงกับความเป็นจริงมากที่สุด

ส่วนที่ 1 (A): ข้อมูลของผู้ตอบแบบสอบถาม

1) จังหวัดที่คุณอาศัยอยู่ในปัจจุบัน ☐ 1. กรุงเทพมหานคร (โปรดระบุ **เขต** ....) ☐ 2. นนทบุรี   (โปรดระบุ **อำเภอ** ....) ☐ 3. ปทุมธานี   (โปรดระบุ **อำเภอ** ....) ☐ 4. สมุทรปราการ   (โปรดระบุ **อำเภอ** ....)
2) คุณมีภูมิลำเนาเดิมอยู่ใน**จังหวัด** (โปรดระบุ) ....
3)   เพศของคุณ ☐ 1. หญิง   ☐ 2. ชาย
4) ปัจจุบันคุณมีอายุ ☐ 1. 20 – 29 ปี   ☐ 2. 30 – 39 ปี ☐ 3. 40 – 49 ปี   ☐ 4. 50 ปี หรือ มากกว่า
5) สถานภาพสมรสของคุณ ☐ 1. โสด   ☐ 2. สมรส ☐ 3. หม้าย/ หย่าร้าง/ แยกกันอยู่
6) ระดับการศึกษาสูงสุดของคุณ (สำเร็จการศึกษาแล้ว) ☐ 1. ต่ำกว่าประถมศึกษา   ☐ 2. ประถมศึกษา ☐ 3. มัธยมศึกษาตอนต้น   ☐ 4. มัธยมศึกษาตอนปลาย/ ปวช. ☐ 5. อนุปริญญา/ ปวส.   ☐ 6. ปริญญาตรี ☐ 7. ปริญญาโท   ☐ 8. ปริญญาเอก
7) คุณคือผู้ที่ตัดสินใจเรื่องการใช้เงินของครัวเรือนใช่หรือไม่ ☐ 1. ใช่   ☐ 2. ไม่ใช่
8) จำนวนสมาชิกทั้งหมดที่อาศัยอยู่ด้วยกันใน**ครัวเรือน (บ้านหลังเดียวกัน)** .... คน
9) จำนวนสมาชิกในครัวเรือนที่**กำลังศึกษาอยู่** .... คน
10) จำนวนสมาชิกในครัวเรือนที่**มีรายได้** .... คน
11) ลักษณะความเป็นเจ้าของบ้าน *(ไม่นับรวมที่ดิน)* ที่คุณอาศัยอยู่ในปัจจุบัน ☐ 1. เป็นเจ้าของ – ซื้อเงินสด/ ผ่อนชำระครบแล้ว   ☐ 2. ผ่อนชำระอยู่ ☐ 3. เช่าอยู่   ☐ 4. ไม่เสียค่าเช่า – ญาติเป็นเจ้าของ ☐ 5. ไม่เสียค่าเช่า – ผู้ที่ไม่ใช่ญาติเป็นเจ้าของ   ☐ 6. *บ้านซึ่งตั้งอยู่บนที่ดินสาธารณะ* ☐ 7. บ้านพักสวัสดิการ   ☐ 8. มีคนนำบ้านหลังนี้มาจำนำ/จำนองกับ   ครัวเรือนของคุณ

12) **อาชีพหลัก**ในปัจจุบันของคุณ

□ 1. เกษตรกร ซึ่ง**เป็นเจ้าของ**ที่ดิน (ปลูกพืช เลี้ยงสัตว์ เพาะเลี้ยงสัตว์น้ำ)

□ 2. เกษตรกร ซึ่ง**เช่า**ที่ดิน/ มีที่ดินฟรี (ปลูกพืช เลี้ยงสัตว์ เพาะเลี้ยงสัตว์น้ำ)

□ 3. ประมง ป่าไม้ ล่าสัตว์ หาของป่า และบริการทางการเกษตร

□ 4. ธุรกิจส่วนตัว (ที่ไม่ใช่การเกษตร)

□ 5. ผู้จัดการ นักวิชาการ และผู้ปฏิบัติงานวิชาชีพ

□ 6. คนงานเกษตร ป่าไม้ และประมง

□ 7. คนงานด้านการขนส่ง และงานพื้นฐาน

□ 8. เสมียน พนักงานขาย และให้บริการ

□ 9. ผู้ปฏิบัติงานในกระบวนการผลิต ก่อสร้าง เหมืองแร่

□ 10. บำเหน็จ บำนาญ เงินช่วยเหลือ ว่างงาน

13) คุณได้รับเงินจากอาชีพหลัก

□ 1. ทุกวัน   □ 2. ทุก **1 สัปดาห์**

□ 3. ทุก **2 สัปดาห์**   □ 4. ทุก **1 เดือน**

□ 5. ตาม**ฤดูกาล**/ ราย**โครงการ**

14) รายได้หลักที่คุณได้รับในแต่ละเดือนเป็นรายได้ที่**ประจำและสม่ำเสมอ**หรือไม่

□ 1. เป็น   □ 2. ไม่เป็น

15) คุณมีอาชีพเสริมหรือไม่

□ 1. มี   □ 2. ไม่มี

16) **รายได้รวมจากทุกแหล่งต่อเดือนของคุณ**โดยประมาณ .... บาท/ เดือน

17) **รายจ่ายรวมต่อเดือนของคุณ**โดยประมาณ .... บาท/ เดือน

18) จำนวนเงิน<u>รายจ่าย</u>ตามด้านล่างที่คุณต้องจ่าย<u>ในแต่ละเดือน</u> *(หากไม่มีค่าใช้จ่ายรายการไหน ให้ผู้ตอบใส่ "0")*

   1. เงิน**ออม**   .... บาท/ เดือน

   2. เงินงวดผ่อนชำระ**หนี้บ้าน**   .... บาท/ เดือน

   3. เงินงวดผ่อนชำระ**หนี้รถยนต์**   .... บาท/ เดือน

   4. เงินผ่อนชำระ**สินค้าอื่น ๆ**   .... บาท/ เดือน

   5. ค่าใช้จ่ายในการ**ประกันชีวิต**   .... บาท/ เดือน

   6. เงินที่ส่งกลับไป**ให้ครอบครัวเพื่อนำไปใช้จ่ายในชีวิตประจำวัน** .... บาท/ เดือน

   7. ค่า**ดอกเบี้ย**เงินกู้/เงินต้น (บางส่วน) .... บาท/ เดือน

   8. ค่า**เช่าบ้าน**   .... บาท/ เดือน

   9. ค่า**บัตรเครดิต**(ขั้นต่ำ)   .... บาท/ เดือน

   10. **ค่าเทอม**บุตรหลาน   เทอมละ .... บาท จำนวนปีละ .... เทอม

19) คุณมีค่าใช้จ่ายในสินค้าต่อไปนี้<u>โดยเฉลี่ย</u>ประมาณกี่บาท<u>ต่อเดือน</u> *(หากไม่มีค่าใช้จ่ายรายการไหน ให้*
ผู้ตอบใส่ "0")

1. เครื่องแต่งกายแบรนด์เนม (เช่น เสื้อผ้า รองเท้า กระเป๋า)   .... บาท/ เดือน
2. น้ำหอม/ เครื่องสำอางค์   .... บาท/ เดือน
3. เครื่องประดับ/ อัญมณี (ที่ไม่ใช่เพื่อการลงทุน)   .... บาท/ เดือน
4. กิจกรรมเพื่อความบันเทิง หรืองานอดิเรก (เช่น ดูหนัง ฟังเพลง)................................ บาท/ เดือน
5. สุรา/ เครื่องดื่มที่มีแอลกอฮอล์   .... บาท/ เดือน
6. เครื่องดื่มที่ไม่มีแอลกอฮอล์ที่รับประทานนอกบ้าน   .... บาท/ เดือน
   (เช่น น้ำหวาน น้ำปั่น ชา กาแฟ น้ำอัดลม เครื่องดื่มชูกำลัง)
7. บุหรี่/ ยาสูบ   .... บาท/ เดือน
8. การท่องเที่ยวในประเทศ/ ต่างประเทศ   .... บาท/ เดือน

20) ปัจจุบันคุณมีการทำ**บัญชีรายรับรายจ่าย**หรือไม่

☐ 1. มี และทำอย่างต่อเนื่องทุกเดือน   ☐ 2. ไม่มี

21) คุณมีการ**ตั้งงบประมาณรายจ่ายต่อเดือน**หรือไม่

☐ 1. มี และทำอย่างต่อเนื่องทุกเดือน   ☐ 2. ไม่มี

22) ปัจจุบันคุณมีเงินออมหรือไม่

☐ 1. มี   ☐ 2. ไม่มี

23) คุณมีการ**ออมเงิน** (โดยไม่ถอนเงินนั้นออกมาใช้เป็นระยะเวลา 3 เดือนขึ้นไป) อย่างสม่ำเสมอ**ทุกเดือน**
หรือไม่

☐ 1. มี   ☐ 2. ไม่มี (**ข้ามไปทำข้อ 26**)

24) คุณมีพฤติกรรมการออมเงินแบบใด

☐ 1. ออมเงินตามจำนวนที่ตั้งไว้ เงินที่เหลือจากการออมจึงนำไปใช้จ่าย

☐ 2. ใช้จ่ายเหลือเงินเท่าใด จึงค่อยนำเงินนั้นไปออม

☐ 3. ออมอย่างกระทันหัน โดยไม่ได้กำหนดจำนวนเงินไว้ก่อน (เช่น ธนบัตรใบละ 50 บาทจะไม่ใช้และ
นำไปออม)

25) คุณมีพฤติกรรมการออมเงิน เนื่องจากครอบครัวของคุณปลูกฝังค่านิยมการออม

☐ 1. ใช่   ☐ 2. ไม่ใช่

26) ตั้งแต่วันนี้หากคุณต้องหยุดทำงานกระทันหันโดยไม่มีกำหนด เงินออมที่คุณมีอยู่จะนำมาเป็นค่าใช้จ่าย
ของคุณได้นานเท่าไหร่ *(โดยมีค่าใช้จ่ายต่อเดือนเท่าเดิม)*

☐ 1. น้อยกว่า 1 สัปดาห์   ☐ 2. อยู่ได้อย่างน้อย 1 สัปดาห์ แต่ไม่ถึง 1 เดือน

☐ 3. อยู่ได้อย่างน้อย 1 เดือน แต่ไม่ถึง 3 เดือน   ☐ 4. อยู่ได้อย่างน้อย 3 เดือน แต่ไม่ถึง 6 เดือน

☐ 5. อยู่ได้อย่างน้อย 6 เดือน แต่ไม่ถึง 1 ปี   ☐ 6. ตั้งแต่ 1 ปี ขึ้นไป (ระบุ) .... ปี

☐ 7. อยู่ได้ตลอดชีพด้วยเงินบำนาญ

ส่วนที่ 2 (B): ข้อมูลเกี่ยวกับการกู้ยืม

27) รายการ<u>**หนี้ในระบบ**</u>ใดที่คุณยังค้างชำระอยู่ในปัจจุบัน (ตอบได้หลายข้อ)   ☐ 1. สินเชื่อเพื่อที่อยู่อาศัย   ☐ 2. สินเชื่อเช่าซื้อรถยนต์   ☐ 3. สินเชื่อส่วนบุคคล   ☐ 4. สินเชื่อเพื่อการลงทุน   ☐ 5. เงินกู้ยืมเพื่อการศึกษา   ☐ 6. เงินกู้ฉุกเฉิน   ☐ 7. หนี้บัตรเครดิต   ☐ 8. หนี้บัตรกดเงินสด
28) ภายใน 12 เดือนที่ผ่านมา คุณกู้ยืมเงิน หรือมีหนี้ที่ยังต้องชำระจาก<u>**นอกระบบ**</u> กี่แห่ง   ☐ 1. 1 แห่ง   ☐ 2. 2 แห่ง   ☐ 3. 3 แห่ง   ☐ 4. มากกว่า 3 แห่ง
29) คุณกู้ยืมเงินนอกระบบจากใคร *(สามารถตอบได้หลายข้อ)*   ☐ 1. ญาติ   ☐ 2. เพื่อน   ☐ 3. เพื่อนร่วมงาน   ☐ 4. คนรู้จัก   ☐ 5. เจ้านาย   ☐ 6. ร้านค้า   ☐ 7. นายทุนในพื้นที่   ☐ 8. นายทุนนอกพื้นที่   ☐ 9. แก�๊งค์หมวกกันน็อค
30) ระดับความสนิทสนมระหว่างคุณกับผู้ปล่อยกู้*(ที่คิดอัตราดอกเบี้ยเงินกู้สูงที่สุด)*<u>**ในวันที่ขอกู้**</u>   ☐ 1. สนิทสนมมาก   ☐ 2. สนิทสนมปานกลาง   ☐ 3. ไม่สนิทสนม   ☐ 4. ไม่เคยรู้จักกันมาก่อน
31) คุณกู้ยืมนอกระบบในครั้งนี้เป็นครั้งแรก   ☐ 1. ใช่   ☐ 2. ไม่ใช่
32) คุณได้รับเงิน จากผู้ปล่อยกู้*(ที่คิดอัตราดอกเบี้ยเงินกู้สูงที่สุด)*ภายในกี่วันหลังจากขอกู้ (นับวันที่ขอกู้เป็นวันแรก)   ☐ 1. 1 วัน (ได้รับเงินภายในวันที่ขอกู้)   ☐ 2. 2 วัน   ☐ 3. 3 วัน   ☐ 4. มากกว่า 3 วัน
33) คุณกู้ยืมนอกระบบก้อนที่กู้มานานที่สุดและยังชำระ ไม่หมด ได้กู้ยืมมาเป็นระยะเวลา.......................เดือน
34) จำนวนเงินต้นที่คุณกู้ยืมจากนอกระบบทุกแหล่งรวมกัน .... บาท
35) ปัจจุบันหนี้นอกระบบจากทุกแหล่งรวมกันที่ยังค้างชำระอยู่ .... บาท

36) อัตราดอกเบี้ยเงินกู้*(ที่สูงที่สุด)*ของคุณ เท่ากับ

☐ 1. 0% – 1.00% ต่อ .... (เช่น ต่อวัน ต่อสัปดาห์ ต่อเดือน เป็นต้น)

☐ 2. 1.01% – 2.00% ต่อ ....

☐ 3. 2.01% – 3.00% ต่อ ....

☐ 4. 3.01% – 4.00% ต่อ ....

☐ 5. 4.01% – 5.00% ต่อ ....

☐ 6. 5.01% – 6.00% ต่อ ....

☐ 7. 6.01% – 7.00% ต่อ ....

☐ 8. 7.01% – 8.00% ต่อ ....

☐ 9. 8.01% – 9.00% ต่อ...........................

☐ 10. 9.01% – 12.00% ต่อ...........................

☐ 11. มากกว่า 12.00% ต่อ...........................

37) **เอกสาร**ที่ต้องใช้สำหรับการกู้ยืมจากการกู้ยืมภายในช่วง *12 เดือนที่ผ่านมา* (ตอบได้หลายข้อ)

☐ 1. ไม่มี   ☐ 2. สัญญาเงินกู้ยืม

☐ 3. หลักฐานแสดงเงินเดือน   ☐ 4. สำเนาบัตรประชาชน

☐ 5. สำเนาทะเบียนบ้าน   ☐ 6. บัตรเอทีเอ็ม

☐ 7. บุคคลค้ำประกัน

38) คุณต้องชำระหนี้จากแหล่งที่คิดอัตราดอกเบี้ยสูงที่สุดคืนทุก ๆ

☐ 1. ทุกวัน   ☐ 2. 1 สัปดาห์

☐ 3. 15 วัน   ☐ 4. 24 วัน

☐ 5. 1 เดือน   ☐ 6. 1 ปี

☐ 7. ไม่มีกำหนด โดยจ่ายเมื่อพร้อมชำระคืน

39) ผู้ปล่อยกู้จากแหล่งที่คิดดอกเบี้ยสูงที่สุดระบุระยะเวลาในการผ่อนชำระคืนหนี้ให้ครบทั้งจำนวนหรือไม่

☐ 1. มี โดยต้องคืนภายใน ....

☐ 2. ไม่มี

40) อะไรคือ<u>**สินทรัพย์ค้ำประกัน**</u>ในกรณีการกู้ยืมนอกระบบของคุณ*ในช่วง 12 เดือนที่ผ่านมา* (ตอบได้หลาย

    ข้อ)

☐ 1. ไม่ต้องมีหลักประกันใด ๆ (**ข้ามไปทำข้อ 43**)   ☐ 2. โฉนดที่ดิน

☐ 3. รถยนต์/ รถจักรยานยนต์/ รถจักรยาน   ☐ 4. ทะเบียนรถ

☐ 5. หุ้น/ หุ้นกู้/ พันธบัตร   ☐ 6. ทอง/ เพชร/ อัญมณี

☐ 7. เอกสารการโอนลอย   ☐ 8. อุปกรณ์ที่ในการประกอบอาชีพ

41) มูลค่าหรือ<u>ราคาตลาด</u>ของสินทรัพย์ค้ำประกัน*ในช่วง 12 เดือนที่ผ่านมา* ณ วันที่ขอกู้นอกระบบ

    .... บาท

42) **สาเหตุ**ที่ทำให้คุณต้องกู้เงิน*ในช่วง 12 เดือนที่ผ่านมา* (ตอบได้หลายข้อ)

☐ 1. บุคคลผู้หารายได้ในครอบครัวเสียชีวิต ☐ 2. บุคคลผู้หารายได้ในครอบครัวตกงาน

☐ 3. หาเงินค่ารักษาคนป่วยในครอบครัว ☐ 4. การหย่าร้าง

☐ 5. ค่าเล่าเรียนบุตร ☐ 6. ซื้อสิ่งของที่อยากได้

☐ 7. ต้องส่งเงินให้ครอบครัว ☐ 8. ขาดสภาพคล่องทางการเงินส่วนบุคคล

☐ 9. ขาดสภาพคล่องทางการเงินของธุรกิจ ☐ 10. สูญเสียที่ทำกิน

☐ 11. ชำระหนี้พนัน

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43) **เหตุใด**คุณจึง<u>เลือก</u>กู้ยืมเงิน**นอกระบบ** (ตอบได้หลายข้อ)

☐ 1. สถาบันการเงินปฏิเสธที่จะอนุมัติเงินกู้ ☐ 2. ได้รับเงินทันความต้องการใช้

☐ 3. ขั้นตอนสะดวก ไม่ยุ่งยาก ☐ 4. ไม่ต้องทำสัญญากู้ยืมเงิน

☐ 5. ไม่ต้องมีหลักทรัพย์ค้ำประกัน ☐ 6. ไม่ต้องมีบุคคลค้ำประกัน

☐ 7. ไม่ต้องใช้หลักฐานแสดงรายได้ ☐ 8. ต้องการกู้เงินจำนวนน้อย

☐ 9. กังวลใจว่าจะกู้ในระบบไม่ผ่าน ☐ 10. ต่อรองระยะเวลาการผ่อนชำระหนี้ได้

☐ 11. ไม่ต้องระบุวัตถุประสงค์การใช้เงิน ☐ 12. ได้รับอนุมัติเงินง่ายกว่าการกู้ในระบบ

☐ 13. ติดเครดิตบูโร

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44) เงินนอกระบบที่คุณกู้*ภายในช่วง 12 เดือนที่ผ่านมา* ได้ถูกนำไปใช้เกี่ยวกับ (ตอบได้หลายข้อ)

☐ 1. ใช้จ่ายในชีวิตประจำวันทั่วไป ☐ 2. ลงทุนในการประกอบอาชีพ

☐ 3. ค่าเทอมบุตร ☐ 4. ค่าใช้จ่ายของบุตร

☐ 5. ค่าเช่าบ้าน ☐ 6. ค่ารักษาพยาบาล

☐ 7. นำไปชำระหนี้สินจากเงินกู้นอกระบบแหล่งอื่น ☐ 8. นำไปชำระหนี้สินจากแหล่งเงินกู้ในระบบ

☐ 9. ส่งเงินให้ครอบครัว ☐ 10. ซื้ออุปกรณ์ตกแต่งบ้าน/ เครื่องใช้ในครัวเรือน

☐ 11. ซื้อเครื่องใช้ไฟฟ้า/ เครื่องใช้ในครัวเรือน/ โทรศัพท์มือถือ ☐ 12. ซื้อยานพาหนะ

☐ 13. ฝากบัญชีธนาคาร/ ซื้อสินทรัพย์เพื่อการลงทุน ☐ 14. จ่ายหนี้พนัน

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45) คุณเคยถูกข่มขู่ตามทวงหนี้จากเจ้าหนี้หรือไม่

☐ 1. เคย ☐ 2. ไม่เคย

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46) ผู้ปล่อยกู้นอกระบบ*(ที่คิดอัตราดอกเบี้ยเงินกู้สูงที่สุด)*ซึ่งคุณไปกู้ยืมเงิน มีลักษณะตรงตามข้อใด (ตอบเพียงข้อเดียว)

☐ 1. เป็นผู้มีอิทธิพลในพื้นที่ สามารถ**ใช้ความรุนแรง**ในการทวงหนี้

☐ 2. ไม่ใช้ความรุนแรงในการทวงหนี้ แต่ทำให้ลูกหนี้**เกิดความอับอาย**หากชำระล่าช้า

☐ 3. ไม่ใช้ความรุนแรงหรือทำให้อับอาย แต่จะยึด**ของที่เป็นสินทรัพย์ค้ำประกัน**ไป

☐ 4. ไม่ใช้ความรุนแรงหรือทำให้อับอาย แต่จะ**ไม่สามารถกู้ยืมได้อีก** หากผิดนัดชำระหนี้ หรือ ผู้ปล่อยกู้ไม่คาดหวังว่าจะได้รับเงินคืน

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47) คุณมักจะซื้อสินค้าที่<u>กำลังเป็นที่นิยม</u>มาครอบครอง

☐ 1. ใช่ ☐ 2. ไม่ใช่

48) คุณมักจะต้องเปรียบเทียบราคาสินค้าจากหลายแหล่ง ก่อนที่จะตัดสินใจซื้อ
☐ 1. ใช่   ☐ 2. ไม่ใช่
49) ถ้าคุณต้องการสินค้าชนิดใดมาครอบครอง คุณมักจะซื้อทันทีในครั้งแรกที่เห็น
☐ 1. ใช่   ☐ 2. ไม่ใช่
50) คุณมักจะซื้อสินค้าแบรนด์เนม
☐ 1. ใช่   ☐ 2. ไม่ใช่
51) คุณมักรู้สึกเสียดายเงินภายหลังจากที่ซื้อไปแล้ว
☐ 1. ใช่   ☐ 2. ไม่ใช่
52) คุณมักจะซื้อสินของหรืออาหารมาแล้วไม่ได้ใช้/ ปล่อยให้เน่าเสีย
☐ 1. ใช่   ☐ 2. ไม่ใช่

- **ขอบคุณท่านที่ช่วยสละเวลาตอบแบบสอบถาม** -

**แบบสอบถามเพื่อประกอบการทำวิจัย เรื่อง หนี้นอกระบบ ความเชื่อมโยงระหว่างอาชีพของผู้กู้นอกระบบและ
ข้อตกลงในการกู้เงินในตลาดเงินกู้นอกระบบของประเทศไทย**

       แบบสอบถามชุดนี้จัดทำขึ้นเพื่อประกอบการทำวิจัยของผู้ศึกษาในหลักสูตรปริญญาเอก คณะ
เศรษฐศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย โดยข้อมูลจากแบบสอบถามนี้จะถูกนำมาใช้ในการศึกษาวิจัยในเชิง
วิชาการ และนำเสนอในภาพรวม โดยจะ <u>ไม่มีการเปิดเผยข้อมูลหรือนำเสนอ*ในระดับรายบุคคล*</u> จึงขอความกรุณา
ท่านโปรดให้ข้อมูลตามความเป็นจริง ผู้วิจัยขอขอบพระคุณท่านเป็นอย่างสูงที่ได้กรุณาสละเวลาให้ข้อมูลมา ณ
โอกาสนี้

<div align="center">

สอบถามเฉพาะ**ผู้ที่มีหนี้ในระบบ**

ในช่วง 12 เดือนที่ผ่านมา ผู้ตอบแบบสอบถามมีการกู้ยืมเงินในระบบ หรือยังมีหนี้ค้างชำระในระบบ

</div>

<u>คำศัพท์</u>: ***ครัวเรือน*** หมายถึง บุคคลที่มาอยู่รวมกัน ร่วมกันจัดหาและใช้สิ่งอุปโภคบริโภคที่จำเป็นแก่การ
ครองชีพร่วมกัน อาจจะเป็นญาติหรือไม่เป็นญาติกันก็ได้ (คำนิยาม สำนักงานสถิติแห่งชาติ, 2547)

    สมาชิกของครัวเรือน หมายถึง บุคคลซึ่งอาศัยอยู่เป็นประจำในครัวเรือน รวมทั้งคนที่เคยอยู่ใน
ครัวเรือน แต่ได้จากไปที่อื่นชั่วคราว โดยไม่มีวัตถุประสงค์จะไปอยู่ประจำที่อื่น (แนวคิดและคำนิยาม
สำนักงานสถิติแห่งชาติ, 2547)

    หนี้นอกระบบ หมายถึง การกู้ยืมสิ่งของ หรือเงินจากแหล่งที่ไม่ใช่สถาบันการเงินในระบบ
ซึ่งอยู่นอกเหนือการควบคุมของรัฐบาล ได้แก่ กู้ยืมจากญาติ เพื่อน เพื่อนร่วมงาน คนรู้จัก เจ้านาย ร้านค้า
นายทุน หรือแก๊งค์หมวกกันน็อค (เรย์, 2541 และ จำเนียรพล, 2557)

    อาชีพหลัก หมายถึง ประเภทของงานซึ่งบุคคลใช้เวลาทำเป็นส่วนมากในระยะเวลาที่กำหนด
(แนวคิดและคำนิยาม สำนักงานสถิติแห่งชาติ, 2559)

    อาชีพเสริม หมายถึง อาชีพที่มีชั่วโมงการทำงานน้อยกว่าอาชีพหลัก หรือเป็นอาชีพที่ให้รายได้
น้อยกว่าอาชีพหลักในกรณีที่มีชั่วโมงการทำงานเท่ากัน *(คำนิยาม สำนักงานสถิติแห่งชาติ, 2559)*

แบบสอบถามชุดนี้มี 2 ส่วน ได้แก่

ส่วนที่ 1: ข้อมูลของผู้ตอบแบบสอบถาม

ส่วนที่ 2: ข้อมูล

<u>คำชี้แจง</u> กรุณาทำเครื่องหมาย ✓ ลงใน ☐ หน้าข้อที่ท่านเลือก และเติมข้อมูลตัวเลขหรือข้อความลงบนเส้นประ
ให้ตรงกับความเป็นจริงมากที่สุด

ส่วนที่ 1 (A): ข้อมูลของผู้ตอบแบบสอบถาม

1) จังหวัดที่คุณอาศัยอยู่ในปัจจุบัน ☐ 1. กรุงเทพมหานคร (โปรดระบุ **เขต** ....) ☐ 2. นนทบุรี   (โปรดระบุ **อำเภอ** ....) ☐ 3. ปทุมธานี   (โปรดระบุ **อำเภอ** ....) ☐ 4. สมุทรปราการ   (โปรดระบุ **อำเภอ** ....)
2) คุณมีภูมิลำเนาเดิมอยู่ใน**จังหวัด** (โปรดระบุ) ....
3) เพศของคุณ ☐ 1. หญิง   ☐ 2. ชาย
4) ปัจจุบันคุณมีอายุ ☐ 1. 20 – 29 ปี   ☐ 2. 30 – 39 ปี ☐ 3. 40 – 49 ปี   ☐ 4. 50 ปี หรือ มากกว่า
5) สถานภาพสมรสของคุณ ☐ 1. โสด   ☐ 2. สมรส ☐ 3. หม้าย/ หย่าร้าง/ แยกกันอยู่
6) ระดับการศึกษาสูงสุดของคุณ (สำเร็จการศึกษาแล้ว) ☐ 1. ต่ำกว่าประถมศึกษา   ☐ 2. ประถมศึกษา ☐ 3. มัธยมศึกษาตอนต้น   ☐ 4. มัธยมศึกษาตอนปลาย/ ปวช. ☐ 5. อนุปริญญา/ ปวส.   ☐ 6. ปริญญาตรี ☐ 7. ปริญญาโท   ☐ 8. ปริญญาเอก
7) คุณคือผู้ที่ตัดสินใจเรื่องการใช้เงินของครัวเรือนใช่หรือไม่ ☐ 1. ใช่   ☐ 2. ไม่ใช่
8) จำนวนสมาชิกทั้งหมดที่อาศัยอยู่ด้วยกันใน**ครัวเรือน (บ้านหลังเดียวกัน)** .... คน
9) จำนวนสมาชิกในครัวเรือนที่**กำลังศึกษาอยู่** .... คน
10) จำนวนสมาชิกในครัวเรือนที่**มีรายได้** .... คน
11) ลักษณะความเป็นเจ้าของบ้าน *(ไม่นับรวมที่ดิน)* ที่คุณอาศัยอยู่ในปัจจุบัน ☐ 1. เป็นเจ้าของ – ซื้อเงินสด/ ผ่อนชำระครบแล้ว   ☐ 2. ผ่อนชำระอยู่ ☐ 3. เช่าอยู่   ☐ 4. ไม่เสียค่าเช่า – ญาติเป็นเจ้าของ ☐ 5. ไม่เสียค่าเช่า – ผู้ที่ไม่ใช่ญาติเป็นเจ้าของ   ☐ 6. *บ้านซึ่งตั้งอยู่บนที่ดินสาธารณะ* ☐ 7. บ้านพักสวัสดิการ   ☐ 8. มีคนนำบ้านหลังนี้มาจำนำ/จำนองกับ   ครัวเรือนของคุณ

12) **อาชีพหลัก**ในปัจจุบันของคุณ

☐ 1. เกษตรกร ซึ่ง**เป็นเจ้าของ**ที่ดิน (ปลูกพืช เลี้ยงสัตว์ เพาะเลี้ยงสัตว์น้ำ)

☐ 2. เกษตรกร ซึ่ง**เช่า**ที่ดิน/ มีที่ดินฟรี (ปลูกพืช เลี้ยงสัตว์ เพาะเลี้ยงสัตว์น้ำ)

☐ 3. ประมง ป่าไม้ ล่าสัตว์ หาของป่า และบริการทางการเกษตร

☐ 4. ธุรกิจส่วนตัว (ที่ไม่ใช่การเกษตร)

☐ 5. ผู้จัดการ นักวิชาการ และผู้ปฏิบัติงานวิชาชีพ

☐ 6. คนงานเกษตร ป่าไม้ และประมง

☐ 7. คนงานด้านการขนส่ง และงานพื้นฐาน

☐ 8. เสมียน พนักงานขาย และให้บริการ

☐ 9. ผู้ปฏิบัติงานในกระบวนการผลิต ก่อสร้าง เหมืองแร่

☐ 10. บำเหน็จ บำนาญ เงินช่วยเหลือ ว่างงาน

13) คุณได้รับเงินจากอาชีพหลัก

☐ 1. ทุกวัน   ☐ 2. ทุก **1 สัปดาห์**

☐ 3. ทุก **2 สัปดาห์**   ☐ 4. ทุก **1 เดือน**

☐ 5. ตาม**ฤดูกาล**/ ราย**โครงการ**

14) รายได้หลักที่คุณได้รับในแต่ละเดือนเป็นรายได้ที่**ประจำ**และ**สม่ำเสมอ**หรือไม่

☐ 1. เป็น   ☐ 2. ไม่เป็น

15) คุณมีอาชีพเสริมหรือไม่

☐ 1. มี   ☐ 2. ไม่มี

16) **รายได้รวมจากทุกแหล่งต่อเดือนของคุณ**โดยประมาณ .... บาท/ เดือน

17) **รายจ่ายรวมต่อเดือนของคุณ**โดยประมาณ .... บาท/ เดือน

18) จำนวนเงิน<u>รายจ่าย</u>ตามด้านล่างที่คุณต้องจ่าย<u>ในแต่ละเดือน</u> *(หากไม่มีค่าใช้จ่ายรายการไหน ให้ผู้ตอบใส่ "0")*

   1. เงิน**ออม**   .... บาท/ เดือน

   2. เงินงวดผ่อนชำระ**หนี้บ้าน**   .... บาท/ เดือน

   3. เงินงวดผ่อนชำระ**หนี้รถยนต์**   .... บาท/ เดือน

   4. เงินผ่อนชำระ**สินค้าอื่น ๆ**   .... บาท/ เดือน

   5. ค่าใช้จ่ายในการ**ประกันชีวิต**   .... บาท/ เดือน

   6. เงินที่ส่งกลับไปให้ครอบครัวเพื่อนำไปใช้จ่ายในชีวิตประจำวัน   .... บาท/ เดือน

   7. ค่า**ดอกเบี้ย**เงินกู้/เงินต้น (บางส่วน) .... บาท/ เดือน

   8. ค่า**เช่าบ้าน**   .... บาท/ เดือน

   9. ค่า**บัตรเครดิต**(ขั้นต่ำ)   .... บาท/ เดือน

   10. **ค่าเทอม**บุตรหลาน   เทอมละ .... บาท จำนวนปีละ .... เทอม

19) คุณมีค่าใช้จ่ายในสินค้าต่อไปนี้<u>โดยเฉลี่ย</u>ประมาณกี่บาท<u>ต่อเดือน</u> *(หากไม่มีค่าใช้จ่ายรายการไหน ให้*
    ผู้ตอบใส่ "0")
   1. เครื่องแต่งกายแบรนด์เนม (เช่น เสื้อผ้า รองเท้า กระเป๋า) .... บาท/ เดือน
   2. น้ำหอม/ เครื่องสำอางค์ .... บาท/ เดือน
   3. เครื่องประดับ/ อัญมณี (ที่ไม่ใช่เพื่อการลงทุน) .... บาท/ เดือน
   4. กิจกรรมเพื่อความบันเทิง หรืองานอดิเรก (เช่น ดูหนัง ฟังเพลง)............................ บาท/ เดือน
   5. สุรา/ เครื่องดื่มที่มีแอลกอฮอล์ .... บาท/ เดือน
   6. เครื่องดื่มที่ไม่มีแอลกอฮอล์ที่รับประทานนอกบ้าน .... บาท/ เดือน
      (เช่น น้ำหวาน น้ำปั่น ชา กาแฟ น้ำอัดลม เครื่องดื่มชูกำลัง)
   7. บุหรี่/ ยาสูบ .... บาท/ เดือน
   8. การท่องเที่ยวในประเทศ/ ต่างประเทศ .... บาท/ เดือน

20) ปัจจุบันคุณมีการทำ**บัญชีรายรับรายจ่าย**หรือไม่
  ☐ 1. มี และทำอย่างต่อเนื่องทุกเดือน   ☐ 2. ไม่มี

21) คุณมีการ**ตั้งงบประมาณรายจ่ายต่อเดือน**หรือไม่
  ☐ 1. มี และทำอย่างต่อเนื่องทุกเดือน   ☐ 2. ไม่มี

22) ปัจจุบันคุณมีเงินออมหรือไม่
  ☐ 1. มี   ☐ 2. ไม่มี

23) คุณมีการ**ออมเงิน** (โดยไม่ถอนเงินนั้นออกมาใช้เป็นระยะเวลา 3 เดือนขึ้นไป) อย่างสม่ำเสมอ**ทุกเดือน**
    หรือไม่
  ☐ 1. มี   ☐ 2. ไม่มี (**ข้ามไปทำข้อ 26**)

24) คุณมีพฤติกรรมการออมเงินแบบใด
  ☐ 1. ออมเงินตามจำนวนที่ตั้งไว้ เงินที่เหลือจากการออมจึงนำไปใช้จ่าย
  ☐ 2. ใช้จ่ายเหลือเงินเท่าใด จึงค่อยนำเงินนั้นไปออม
  ☐ 3. ออมอย่างกระทันหัน โดยไม่ได้กำหนดจำนวนเงินไว้ก่อน (เช่น ธนบัตรใบละ 50 บาทจะไม่ใช้และ
    นำไปออม)

25) คุณมีพฤติกรรมการออมเงิน เนื่องจากครอบครัวของคุณปลูกฝังค่านิยมการออม
  ☐ 1. ใช่   ☐ 2. ไม่ใช่

26) ตั้งแต่วันนี้หากคุณต้องหยุดทำงานกระทันหันโดยไม่มีกำหนด เงินออมที่คุณมีอยู่จะนำมาเป็นค่าใช้จ่าย
    ของคุณได้นานเท่าไหร่ *(โดยมีค่าใช้จ่ายต่อเดือนเท่าเดิม)*
  ☐ 1. น้อยกว่า 1 สัปดาห์   ☐ 2. อยู่ได้อย่างน้อย 1 สัปดาห์ แต่ไม่ถึง 1 เดือน
  ☐ 3. อยู่ได้อย่างน้อย 1 เดือน แต่ไม่ถึง 3 เดือน   ☐ 4. อยู่ได้อย่างน้อย 3 เดือน แต่ไม่ถึง 6 เดือน
  ☐ 5. อยู่ได้อย่างน้อย 6 เดือน แต่ไม่ถึง 1 ปี   ☐ 6. ตั้งแต่ 1 ปี ขึ้นไป (ระบุ) .... ปี
  ☐ 7. อยู่ได้ตลอดชีพด้วยเงินบำนาญ

ส่วนที่ 2 (B): ข้อมูลเกี่ยวกับการกู้ยืม

27) รายการ**หนี้ในระบบ**ใดที่คุณยังค้างชำระอยู่ในปัจจุบัน (ตอบได้หลายข้อ)
☐ 1. สินเชื่อเพื่อที่อยู่อาศัย ☐ 2. สินเชื่อเช่าซื้อรถยนต์
☐ 3. สินเชื่อส่วนบุคคล ☐ 4. สินเชื่อเพื่อการลงทุน
☐ 5. เงินกู้ยืมเพื่อการศึกษา ☐ 6. เงินกู้ฉุกเฉิน
☐ 7. หนี้บัตรเครดิต ☐ 8. หนี้บัตรกดเงินสด

28) เงินที่ได้รับจากการกู้**สินเชื่อส่วนบุคคล** ถูกนำไปใช้เกี่ยวกับ (ตอบได้มากกว่า 1 ข้อ)
☐ 1. ไม่ได้กู้ ☐ 2. ลงทุนในการประกอบอาชีพ
☐ 3. จ่ายค่าเทอมบุตร ☐ 4. จ่ายค่ารักษาพยาบาล
☐ 5. ใช้จ่ายในชีวิตประจำวันทั่วไป ☐ 6. ซื้อยานพาหนะ
☐ 7. ชำระหนี้สินจากแหล่งเงินกู้นอกระบบ ☐ 8. ชำระหนี้จากแหล่งเงินกู้ในระบบแหล่งอื่น
☐ 9. ซื้อเครื่องใช้ไฟฟ้า/ โทรศัพท์มือถือ ☐ 10. ซื้ออุปกรณ์ตกแต่งบ้าน
☐ 11. ส่งเงินให้ครอบครัว ☐ 12. ชำระหนี้พนัน
☐ 13. ฝากบัญชีธนาคาร/ ซื้อสินทรัพย์เพื่อการลงทุน

29) อัตราดอกเบี้ยเงินกู้ที่**สูงที่สุด**ที่คุณยอมรับได้ เท่ากับ .... **% ต่อ ปี**

30) คุณคิดว่าเพราะเหตุใดคุณจึงสามารถ**ได้รับอนุมัติเงินกู้**จากในระบบ (ตอบได้มากกว่า 1 ข้อ)
☐ 1. เนื่องจาก มีหลักทรัพย์ค้ำประกัน
☐ 2. เนื่องจาก มีหน้าที่การงานที่มั่นคง
☐ 3. เนื่องจาก มีบุคคลค้ำประกันที่มีความน่าเชื่อถือ
☐ 4. เนื่องจาก มีรายได้ที่มั่นคง
☐ 5. เนื่องจาก กู้เงินจำนวนไม่สูงมาก
☐ 6. ไม่เคยมีประวัติหนี้เสียในรอบ 5 ปี ก่อนกู้เงิน

31) คุณเคยกู้ยืมเงินจากบุคคลใดต่อไปนี้ *(สามารถตอบได้หลายข้อ)*
☐ 1. ญาติ ☐ 2. เพื่อน
☐ 3. เพื่อนร่วมงาน ☐ 4. คนรู้จัก
☐ 5. เจ้านาย ☐ 6. ร้านค้า
☐ 7. นายทุนในพื้นที่ ☐ 8. นายทุนนอกพื้นที่
☐ 9. แก๊งค์หมวกกันน็อค ☐ 10. ไม่เคยกู้ยืมจากตัวเลือกในข้อใดเลย (**ข้ามไปทำข้อ 36**)

32) <u>จากคำถามข้อ 31</u> ระดับความสนิทสนมระหว่างคุณกับผู้ปล่อยกู้*(ที่คิดอัตราดอกเบี้ยสูงที่สุด)*<u>ในวันที่ขอกู้</u>
☐ 1. สนิทสนมมาก
☐ 2. สนิทสนมปานกลาง
☐ 3. ไม่สนิทสนม
☐ 4. ไม่เคยรู้จักกันมาก่อน

33) อัตราดอกเบี้ยเงินกู้*(ที่สูงที่สุด)*ของคุณ เท่ากับ

☐ 1. 0% – 1.00% ต่อ .... (เช่น ต่อวัน ต่อสัปดาห์ ต่อเดือน เป็นต้น)

☐ 2. 1.01% – 2.00% ต่อ ....

☐ 3. 2.01% – 3.00% ต่อ ....

☐ 4. 3.01% – 4.00% ต่อ ....

☐ 5. 4.01% – 5.00% ต่อ ....

☐ 6. 5.01% – 6.00% ต่อ ....

☐ 7. 6.01% – 7.00% ต่อ ....

☐ 8. 7.01% – 8.00% ต่อ ....

☐ 9. 8.01% – 9.00% ต่อ...........................

☐ 10. 9.01% – 12.00% ต่อ...........................

☐ 11. มากกว่า 12.00% ต่อ...........................

34) <u>จากคำถามข้อ 31</u> *คุณต้องชำระหนี้จากแหล่งที่คิดอัตราดอกเบี้ยสูงที่สุดคืนทุก ๆ*

☐ 1. ทุกวัน ☐ 2. 2 สัปดาห์

☐ 3. 15 วัน ☐ 4. 24 วัน

☐ 5. 1 เดือน ☐ 6. 1 ปี

☐ 7. ไม่มีกำหนด โดยจ่ายเมื่อพร้อมชำระคืน

35) <u>จากคำถามข้อ 31</u> ผู้ปล่อยกู้*(ที่คิดอัตราดอกเบี้ยสูงที่สุด)*ซึ่งคุณไปกู้ยืมเงิน มีลักษณะตรงตามข้อใด (ตอบเพียงข้อเดียว)

☐ 1. เป็นผู้มีอิทธิพลในพื้นที่ สามารถ**ใช้ความรุนแรง**ในการทวงหนี้

☐ 2. ไม่ใช้ความรุนแรงในการทวงหนี้ แต่ทำให้ลูกหนี้**เกิดความอับอาย**หากชำระล่าช้า

☐ 3. ไม่ใช้ความรุนแรงหรือทำให้อับอาย แต่จะ**ยึดของที่เป็นสินทรัพย์ค้ำประกัน**ไป

☐ 4. ไม่ใช้ความรุนแรงหรือทำให้อับอาย แต่จะ**ไม่สามารถกู้ยืมได้อีก** หากผิดนัดชำระหนี้ หรือผู้ปล่อยกู้ไม่คาดหวังว่าจะได้รับเงินคืน

36) คุณมักจะซื้อสินค้าที่<u>กำลังเป็นที่นิยม</u>มาครอบครอง

☐ 1. ใช่ ☐ 2. ไม่ใช่

37) คุณมักจะต้องเปรียบเทียบราคาสินค้าจากหลายแหล่ง ก่อนที่จะตัดสินใจซื้อ

☐ 1. ใช่ ☐ 2. ไม่ใช่

38) ถ้าคุณต้องการสินค้าชนิดใดมาครอบครอง คุณมักจะซื้อทันทีในครั้งแรกที่เห็น

☐ 1. ใช่ ☐ 2. ไม่ใช่

39) คุณมักจะซื้อสินค้าแบรนด์เนม

☐ 1. ใช่ ☐ 2. ไม่ใช่

40) คุณมักรู้สึกเสียดายเงินภายหลังจากที่ซื้อไปแล้ว

☐ 1. ใช่ ☐ 2. ไม่ใช่

41) คุณมักจะซื้อสินของหรืออาหารมาแล้วไม่ได้ใช้/ ปล่อยให้เน่าเสีย

☐ 1. ใช่ ☐ 2. ไม่ใช่

- **ขอบคุณท่านที่ช่วยสละเวลาตอบแบบสอบถาม** -

แบบสอบถามเพื่อประกอบการทำวิจัย เรื่อง หนี้นอกระบบ ความเชื่อมโยงระหว่างอาชีพของผู้กู้นอกระบบและ
ข้อตกลงในการกู้เงินในตลาดเงินกู้นอกระบบของประเทศไทย

       แบบสอบถามชุดนี้จัดทำขึ้นเพื่อประกอบการทำวิจัยของผู้ศึกษาในหลักสูตรปริญญาเอก คณะ
เศรษฐศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย โดยข้อมูลจากแบบสอบถามนี้จะถูกนำมาใช้ในการศึกษาวิจัยในเชิง
วิชาการ และนำเสนอในภาพรวม โดยจะ<u>ไม่มีการเปิดเผยข้อมูลหรือนำเสนอ<i>ในระดับรายบุคคล</i></u> จึงขอความกรุณา
ท่านโปรดให้ข้อมูลตามความเป็นจริง ผู้วิจัยขอขอบพระคุณท่านเป็นอย่างสูงที่ได้กรุณาสละเวลาให้ข้อมูลมา ณ
โอกาสนี้

<div align="center">

สอบถามเฉพาะ**ผู้ที่ไม่มีหนี้สิน**

ในช่วง 12 เดือนที่ผ่านมา ผู้ตอบแบบสอบถามไม่มีหนี้สินจากแหล่งใดเลย

</div>

<u>คำศัพท์</u>: ***ครัวเรือน*** หมายถึง บุคคลที่มาอยู่รวมกัน ร่วมกันจัดหาและใช้สิ่งอุปโภคบริโภคที่จำเป็นแก่การ
ครองชีพร่วมกัน อาจจะเป็นญาติหรือไม่เป็นญาติกันก็ได้ (คำนิยาม สำนักงานสถิติแห่งชาติ, 2547)

    สมาชิกของครัวเรือน หมายถึง บุคคลซึ่งอาศัยอยู่เป็นประจำในครัวเรือน รวมทั้งคนที่เคยอยู่ใน
ครัวเรือน แต่ได้จากไปที่อื่นชั่วคราว โดยไม่มีวัตถุประสงค์จะไปอยู่ประจำที่อื่น (แนวคิดและคำนิยาม
สำนักงานสถิติแห่งชาติ, 2547)

    หนี้นอกระบบ หมายถึง การกู้ยืมสิ่งของ หรือเงินจากแหล่งที่ไม่ใช่สถาบันการเงินในระบบ
ซึ่งอยู่นอกเหนือการควบคุมของรัฐบาล ได้แก่ กู้ยืมจากญาติ เพื่อน เพื่อนร่วมงาน คนรู้จัก เจ้านาย ร้านค้า
นายทุน หรือแก๊งค์หมวกกันน็อค (เรย์, 2541 และ จำเนียรพล, 2557)

    อาชีพหลัก หมายถึง ประเภทของงานซึ่งบุคคลใช้เวลาทำเป็นส่วนมากในระยะเวลาที่กำหนด
(แนวคิดและคำนิยาม สำนักงานสถิติแห่งชาติ, 2559)

    อาชีพเสริม หมายถึง อาชีพที่มีชั่วโมงการทำงานน้อยกว่าอาชีพหลัก หรือเป็นอาชีพที่ให้รายได้
น้อยกว่าอาชีพหลักในกรณีที่มีชั่วโมงการทำงานเท่ากัน *(คำนิยาม สำนักงานสถิติแห่งชาติ, 2559)*

แบบสอบถามชุดนี้มี 2 ส่วน ได้แก่
ส่วนที่ 1: ข้อมูลของผู้ตอบแบบสอบถาม
ส่วนที่ 2: ข้อมูลเกี่ยวกับการกู้ยืม

<u>คำชี้แจง</u> กรุณาทำเครื่องหมาย ✓ ลงใน ☐ หน้าข้อที่ท่านเลือก และเติมข้อมูลตัวเลขหรือข้อความลงบนเส้นประ
ให้ตรงกับความเป็นจริงมากที่สุด

ส่วนที่ 1 (A): ข้อมูลของผู้ตอบแบบสอบถาม

1) จังหวัดที่คุณอาศัยอยู่ในปัจจุบัน ☐ 1. กรุงเทพมหานคร (โปรดระบุ **เขต** ....) ☐ 2. นนทบุรี   (โปรดระบุ **อำเภอ** ....) ☐ 3. ปทุมธานี   (โปรดระบุ **อำเภอ** ....) ☐ 4. สมุทรปราการ   (โปรดระบุ **อำเภอ** ....)
2) คุณมีภูมิลำเนาเดิมอยู่ใน**จังหวัด** (โปรดระบุ) ....
3) เพศของคุณ ☐ 1. หญิง   ☐ 2. ชาย
4) ปัจจุบันคุณมีอายุ ☐ 1. 20 – 29 ปี   ☐ 2. 30 – 39 ปี ☐ 3. 40 – 49 ปี   ☐ 4. 50 ปี หรือ มากกว่า
5) สถานภาพสมรสของคุณ ☐ 1. โสด   ☐ 2. สมรส ☐ 3. หม้าย/ หย่าร้าง/ แยกกันอยู่
6) ระดับการศึกษาสูงสุดของคุณ (สำเร็จการศึกษาแล้ว) ☐ 1. ต่ำกว่าประถมศึกษา   ☐ 2. ประถมศึกษา ☐ 3. มัธยมศึกษาตอนต้น   ☐ 4. มัธยมศึกษาตอนปลาย/ ปวช. ☐ 5. อนุปริญญา/ ปวส.   ☐ 6. ปริญญาตรี ☐ 7. ปริญญาโท   ☐ 8. ปริญญาเอก
7) คุณคือผู้ที่ตัดสินใจเรื่องการใช้เงินของครัวเรือนใช่หรือไม่ ☐ 1. ใช่   ☐ 2. ไม่ใช่
8) จำนวนสมาชิกทั้งหมดที่อาศัยอยู่ด้วยกันใน**ครัวเรือน (บ้านหลังเดียวกัน)** .... คน
9) จำนวนสมาชิกในครัวเรือนที่**กำลังศึกษาอยู่** .... คน
10) จำนวนสมาชิกในครัวเรือนที่**มีรายได้** .... คน
11) ลักษณะความเป็นเจ้าของบ้าน *(ไม่นับรวมที่ดิน)* ที่คุณอาศัยอยู่ในปัจจุบัน ☐ 1. เป็นเจ้าของ – ซื้อเงินสด/ ผ่อนชำระครบแล้ว   ☐ 2. ผ่อนชำระอยู่ ☐ 3. เช่าอยู่   ☐ 4. ไม่เสียค่าเช่า – ญาติเป็นเจ้าของ ☐ 5. ไม่เสียค่าเช่า – ผู้ที่ไม่ใช่ญาติเป็นเจ้าของ   ☐ 6. *บ้านซึ่งตั้งอยู่บนที่ดินสาธารณะ* ☐ 7. บ้านพักสวัสดิการ   ☐ 8. มีคนนำบ้านหลังนี้มาจำนำ/จำนองกับ   ครัวเรือนของคุณ

12) **อาชีพหลัก**ในปัจจุบันของคุณ

☐ 1. เกษตรกร ซึ่ง**เป็นเจ้าของ**ที่ดิน (ปลูกพืช เลี้ยงสัตว์ เพาะเลี้ยงสัตว์น้ำ)

☐ 2. เกษตรกร ซึ่ง**เช่า**ที่ดิน/ มีที่ดินฟรี (ปลูกพืช เลี้ยงสัตว์ เพาะเลี้ยงสัตว์น้ำ)

☐ 3. ประมง ป่าไม้ ล่าสัตว์ หาของป่า และบริการทางการเกษตร

☐ 4. ธุรกิจส่วนตัว (ที่ไม่ใช่การเกษตร)

☐ 5. ผู้จัดการ นักวิชาการ และผู้ปฏิบัติงานวิชาชีพ

☐ 6. คนงานเกษตร ป่าไม้ และประมง

☐ 7. คนงานด้านการขนส่ง และงานพื้นฐาน

☐ 8. เสมียน พนักงานขาย และให้บริการ

☐ 9. ผู้ปฏิบัติงานในกระบวนการผลิต ก่อสร้าง เหมืองแร่

☐ 10. บำเหน็จ บำนาญ เงินช่วยเหลือ ว่างงาน

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13) คุณได้รับเงินจากอาชีพหลัก

☐ 1. ทุกวัน   ☐ 2. ทุก **1 สัปดาห์**

☐ 3. ทุก **2 สัปดาห์**   ☐ 4. ทุก **1 เดือน**

☐ 5. ตาม**ฤดูกาล**/ ราย**โครงการ**

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14) รายได้หลักที่คุณได้รับในแต่ละเดือนเป็นรายได้ที่**ประจำและสม่ำเสมอ**หรือไม่

☐ 1. เป็น   ☐ 2. ไม่เป็น

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15) คุณมีอาชีพเสริมหรือไม่

☐ 1. มี   ☐ 2. ไม่มี

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16) **รายได้รวมจากทุกแหล่งต่อเดือนของคุณ**โดยประมาณ .... บาท/ เดือน

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17) **รายจ่ายรวมต่อเดือนของคุณ**โดยประมาณ .... บาท/ เดือน

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18) จำนวนเงิน<u>รายจ่าย</u>ตามด้านล่างที่คุณต้องจ่าย<u>ในแต่ละเดือน</u> *(หากไม่มีค่าใช้จ่ายรายการไหน ให้ผู้ตอบใส่ "0")*

    1. เงิน**ออม** .... บาท/ เดือน

    2. เงินงวดผ่อนชำระ**หนี้บ้าน** .... บาท/ เดือน

    3. เงินงวดผ่อนชำระ**หนี้รถยนต์** .... บาท/ เดือน

    4. เงินผ่อนชำระ**สินค้าอื่น ๆ** .... บาท/ เดือน

    5. ค่าใช้จ่ายในการ**ประกันชีวิต** .... บาท/ เดือน

    6. เงินที่ส่งกลับไป**ให้ครอบครัว**เพื่อนำไปใช้จ่ายในชีวิตประจำวัน .... บาท/ เดือน

    7. ค่า**ดอกเบี้ย**เงินกู้/เงินต้น (บางส่วน) .... บาท/ เดือน

    8. ค่า**เช่าบ้าน** .... บาท/ เดือน

    9. ค่า**บัตรเครดิต**(ขั้นต่ำ) .... บาท/ เดือน

    10. **ค่าเทอม**บุตรหลาน เทอมละ .... บาท จำนวนปีละ .... เทอม

19) คุณมีค่าใช้จ่ายในสินค้าต่อไปนี้<u>โดยเฉลี่ย</u>ประมาณกี่บาท<u>ต่อเดือน</u> *(หากไม่มีค่าใช้จ่ายรายการไหน ให้ผู้ตอบใส่ "0")*

    1. เครื่องแต่งกายแบรนด์เนม (เช่น เสื้อผ้า รองเท้า กระเป๋า) .... บาท/ เดือน

    2. น้ำหอม/ เครื่องสำอางค์ .... บาท/ เดือน

    3. เครื่องประดับ/ อัญมณี (ที่ไม่ใช่เพื่อการลงทุน) .... บาท/ เดือน

    4. กิจกรรมเพื่อความบันเทิง หรืองานอดิเรก (เช่น ดูหนัง ฟังเพลง)............................ บาท/ เดือน

    5. สุรา/ เครื่องดื่มที่มีแอลกอฮอล์ .... บาท/ เดือน

    6. เครื่องดื่มที่ไม่มีแอลกอฮอล์ที่รับประทานนอกบ้าน .... บาท/ เดือน

        (เช่น น้ำหวาน น้ำปั่น ชา กาแฟ น้ำอัดลม เครื่องดื่มชูกำลัง)

    7. บุหรี่/ ยาสูบ .... บาท/ เดือน

    8. การท่องเที่ยวในประเทศ/ ต่างประเทศ .... บาท/ เดือน

20) ปัจจุบันคุณมีการทำ**บัญชีรายรับรายจ่าย**หรือไม่

☐ 1. มี และทำอย่างต่อเนื่องทุกเดือน   ☐ 2. ไม่มี

21) คุณมีการ**ตั้งงบประมาณรายจ่ายต่อเดือน**หรือไม่

☐ 1. มี และทำอย่างต่อเนื่องทุกเดือน   ☐ 2. ไม่มี

22) ปัจจุบันคุณมีเงินออมหรือไม่

☐ 1. มี   ☐ 2. ไม่มี

23) คุณมีการ**ออมเงิน** (โดยไม่ถอนเงินนั้นออกมาใช้เป็นระยะเวลา 3 เดือนขึ้นไป) อย่างสม่ำเสมอ**ทุกเดือน**หรือไม่

☐ 1. มี   ☐ 2. ไม่มี **(ข้ามไปทำข้อ 26)**

24) คุณมีพฤติกรรมการออมเงินแบบใด

☐ 1. ออมเงินตามจำนวนที่ตั้งไว้ เงินที่เหลือจากการออมจึงนำไปใช้จ่าย

☐ 2. ใช้จ่ายเหลือเงินเท่าใด จึงค่อยนำเงินนั้นไปออม

☐ 3. ออมอย่างกระทันหัน โดยไม่ได้กำหนดจำนวนเงินไว้ก่อน (เช่น ธนบัตรใบละ 50 บาทจะไม่ใช้และนำไปออม)

25) คุณมีพฤติกรรมการออมเงิน เนื่องจากครอบครัวของคุณปลูกฝังค่านิยมการออม

☐ 1. ใช่   ☐ 2. ไม่ใช่

26) ตั้งแต่วันนี้หากคุณต้องหยุดทำงานกระทันหันโดยไม่มีกำหนด เงินออมที่คุณมีอยู่จะนำมาเป็นค่าใช้จ่ายของคุณได้นานเท่าไหร่ *(โดยมีค่าใช้จ่ายต่อเดือนเท่าเดิม)*

☐ 1. น้อยกว่า 1 สัปดาห์   ☐ 2. อยู่ได้อย่างน้อย 1 สัปดาห์ แต่ไม่ถึง 1 เดือน

☐ 3. อยู่ได้อย่างน้อย 1 เดือน แต่ไม่ถึง 3 เดือน   ☐ 4. อยู่ได้อย่างน้อย 3 เดือน แต่ไม่ถึง 6 เดือน

☐ 5. อยู่ได้อย่างน้อย 6 เดือน แต่ไม่ถึง 1 ปี   ☐ 6. ตั้งแต่ 1 ปี ขึ้นไป (ระบุ) .... ปี

☐ 7. อยู่ได้ตลอดชีพด้วยเงินบำนาญ

ส่วนที่ 2 (B): ข้อมูลเกี่ยวกับการกู้ยืม

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27) ภายในช่วง 12 เดือนที่ผ่านมา คุณมีการ**กู้ยืมเงิน/ หรือยังมีหนี้**ที่ยังต้องชำระจากแหล่งใดบ้าง

☐ 1. กู้ในระบบ

☐ 2. กู้นอกระบบ

☐ 3. ไม่กู้ยืม และไม่มีหนี้

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28) อัตราดอกเบี้ยเงินกู้**สูงสุด**ที่คุณยอมรับได้ เท่ากับ .... **% ต่อ ปี**

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29) หากคุณมีความจำเป็นต้องกู้ยืมเงิน คุณจะเลือกกู้เงินจากแหล่งใดเป็น<u>อันดับแรก</u>

☐ 1. กู้ในระบบ (ถามต่อข้อ 30)

☐ 2. กู้นอกระบบ (**โปรดเลือกคำตอบด้านล่างเพียง 1 ตัวเลือก**) จาก . . .

    ☐ 2.1 ญาติ   ☐ 2.2 เพื่อน   ☐ 2.3 เพื่อนร่วมงาน   ☐ 2.4 คนรู้จัก

    ☐ 2.5 เจ้านาย   ☐ 2.6 ร้านค้า   ☐ 2.7 นายทุนในพื้นที่   ☐ 2.8 นายทุนนอกพื้นที่

    ☐ 2.9 แก๊งค์หมวกกันน็อค

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30) คุณเคยกู้ยืมเงินจากบุคคลใดต่อไปนี้ *(สามารถตอบได้หลายข้อ)*

☐ 1. ญาติ   ☐ 2. เพื่อน

☐ 3. เพื่อนร่วมงาน   ☐ 4. คนรู้จัก

☐ 5. เจ้านาย   ☐ 6. ร้านค้า

☐ 7. นายทุนในพื้นที่   ☐ 8. นายทุนนอกพื้นที่

☐ 9. แก๊งค์หมวกกันน็อค   ☐ 10. ไม่เคยกู้ยืมจากตัวเลือกในข้อใดเลย (**ข้ามไปทำข้อ 35**)

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31) <u>จากคำถามข้อ 30</u> ระดับความสนิทสนมระหว่างคุณกับผู้ปล่อยกู้*(ที่คิดอัตราดอกเบี้ยเงินกู้สูงที่สุด)*<u>ในวันที่</u>

    <u>**ขอกู้**</u>

☐ 1. สนิทสนมมาก   ☐ 2. สนิทสนมปานกลาง

☐ 3. ไม่สนิทสนม   ☐ 4. ไม่เคยรู้จักกันมาก่อน

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32) <u>จากคำถามข้อ 30</u> อัตราดอกเบี้ยเงินกู้*(ที่สูงที่สุด)*ของคุณ เท่ากับ

☐ 1. 0% – 1.00% ต่อ .... (เช่น ต่อวัน ต่อสัปดาห์ ต่อเดือน เป็นต้น)

☐ 2. 1.01% – 2.00% ต่อ ....

☐ 3. 2.01% – 3.00% ต่อ ....

☐ 4. 3.01% – 4.00% ต่อ ....

☐ 5. 4.01% – 5.00% ต่อ ....

☐ 6. 5.01% – 6.00% ต่อ ....

☐ 7. 6.01% – 7.00% ต่อ ....

☐ 8. 7.01% – 8.00% ต่อ ....

☐ 9. 8.01% – 9.00% ต่อ...........................

☐ 10. 9.01% – 12.00% ต่อ...........................

☐ 11. มากกว่า 12.00% ต่อ...........................

33) <u>จากคำถามข้อ 30</u> *คุณต้องชำระหนี้จากแหล่งที่คิดอัตราดอกเบี้ยสูงที่สุดคืนทุก ๆ* ☐ 1. ทุกวัน ☐ 2. 2 สัปดาห์ ☐ 3. 15 วัน ☐ 4. 24 วัน ☐ 5. 1 เดือน ☐ 6. 1 ปี ☐ 7. ไม่มีกำหนด โดยจ่ายเมื่อพร้อมชำระคืน
34) <u>จากคำถามข้อ 30</u> *ผู้ปล่อยกู้(ที่คิดอัตราดอกเบี้ยเงินกู้สูงที่สุด)* ซึ่งคุณไปกู้ยืมเงิน มีลักษณะตรงตามข้อใด   (ตอบเพียงข้อเดียว) ☐ 1. เป็นผู้มีอิทธิพลในพื้นที่ สามารถ**ใช้ความรุนแรง**ในการทวงหนี้ ☐ 2. ไม่ใช้ความรุนแรงในการทวงหนี้ แต่ทำให้ลูกหนี้**เกิดความอับอาย**หากชำระล่าช้า ☐ 3. ไม่ใช้ความรุนแรงหรือทำให้อับอาย แต่จะ**ยึดของที่เป็นสินทรัพย์ค้ำประกันไป** ☐ 4. ไม่ใช้ความรุนแรงหรือทำให้อับอาย แต่จะ**ไม่สามารถกู้ยืมได้อีก** หากผิดนัดชำระหนี้ หรือ ผู้ปล่อยกู้ไม่ คาดหวังว่าจะได้รับเงินคืน
35) คุณมักจะซื้อสินค้าที่<u>กำลังเป็นที่นิยม</u>มาครอบครอง ☐ 1. ใช่   ☐ 2. ไม่ใช่
36) คุณมักจะต้องเปรียบเทียบราคาสินค้าจากหลายแหล่ง ก่อนที่จะตัดสินใจซื้อ ☐ 1. ใช่   ☐ 2. ไม่ใช่
37) ถ้าคุณต้องการสินค้าชนิดใดมาครอบครอง คุณมักจะซื้อทันทีในครั้งแรกที่เห็น ☐ 1. ใช่   ☐ 2. ไม่ใช่
38) คุณมักจะซื้อสินค้าแบรนด์เนม ☐ 1. ใช่   ☐ 2. ไม่ใช่
39) คุณมักรู้สึกเสียดายเงินภายหลังจากที่ซื้อไปแล้ว ☐ 1. ใช่   ☐ 2. ไม่ใช่
40) คุณมักจะซื้อสินของหรืออาหารมาแล้วไม่ได้ใช้/ ปล่อยให้เน่าเสีย ☐ 1. ใช่   ☐ 2. ไม่ใช่

-    **ขอบคุณท่านที่ช่วยสละเวลาตอบแบบสอบถาม**   -

APPENDIX D
IN-DEPTH INTERVIEW QUESTIONS

This is an in-depth interview guide having the main topics as the following questions:

Part 1: Personal information of an informal lender

    1.1 What is a lender's occupation?

    1.2 How long have you lent informal credit?

Part 2: Process of approval credit

    2.1 What is a way to contact you by a borrower?

    2.2 What are basic characteristics of potential borrowers that you require?

    2.3 What are required documents from a borrower?

        2.3.1 Do you ask for making a loan contract?

        2.3.2 What is a type of collateral that you need?

Part 3: The method of establishing informal interest rates and credit rationing

    3.1 Amount of loan per borrower

        3.1.1   What is level of informal loan amount per person?

        3.1.2   How much of all credit that you granted?

        3.1.3   How many percent of granting loan when compare to a borrower's collateral market price?

    3.2 Interest rates

        3.2.1 Do you ask the same interest rate on each borrower?

        3.2.2 Does borrower's occupation affect the rate of interest?

        3.3.3 What are the method and calculation model for setting interest rate?

        3.3.4 Do you charge higher interest rate if your borrower paid lately?

Part 4: Process of monitoring and recall for loans

    4.1 Do you hire another one in order to act as a debt collector?

    4.2 How do you do if there is high potential that your borrower may not pay the debt or pay lately?

Part 5: When default occurs

    5.1 Do you have any method to deal with an unpaid loan in case that your

        borrower was going to flee the obligation?

    5.2 In the case of getting default, do you ask for remaining debt from relative's

        borrower?

APPENDIX E

IN-DEPTH INTERVIEW FROM INFORMAL LENDERS

Since the survey data gathering uses the sample from the borrowers only, the researcher also did in-depth interviews with the 14 informal lenders without province concerns through snowball sampling technique in order to give a more complete picture of the informal credit market. But the information from the informal lender interviews were not used in the main analysis of the main paper, and their identity information is also kept confidential. The data from this side were used mostly for reinforcing the understandings of the sector.

The in-depth interview for the informal lenders were implemented according to the details below.

Step 1: Choosing the interviewers, and planning the in-depth interview sessions

Since we need to consider the safety of the interviewers when carrying out their sessions, the study will need to use interviewing teams consisting of 2-3 members. The researchers then select 3 interviewers who have good communication skills and social skills, are friendly, polite, humble, and can handle situations effectively while maintaining the objective of inquiring the informal lenders, "interviewees", for the anonymized data needed in the study. The team members are required to ask questions in a non-leading manner, and must be good listeners in order to obtain the data.

Step 2: Training the interviewers, and planning how to carry out in-depth interview questions

The selected interviewers will then enroll in the course on quantitative research and data collection by Dr. Parameth Voraseyanont, which lasted for 2 days. They will be informed on the purposes of the study, and receive clarifications on data collection to make sure that they understand the research issues correctly, including the guidelines for interviews, and the details of the questions to be used in the conversations with the interviewees (see Appendix C for more details). They are expected to focus on asking broad questions that can lead to desired information without unintentionally guiding the answers, and questions that can only be answered with yes/no. In addition to this, the researcher and the interview team were needed to make plans together about the in-

depth interview questions in each situation, and about how to make interviewees willing to give additional details on their answers, including how to deal with possible problems, how to solve them, and how to record the information received from the interviews.

Step 3: Making appointments with each interviewee, and choosing the place for an interview

All interviewees who are informal lenders will remain anonymous and secret, their identity will not be recorded or traced in any way. It is specified that the lenders being interviewed are just citizens of Thailand nationality, who are willing to give some of their own lending data for research only. Other identity information or their provinces of residence or work were not specified. The targeted number of interviewees was set at around 14 persons. In doing the interviews, each interview has only one informal lender being interviewed at any time, in order to maintain the secrecy of the interviewees' identity. The location where each interview takes place was chosen by the interviewees, where they feel comfortable to talk, but preferably not at either party's home or workplace if possible.

The study uses the "snowball sampling technique", meaning that after the first informal lender interviewee has been successfully contacted, and received that interviewee's consent, that person will be asked to recommend a second interviewee for the next interview. The first interviewee will then notify the second one (the second informal lender). The interviewing team will contact that second person directly only if this second person is willing to participate in an interview and provide data for this study. The process goes on until the number of interviewees needed is achieved.

Step 4: Interviewing

When the interviewing team meets the informal lender being interviewed, they will introduce themselves, explain the objectives of the study, gives that person several documents about the information which will be collected and about the interview, so that the informal lender will understand the contents. Then, the team will tell the informal lender, now the interviewee, about the time of interview which is only around 20 minutes. The interviewee will be asked for permission in recording the voice of the conversation, and the team will firmly ensure them that the recordings will all be

destroyed as soon as the data collection process is finished, to guarantee trust that their information will remain a secret. The interviewees will be informed also how their opinions and information are very important to a research project.

An interview starts with broad questions before going in to deeper details of the interviewees' informal lending. The interviewer uses various methods to receive as much information as possible that the lenders are willing to provide. This includes asking for further explanations, or listening silently sometimes so that it will not interrupt the interviewees' answers and clarifications.

If there is any answer that the interviewers do not understand, they will ask for explanations or clarification as soon as they have the chance. Above all, the interviewing team will avoid making any opinions on the answers or use leading questions. They will act as good listeners and keep good manners when receiving the answers so that the conversation will not become unfriendly.

When the interview is over (and all necessary information is received), the interviewing team will thank the interviewee. Each time, the interviewing team will try not to take longer time than they have told the lenders (20 minutes). If it becomes longer than that, the interviewing team will apologize to the lender who is being interviewed.

Step 5: Data management after the interview is over

After each interview is completed, the interviewing team will take a look at the notes on the conversation again, and add their opinions or remarks. The voice recording will be sorted in a way that does not confuse the interview team since there are many lenders being interviewed. These voice files were destroyed after the data collection is finished. The interviewing team also summarized any problems that occurred during each interview, to find solutions and improve other interviews that came after it.

Step 6: Analysis of the data

The researcher uses content analysis and descriptive statistical summary to explain the findings from the collected data from the interview with the informal lenders, whose identities are secret. The anonymized data are presented with tables to make comparisons easier.

In Table 1.1E, we present personal information of the informal lenders, process of approval credit, method of establishing informal interest rate and credit rationing, monitoring method, and method to dealing with unpaid debt when default occurred by in-depth interviews.

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Table 1.1E In-depth interviews from the 14 informal lenders

Question	Lender 1	Lender 2	Lender 3
1. Lender's main occupation	Moneylender	Mobile phones and laptop computers seller	Food seller in a market
2. Years active in providing loans	22 years	5 years	5 years
3. Channel of making a loan	- Lender was recommended by acquaintances. - Lender contacts a potential borrower himself at a borrower's workplace (in a market).	- Borrower contacted the lender personally at the lender's store, as previous borrowers have told the current borrower about the place of contact.	- Lender was recommended by acquaintances, or have known each other before making loans.
4. Borrower's qualification for a loan	- Borrower receives daily income such as being merchant, or motorcycle man. - Borrower has a primary workplace.	- Any borrower who has collaterals as mobile phones or laptop computers.	- Borrower has familiarity to the lender at medium or high level. - Borrower has a primary workplace and a primary house.
5. Required document or collateral	- A copy of personal ID - Loan contract with standardized forms - Guarantor	- A copy of personal ID - Loan contract with standardized forms - Collaterals are used, such as mobile phones or laptop computers, which must be kept at the lender's store or place of business.	- Not required

Table 1.1E (continued)

Question	Lender 1	Lender 2	Lender 3
6. Amount of a loan	- 10,000 – 50,000 baht per person	- Granting a loan about 30% of collateral market price - 600 – 9,000 baht per person	- ≤ 10,000 baht per person
7. Interest rate level	- 20% - 40% per day (Interests are collected continuously for 24 days). - Interest rates between borrowers are different depending on consistent paying of principle and interest money i.e., 40% for the first time borrowing and 20% for the second time. - Borrower's occupation does not relate to the rate of interest, but it does relate to credit rationing. - Late payments are not punished by higher interests.	- 10% per 15 days (Interests are collected twice a month). - Borrower's occupation does not relate to the rate of interest. - Late payments are not punished by higher interests.	- 10% per month (Interests are collected once per month). - Borrower's occupation does not relate to the rate of interest. - Late payments are not punished by higher interests, the borrower can give reasons for not being able to pay on time. - Borrower can merely repay interest without principle money when he has no enough money.
8. Payment method	- The lender visits the borrower's workplace every day in the evening to collect interests and principle money.	- Payment at the lender's store	- Borrowers pay interests and principle money at the lender's house.

Table 1.1E (continued)

Question	Lender 1	Lender 2	Lender 3
9. Monitoring and method of calling for a loan when a borrower has potential to default	- Borrowers can delay payment of interests and/or principle money for 3 days. If longer than the time, the lender will seize collateral or movable asset in the borrower's shop such as table, chair, TV, electronic device. The lender hairs polices to be negotiators by using a loan contract as a major tool.	- If a borrower delays payment, the lender will seize collateral.	- Lender makes phone calls to ask about the reason of late interest payment.
10. Default case	- There were borrowers who did not pay, but the lender collects the unpaid debt from guarantor persons, relatives, and friends of the borrower.	- There were borrowers who did not pay; therefore, the collateral was seized.	- No

Table 1.1E (continued)

Question	Lender 4	Lender 5	Lender 6
1. Lender's main occupation	Merchant (lady's bag and shoes)	Teacher	Assistant Village Headman
2. Years active in providing loans	3 years	30 years	3 months
3. Channel of making a loan	- Lender was recommended by acquaintances, or have known each other before making loans.	- Lender was recommended by acquaintances, or have known each other before making loans or works at the same place as the borrower or nearby.	- Lender and borrower have known each other before making loans.
4. Borrower's qualification for a loan	- Borrower has familiarity to the lender at medium or high level. - Borrower has a primary house. - Borrower has a security job.	- Borrower has familiarity to the lender at low to high level. - Borrower has a primary house. - Borrower has a security job and earns stable income. - Consider a borrower's outstanding debt.	- Borrower has familiarity and living at the same village.
5. Required document or collateral	- A copy of personal ID - Collateral (if any) such as motorcycle, car, or gold - Guarantor - Borrowers write the details of the debt on a blank piece of paper.	- A copy of personal ID and household registration - Slip payment - Loan contract - Transfer through relinquishment document - Collaterals (if any) such as gold and diamond	- A copy of personal ID and household registration - Loan contract

Table 1.1E (continued)

Question	Lender 4	Lender 5	Lender 6
6. Amount of a loan	- 1,000 – 15,000 baht per person - Granting a loan about 30% of collateral market price	- 10,000 – 1,000,000 baht per person	- ≤ 50,000 baht per person
7. Interest rate level	- 10% - 20% per month (Interests are collected once per month). - Interest rates between borrowers are different depending on a borrower's ability to repay and familiarity level. - Borrower's occupation does not relate to the rate of interest, but it does relate to credit rationing. - Late payments are not punished by higher interests. - Borrower can merely repay interest without principle money when he has no enough money.	- 3% - 5% per month (Interests are collected once per month). - Interest rates between borrowers are different depending on consistent paying of principle and interest money. - Borrower's occupation does not relate to the rate of interest, but it does relate to credit rationing. - Late payments are not punished by higher interests, but no more loans are granted in the future. - Borrower can merely repay interest without principle money when he has no enough money.	- 6% per month (Interests are collected once per month). - Lender collects interests from borrowers at the same rate - Borrower's occupation does not relate to the rate of interest. - Late payments are not punished by higher interests.
8. Payment method	- Payment at the lender's house, or another place, or pay through bank transfers	- Pay through bank transfers	- Payment at the lender's house.

Table 1.1E (continued)

Question	Lender 4	Lender 5	Lender 6
9. Monitoring and method of calling for a loan when a borrower has potential to default.	- Lender makes phone calls to ask about the reason of late interest payment and tries to help in order not to lose the principle money. - Lender pressures debtors into repayment with verbal demands and persuasion, but not using violent methods. - Lender adjusts the payment amount and payment periods to suit the paying abilities of the borrower, but the interest rates are not exempted and will be charged as compound interests.	- Lender makes phone calls, visits at a borrower's house or workplace to ask about the reason of late interest payment. - Making a shame on a borrower's when being late payments longer than 2 months.	- Lender makes phone calls to ask about the reason of late interest payment.
10. Default case	- The borrower decides to come back and repay debt after weeks of disappearing	- There were borrowers who did not pay; therefore, the collateral was seized.	- No

Table 1.1E (continued)

Question	Lender 7	Lender 8	Lender 9
1. Lender's main occupation	Own a business (Furniture exports)	Moneylender	Merchant (clothes)
2. Years active in providing loans	12 years	20 years	10 years
3. Channel of making a loan	- Contact the lender at the office	- Lender was recommended by acquaintances.	- Lender was recommended by acquaintances, or have known each other before making loans.
4. Borrower's qualification for a loan	- A borrower is working at the lender's company and passed probation. - Borrower earn monthly income more than 20,000 baht. - A borrower has no other informal debt.	- Borrower has familiarity to the lender. - Borrower has a primary house and workplace.	- Owning a business - Collateral is required such as land.
5. Required document or collateral	Case 1: ≤ 30,000 baht loan - A borrower's ATM card Case 2: > 30,000 baht loan - A borrower's ATM card - Bank book - Guarantor	- Not required	- Loan contract
6. Amount of a loan	- 20,000 – 50,000 baht per person	- 5,000 – 1,000,000 baht per person	- 10,000 – 500,000 baht per person - Granting a loan about 40% - 42% of collateral market price

Table 1.1E (continued)

Question	Lender 7	Lender 8	Lender 9
7. Interest rate level	- 5% - 10% per 15 days (Interests are collected every 15 days). - Interest rates between borrowers are different depending on years of working and previous records of paying debt. - Borrowers pay the principle and interests with personalized arrangements about the amount of money. - Late payments are not punished by higher interests, but no more loans are granted in the future.	- 10% per month (interests are collected once per month). - Lender collects interests from borrowers at the same rate. - Borrower's occupation does not relate to the rate of interest. - Late payments are not punished by higher interests, but no more loans are granted in the future.	- 3% per month (interests are collected once per month). - Lender collects interests from borrowers at the same rate. - Borrower's occupation does not relate to the rate of interest. - Late payments are not punished by higher interests.
8. Payment method	- Lender withdraws all of the borrower's salary from ATM, and gives the remaining money to the borrower after subtracting all due debt and interest money (the ATM card will not be given back until all debt has been paid).	- The lender employs other people to act as debt collectors. - The debt collector called for interest and principle money at a borrower's house or workplace.	- Pay through bank transfers

Table 1.1E (continued)

Question	Lender 7	Lender 8	Lender 9
9. Monitoring and method of calling for a loan when a borrower has potential to default.	- Lender makes phone calls to ask about the reason of late interest payment.	- Lender makes phone calls or visits at a borrower's house or workplace to ask about the reason of late interest payment. - Making a shame on a borrower's by the debt collectors.	- Lender makes phone calls to ask about the reason of late interest payment. - Debtors can pay only interest first without needing to pay the principle money immediately
10. Default case	- There were borrowers who did not pay, but the lender collects the unpaid debt from guarantor persons.	- There were borrowers who did not pay, but the lender collects the unpaid debt from relatives of the borrower.	- No. Even if default occurs, the lender will collect the unpaid debt from relatives of the borrower.

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Table 1.1E (continued)

Question	Lender 10	Lender 11	Lender 12
1. Lender's main occupation	Rent and buy second-hand or used cars	Restaurant business	Freelance
2. Years active in providing loans	15 years	3 years	10 years
3. Channel of making a loan	- Lender was recommended by acquaintances.	- Lender was recommended by acquaintances, or works at the same place as the borrower or nearby.	- Lender was recommended by acquaintances. - Advertisements on public wall, electric post, and public phone booth. - Leaflet or business card
4. Borrower's qualification for a loan	- Borrower has a primary house.	- Borrower has familiarity to the lender. - Borrower has a primary house and workplace.	- Borrower has his own business or company. - The business has ability to earn profit. - Borrower has ability to repay.
5. Required document or collateral	- A copy of personal ID and household registration - Collateral are required such as motorcycle, car, or title deed. - Guarantor - Borrowers write the details of the debt on a blank piece of paper.	- A copy of personal ID and household registration - Collateral are required such as gold. - Loan contract - Guarantor	- A copy of personal ID and household registration of a borrower and guarantor - Collateral are required such as title deed, real estate, or car. - Loan contract - Guarantor

Table 1.1E (continued)

Question	Lender 10	Lender 11	Lender 12
6. Amount of a loan	- ≤ 1,000,000 baht per person	- ≤ 20,000 baht per person	- ≤ 2,000,000 baht per person
7. Interest rate level	- 1% per day (Interests are collected every day). - Lender collects interests from borrowers at the same rate. - Borrower's occupation does not relate to the rate of interest. - Late payments are punished by higher interests.	- 0% - 20% per month (Interests are collected once per month). - Interest rates between borrowers are different depending on close relationships. - Borrower's occupation does not relate to the rate of interest. - Late payments are not punished by higher interests.	- 0% - 20% per month (Interests are collected every day). - Borrower's occupation does not relate to the rate of interest. - Late payments are not punished by higher interests.
8. Payment method	- Lender collects interest and principle money at a borrower's house or workplace.	- Payment at the lender's house	- Lender hires another person to act as a debt collector. - The debt collector visits the borrower's workplace every day in the evening to collect interests and principle money.

Table 1.1E (continued)

Question	Lender 10	Lender 11	Lender 12
9. Monitoring and method of calling for a loan when a borrower has potential to default.	- Lender makes phone calls, or visits at a borrower's house or workplace to ask about the reason of late interest payment. - Borrowers can delay payment of interests and/or principle money for continuous 3 days. If making late payment longer than 3 days, the interest rate will be adjusted to be a higher rate.	- Lender makes phone calls, or visits at a borrower's house to ask about the reason of late interest payment.	1st step: - Lender makes phone calls to ask about the reason of late interest payment. 2nd step: - Making a shame or harassment. 3rd step: - Seizure collateral
10. Default case	- There were borrowers who did not pay, but the lender collects the unpaid debt from borrowers' relatives.	- There were borrowers who did not pay, but the lender collects the unpaid debt from borrowers' relatives; however, some relatives of the borrowers had no money to repay.	- There were borrowers who did not pay; therefore, the debt collector collected the unpaid debt at borrowers' house. - In case that the borrowers had no money to repay, the lender and the debt collector collected the unpaid debt from guarantors instead.

Table 1.1E (continued)

Question	Lender 13	Lender 14
1. Lender's main occupation	Employee in private sector	Government officer
2. Years active in providing loans	2 years	20 years
3. Channel of making a loan	- Lender was recommended by acquaintances, or works at the same place as the borrower. - Advertisements on public wall, electric post, and public phone booth	- Lender was recommended by acquaintances. - Being relatives of the lender - Advertisements on electric post
4. Borrower's qualification for a loan	- Borrower has a security job and earns stable income. - Lender considers existing debts of the borrowers when granting loans. - Borrower has ability to repay debt in the future.	- Borrower has familiarity to the lender or lives nearby the lender's house. - Borrower has a security job - Borrower has not high existing debts.
5. Required document or collateral	- Borrower's ATM card - A copy of personal ID - Slip payment - Borrowers write the details of the debt on a blank piece of paper.	- A copy of personal ID and household registration - Slip payment - Collateral (if any) such title deed, gold, or guarantor - Loan contract

Table 1.1E (continued)

Question	Lender 13	Lender 14
6. Amount of a loan	- ≤ 10,000 baht per person	- 20,000 – 70,000 baht per person
7. Interest rate level	- 20% per month (Interests are collected once per month). - Lender collects interests from borrowers at the same rate. - Borrower's occupation does not relate to the rate of interest. - Late payments are punished by higher interests.	- 1% per day (Interests are collected every day). - Lender collects interests from borrowers at the same rate. - Borrower's occupation does not relate to the rate of interest. - Late payments are punished by higher interests.
8. Payment method	- Lender withdraws all of the borrower's salary from ATM or payment at the lender's house.	- Lender hires another person to act as a debt collector. - The debt collector visits the borrower's house every day to collect interests and principle money or pay through bank transfers before due date.
9. Monitoring and method of calling for a loan when a borrower has potential to default.	- Debtors can pay only interest first without needing to pay the principle money immediately.	- Lender makes phone calls to ask about the reason of late interest payment. - Lender pressures debtors into repayment with verbal demands and persuasion, but not using violent methods.

Table 1.1E (continued)

Question	Lender 13	Lender 14
		- Borrowers can delay payment of interests and/or principle money for 3 days.
10. Default case	- There were borrowers who did not pay, but the lender collects the unpaid debt from borrowers' relatives.	- There were borrowers who did not pay, but the lender collects the unpaid debt from borrowers' guarantors.

Source: Survey findings compiled by the authors (2017)

We summarize the interesting findings from the interviews with the informal lenders that:

1) Most of them have main jobs which are not informal lending activities, and only 2 out of 14 people in this category have main occupation as informal lenders.

2) they have been active as informal lenders for a long time, and 8 out of 14 people interviewed have been lending informal loans to other people for more than 10 years, which confirms that the Thai people have long been associated with informal borrowing and lending.

3) Loan contracts are needed by the lenders, with interview findings showing that the informal lenders specify the interest rates in their contracts differently from what they collect in real life (by having written interest rates within the levels allowed by the law). The borrowers acknowledge and give consent to borrowing through actual terms that differ from what was written in the contracts. This means that the borrowers help the lenders conceal the high interest rate debts, and this leads to the lack of evidence when informal loan cases are brought to the court.

4) Collaterals and guarantors are considered by 50% of informal lenders interviewed as not important when a borrower applies for a loan. Requirement of collaterals and guarantors may have been the major factor that prevented the borrowers from accessing the formal credit system in the first place.

5) Informal lenders collect their interest rates on different frequencies from person to person. 8 out of 14 people interviewed prefer to collect their interest rates on monthly basis.

6) The interest rates charged by 12 informal lenders interviewed are higher than 5% per month, and 3 of the lenders charge at rates over 20% per month. But most informal lenders reduce their rates to the borrowers they feel close to. Also, lenders who use physical violence to borrowers who do not pay on time charge higher interest rates on average, compared to those who do not use physical violence. It reflects the problem that legal punishments are not considered much by informal lenders, and also another problem that borrowers will have to face high burden in paying off their informal debts, which can lead to more severe lack of financial liquidity for them.

Figure 1.1F Concluding results from the interviews
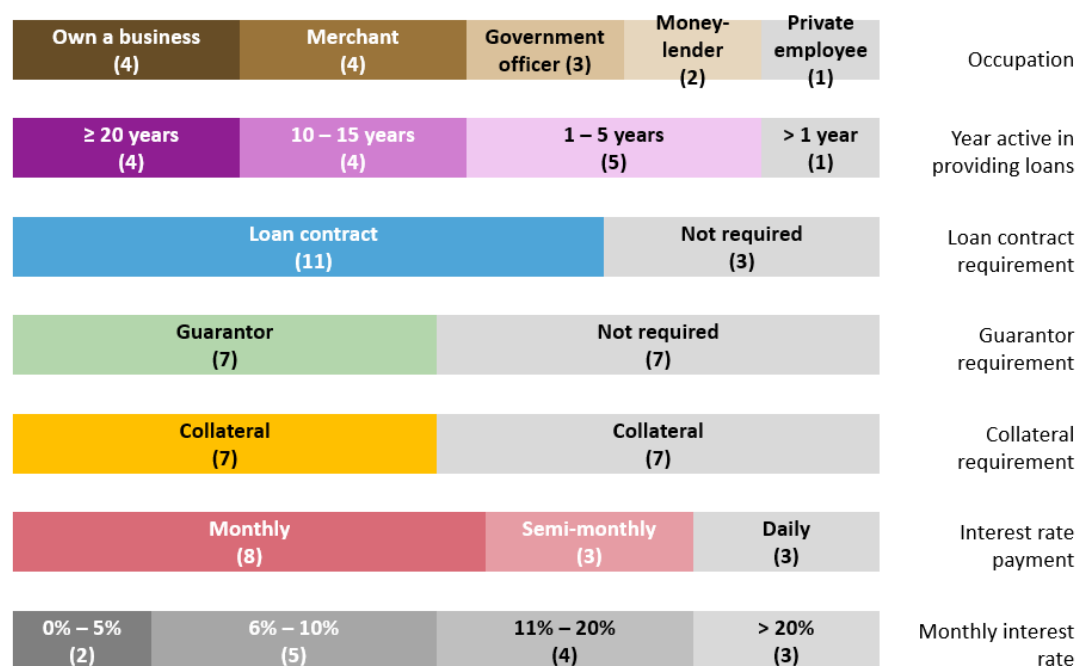
Source: Survey findings compiled by the authors (2017)

APPENDIX F

Table 1.1F The effect of luxury spending on decision making an informal credit using the 1st stage IV estimates. (The dependent variable is making an informal credit).

Variables	Model 1	Model 2	Model 3
Luxury Spending	0.000***	0.000***	0.000***
	(0.000)	(0.000)	(0.000)
Income level	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)
DTI	0.007***	0.007***	0.008***
	(0.000)	(0.000)	(0.000)
Net income	-0.381***	-0.371***	-0.394***
	(0.005)	(0.003)	(0.001)
Saving	-0.273***	-0.276***	-0.307***
	(0.000)	(0.000)	(0.000)
Account	-0.156	-0.158	
	(0.164)	(0.154)	
Head of hh.	-0.076		
	(0.320)		
No-income	0.001	0.001	0.001
	(0.387)	(0.310)	(0.336)
Age 30-39	0.099		
	(0.336)		
Age 40-49	0.078		
	(0.532)		
Age 50 or over	0.003		
	(0.984)		
Gender	0.172**	0.174**	
	(0.036)	(0.028)	
Single	-0.299**	-0.288**	-0.280**
	(0.020)	(0.012)	(0.015)
Married	-0.268**	-0.252**	-0.239**
	(0.016)	(0.021)	(0.029)
Elementary	0.392	0.389	0.337
	(0.188)	(0.188)	(0.259)
Lower second	0.464	0.468	0.453
	(0.134)	(0.131)	(0.147)
Upper second	0.176	0.183	0.143
	(0.544)	(0.525)	(0.624)
Higher level	-0.092	-0.075	-0.099
	(0.756)	(0.799)	(0.738)

Table 1.1F (continued)

Variables	Model 1	Model 2	Model 3
Bachelor	-0.028	-0.014	-0.058
	(0.922)	(0.960)	(0.842)
Master level	-0.649**	-0.630**	-0.671**
	(0.043)	(0.049)	(0.038)
Ph.D.	-0.463	-0.462	-0.555
	(0.467)	(0.465)	(0.385)
Stable income	0.027	0.020	
	(0.749)	(0.811)	
Home ownership	-0.284***	-0.291***	-0.296***
	(0.000)	(0.000)	(0.000)
Observations	1,494	1,494	1,494
Wald test, p-value	0.0356	0.0216	0.0286

* significant at the 10%, ** at the 5%, *** at the 1% levels, respectively.

Source: Survey findings compiled by the authors (2017).

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Table 1.2F Determinants of repeated on informal loans using the 1st stage IV estimates.
(The dependent variable is repeated on informal loans.).

Variables	Model 1	Model 2	Model 3
Key variables			
Consistent Saving	-1.439***	-1.434***	-1.398***
	(0.000)	(0.000)	(0.000)
Net income	-0.000***	-0.000***	-0.000***
	(0.001)	(0.001)	(0.003)
Payday-daily	0.516***	0.496***	0.514***
	(0.003)	(0.005)	(0.004)
Payday-weekly	0.379*	0.392**	0.406**
	(0.054)	(0.048)	(0.043)
Payday-monthly	0.182	0.166	0.176
	(0.271)	(0.312)	(0.287)
Installments	0.000**	0.000**	0.000**
	(0.012)	(0.012)	(0.023)
Materialism	0.191*	0.218**	0.215**
	(0.057)	(0.036)	(0.041)
Impulsive buying	0.135	0.160*	0.162**
	(0.149)	(0.086)	(0.086)
Age 20-29		0.069	0.046
		(0.650)	(0.763)
Age 30-39		0.043	0.032
		(0.741)	(0.810)
Age 40-49		0.053	0.051
		(0.677)	(0.693)
Gender		-0.167**	-0.172**
		(0.045)	(0.040)
Single		-0.181	-0.188
		(0.261)	(0.246)
Married		0.021	-0.044
		(0.869)	(0.759)
No-income member			-0.001
			(0.625)
Income level			-0.000
			(0.867)
Debt-to-income			0.001
			(0.203)
Observations	1153	1153	1153
Wald test, p-value	0.2752	0.2578	0.3148
Prob > chi2	0.0000	0.0000	0.0000

Source: Survey findings compiled by the authors (2017).

Table 1.3F Determinants of consistent savings using the 1st stage IV estimates. (The dependent variable is consistent savings behavior).

Variables	Model 1	Model 2	Model 3
Key variables			
Amount of saving	0.000***	0.000***	0.000***
	(0.000)	(0.000)	(0.000)
Net income	-0.000*	-0.000**	-0.000
	(0.093)	(0.049)	(0.375)
Payday-daily	0.061	0.057	0.048
	(0.281)	(0.302)	(0.382)
Payday-weekly	-0.017	-0.042	-0.049
	(0.790)	(0.499)	(0.435)
Payday-monthly	0.098*	0.074	0.063
	(0.058)	(0.152)	(0.219)
Installments	0.000	0.000	0.000
	(0.208)	(0.156)	(0.334)
Materialism	-0.015	-0.040	-0.040
	(0.646)	(0.223)	(0.215)
Impulsive buying	0.074**	0.056**	0.057**
	(0.010)	(0.049)	(0.047)
Age 20-29		0.080*	0.089*
		(0.094)	(0.063)
Age 30-39		0.003	0.009
		(0.952)	(0.824)
Age 40-49		0.037	0.044
		(0.359)	(0.282)
Gender		-0.041	-0.037
		(0.122)	(0.162)
Single		0.170***	0.157***
		(0.000)	(0.001)
Married		0.072*	0.073*
		(0.079)	(0.071)
No-income member			-0.001
			(0.232)
Income level			-0.000
			(0.963)
Debt-to-income			-0.001***
			(0.004)
Observations	1153	1153	1153
Wald test, p-value	0.2752	0.2578	0.3148
Prob > chi2	0.0000	0.0000	0.0000

Source: Survey findings compiled by the authors (2017).

REFERENCES

APPENDIX

VITA

Miss Wichyada Tanomchat was born on 7 December 1983, in Thailand. She obtained her Bachelor and Master of Economics from Thammasat University and Kasetsart Unversity, in 2006 and 2008, respectively. She has been working as a lecturer at Burapha University since 2008. She started a Ph.D. at Chulalongkorn University, Thailand, and has published latest paper in International Advances in Economic Research (IAER), titled "Dependence of Informal Interest rates and Level of Lenders' Influence in the Informal Loan Market in Thailand."