Financial Services for the Poor in Vietnam: A Comprehensive Analysis on the Performance and Sustainability of Microfinance Sector

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i

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Table of Contents

Acknowledgements	i
Table of Contents	iii
List of Tables	ix
List of Figures	xi
Abbreviations	xii

Chapter 1: Introduction	1
1.1. Rationale	1
1.2. Research Questions and Goals	
1.3. Research Structure	10
1.4. Data and Methodology	12
1.5. Research Justification	12

Chapter 2: Extensive Literature Reviews of Microfinance: History, Development,

Models, and Recent Issues	
2.1. Microfinance: Financial Opportunity for Poor Communities	
2.2. Importance of Financial Services for the Poor	
2.3. Microfinance Concepts	
2.3.1. Definitions	
2.3.2. Lending Methods in Microfinance	
2.3.2.1. Rotating Savings and Credit Associations	
2.3.2.2. Solidarity Groups and Grameen Bank	
2.3.2.3. Association Model and Self-help Groups (SHGs)	

2.3.2.4. Village Banking Model/ Community Bank Model and Foundation for International
Community Assistance (FINCA)
2.3.2.5. Cooperative
2.3.2.6. Credit Union
2.3.2.7. Non-Governmental Organizations (NGOs)
2.3.2.8. MC2 Model
2.4. Current Debates in Microfinance Practices
2.4.1. Commercialization in Microfinance
2.4.2. Mission Drift or Trade-offs in the Development of Microfinance Institutions 39
2.4.3. Governance Practices within Microfinance Sector
2.5. Conclusion

Chapter 3: Tracing and Evaluating the Institutional Characteristics and Governance

Practices of Microfinance Sector in Vietnam44	4
3.1. Potential Market for Microfinance	4
3.1.1. Current Situations	4
3.1.2. Lack of Microfinance Services and Products	5
3.2. Sector Characteristics	9
3.2.1. Emergence and Development of Microfinance Sector in Vietnam	9
3.2.2. Main Institutional Types	3
3.2.2.1. Informal Service Providers	5
3.2.2.2. Semi-Formal Service Providers/ Non-licensed Microfinance Programs	5
3.2.2.3. Formal (Regulated) Service Providers	0
3.2.3. Age and Staff Employed	3

3.3. Market Share and Product Development	65
3.3.1. Microlending Activities	65
3.3.2. Micro-savings	69
3.3.3. Other Products and Services	72
3.4. Governance Practices for Microfinance Sector	73
3.4.1. Current Legal Framework and Discussion	65
3.4.2. Lending Interest Rate	82
3.4.3. Tax Policy	84
3.4.4. Institutional Transformation	87
3.4.4.1. Benefits	87
3.4.4.2. Challenges	89
3.4.5. Impact of Regulatory Innovation	93
3.5. Conclusion	98

Chapter 4: Quantitative Evaluation of the Sustainability of Microfinance Institutions

in Vietnam	
4.1. Introduction	101
4.2. Literature Review	103
4.3. Empirical Studies	105
4.4. Methodology	109
4.4.1. Data Envelopment Analysis	109
4.4.2. Super Efficiency	112
4.4.3. Malmquist Productivity Index and Its Decomposition	114
4.4.4. Tobit Model	116

4.4.5. Panel Data Regression Model	117
4.5. Data and Variable Selection	118
4.5.1. DEA Analysis	119
4.5.2. Tobit Model	124
4.5.3. Malmquist Productivity Index	128
4.5.4. Panel Data Regression Analysis	129
4.6. Empirical Results and Analysis	130
4.6.1. Overall Efficiency Scores Suggesting High Performance	130
4.6.2. Specifications Showing Significant Difference between Social and Finan	icial
Performance	133
4.6.3. Decreasing in Overall Productivity	137
4.6.4. Four Different Groups of MFIs	140
4.6.5. Factors Affecting Efficiency Score	142
4.6.6. Factors Indicating Impact on Financial Sustainability	145
4.7. Conclusion	146

5.2. O	vervie	ew						152
5.2.1.	Lao	People's	Democratic	Republic	(Lao	PDR):	Village-based	Microfinance
Syster	n							155
5.2.2.	Kingo	lom of Cai	mbodia: Quic	k Developr	nent fo	or Microf	finance Sector	158

5.2.3. Republic of the Philippines: Efficient Regulation for Microfinance Sector161

5.2.4. Discussion1	163
5.3. Regulatory Environment and Promotion for Market Development	66
5.3.1. Lao PDR	68
5.3.2. Cambodia 1	169
5.3.3. The Philippines1	72
5.3.4. Discussion	75
5.4. Performance of Microfinance Sector1	76
5.4.1. Operational Characteristics1	.77
5.4.2. Funding Structure1	80
5.4.3. Financial Achievements and Sustainability1	.82
5.5. Conclusion	85

Chapter 6: Key Findings, Policy Implications, Limitations and Direction for Further

Research
6.1. Introduction
6.2. Key Findings190
6.2.1. Characteristics of the Microfinance Sector in Vietnam
6.2.2. Regulatory Environment of Microfinance Sector in Vietnam
6.2.3. Efficiency of MFIs in Vietnam and Determinants
6.2.4. Microfinance Progress in the Peer Countries195
6.2.5. Microfinance Sector of Vietnam Compared to Peer Countries
6.3. Policy Implications
6.3.1. Customer Protection and Risk Management197
6.3.2. Product Development

6.3.3. Interest Rate Policy	199
6.3.4. Operation Management	199
6.4. Limitation of the Study and Suggested Further Research	200
6.5. Concluding remarks	201

References	i
Appendices	xxiii

List of Tables

Table 1.1: Objectives of the Research	9
Table 2.1: A Comparison among Popular Microfinance Lending Method	35
Table 3.1: Micro-credit Landscape of Vietnam (as of January 1st, 2016)	66
Table 3.2: Sources of Borrowing and Amount per Loan	68
Table 3.3: Micro-savings Landscape of Vietnam (2013-2015)	71
Table 3.4: Significant Points in the Regulatory Framework of Microfinance Sect	or in
Vietnam	76
Table 3.5: Tax Rates for MFIs in Vietnam	85
Table 3.6: The Legal Formation of Tax Policy for MFIs in Vietnam	86
Table 3.7: Typical Examples Statistics on the Number of Successfully Transformed	MFIs
	79
Table 3.8: Regulation Objectives for Microfinance	95
Table 3.9: Linkage between Regulation Objectives and Key Indicators	96
Table 4.1: Main Empirical Efficiency Studies on MFIs	.107
Table 4.2: Selected Input and Output Variables	.121
Table 4.3: DEA Specifications	.124
Table 4.4: Description of Variables along with Expected Sign	.125
Table 4.5: Descriptive Statistics for Variables in the Year 2014	.127
Table 4.6: Descriptive Statistics for Variable in MPI Analysis (2013-2015)	.128
Table 4.7: Descriptive Statistics for Variable in Panel Data Regression Analysis	.130
Table 4.8: DEA Efficiency Score and Composition of Production Frontier	.132

Table 4.10: Social and Financial Efficiency Score 134	4
Table 4.11: Pearson Correlations between Social and Financial Efficiency Scores	6
Table 4.12: Malmquist Index and Its Components during 2013-2015	9
Table 4.13: Determinants of Efficiency Level 143	3
Table 4.14: Effect Signs of Determinants Affecting Efficiency Scores 144	4
Table 4.15: Regression Analysis (Pooled OLS Model)14:	5
Table 4.16: Random Effect Model	6
Table 5.1: Major Characteristics on Microfinance Industry by Country 153	3
Table 5.2: Variety of Microfinance Providers by Country 164	4
Table 5.3: Regulatory Environment by Country16'	7
Table 5.4: Number of Clients by Country (as of January 2018) 179	9

List of Figures

Figure 2.1: Lending Process of Grameen Bank
Figure 2.2: Lending Process of Village Banks
Figure 2.3: The Standard Microcredit Process of NGOs
Figure 3.1: Vietnam: Poverty Headcount Rates and GINI Index Over Time
Figure 3.2: National Overview on Financial Access Points
Figure 3.3: Vietnam Microfinance Landscape (in General)
Figure 3.4: Classification of Microfinance Providers in Vietnam
Figure 3.5: Number of MFIs by Starting Period of Operation
Figure 3.6: Share of MFIs per Staff Category
Figure 3.7: Outstanding Loans (US\$ Million)67
Figure 3.8: Vietnam Bank for Social Policies: Board of Directors
Figure 3.9: Process to Become Formal MFIs
Figure 4.1: DEA with One Input and One Output110
Figure 4.2: Standard and Super Efficiency DEA113
Figure 4.3: Comparative Ranking of Social and Financial Efficiency Based on Super
Efficiency Scores
Figure 5.1: Operational Metrics by Country (as of January 2018)177
Figure 5.2: Financing Structure (as of January 2016)
Figure 5.3: Productivity of Microfinance Sector by Country (as of January 2018)183
Figure 5.4: Sustainability (as of January 2018)

Abbreviations

3PAD	3PAD Fund Bac Kan
ACE	Anh Chi Em
ACLEDA	Association of Cambodian Local Economic Development Agencies
ADB	Asian Development Bank
ADRA	Adventist Development and Relief Agency International
AE	Allocative Efficiency
АМК	Angkor Mikroheranhvatho Kampuchea
A.P	An Phu Development Fund
ASA	Association for Social Advancement
ASEAN	Association of Southeast Asian Nations
AusAID	Australian Government Overseas Aid Program
BCC	Banker-Charnes-Cooper
BRAC	Bangladesh Rural Advancement Committee
BRI	Bank Rakyat Indonesia
BSP	Bangko Sentral ng Pilipinas
BTV	Golden Hand Program
BTWU	Microfinance Program - Women's Union, Ben Tre Province
CAFPE	Capital Aid Fund for Poor Employees and Civil Servants of Ba Ria -
	Vung Tau
C.B	Cao Bang Poverty Reduction Fund
CCF	Central People's Credit Funds
CCR	Charnes-Cooper-Rhodes
CDA	Cooperative Development Authority

CEP	Capital Aid Fund for Employment of the Poor
CGAP	Consultative Group to Assist the Poor
CIDA	Canadian International Development Agency
CIL	Credit Institution Law
Co.B/ Co-op Bank	Cooperative Bank of Vietnam
CRS	Constant Return to Scale
CWCD	Center for Women and Community Development
CWED	Capital Aid Fund for Women in Economic Development, Ho Chi
	Minh City
Dariu	Dariu Foundation
DBP/M7DBP City	Women Development Fund Dien Bien city
DEA	Data Envelopment Analysis
DFA	Distribution Free Approach
DFID	UK Department for International Development
DMU	Decision-Making Unit
DRS	Decreasing Returns to Scale
DTMFIs	Deposit-Taking MFIs
EA	Elderly Association
FDH	Free Disposal Hull
FU	Farmers' Union
FWD/ M7DB District	Women Development Fund - Dien Bien District
GB	Grammen Bank
GOs	Governmental Organizations
GSO	General Statistics Office of Vietnam
IFAD	International Fund for Agricultural Development

IFC	International Finance Corporation
IOM	Input-Oriented Linear Programing Model
IRS	Increasing Return to Scale
Lao PDR	Lao People's Democratic Republic
LPRYU	Lao People's Revolutionary Youth Union
LWU	Lao Women's Union
M&D	My Duc Microfinance Program
M7CDI	Microfinance Funds for Community Development
M7MFI	M7 Limited Liability Microfinance Institution
M7NP	Ninh Phuoc Women Development Fund
M7STU (CFRC)	Community Finance Resource Center
MBOs	Micro-Banking Offices
MDGs	Millennium Development Goals
MENA	Middle East and North Africa
MFIs	Microfinance Institutions
MOM	Tien Giang Women Fund for Economic Development
MOs	Mass Organizations
MSMEs	Micro, Small, and Medium Enterpises
NBC	National Bank of Cambodia
NDTMFIs	Non-Deposit-Taking MFIs
NGOs	Non-Government Organizations
NGPES	National Growth and Poverty Eradication Strategy
NMPs	NGO-sponsored Microfinance Programs
OER	Operating Expense Ratio
OOM	Output-Oriented Linear Programing Model

PCFs	People's Credit Funds
PE	Productive Efficiency
PPC	Pro-Poor Center Can Loc, Ha Tinh
PTE	Pure Technical Efficiency
RDB	Rural Development Bank
ROSCAs	Rotating Savings and Credit Associations
SBV	State Bank of Vietnam
SCUs	Savings and Credit Unions
SDGs	Sustainable Development Goals
SE	Scale Efficiency
SEDA	The Center of Small Enterprise Development Assistance
SFA	Stochastic Frontier Analysis
SIDA	Swedish International Development Cooperation Agency
SNV	Netherlands Development Organization
SODBs	State-Owned Development Banks
SRD	Sustainable Rural Development
TE	Overall Technical Efficiency
TFA	Thick Frontier Analysis
T.HOA/ FPW	Thanh Hoa Fund for Poor Women
TTH Province	Thua Thien Hue Province
ТҮМ	Tinh Thuong One Member Limited Liability Microfinance
	Institution
USAID	United States Agency for International Development
VA	Veteran Association
VBARD	Vietnam Bank for Agriculture and Rural Development

VBP	Vietnam Bank for the Poor
VBSP	Vietnam Bank for Social Policies
VDFs	Village Development Funds
VHLSS	Vietnam Household Living Standard Survey
VMWG	Vietnam Microfinance Working Group
VPSC	Vietnam Postal Saving Service Company
VRS	Variable Return to Scale
VWU	Vietnam Women's Union
WAEMU	West African Economic and Monetary Union
WB	World Bank
WDF	Women Development Fund Lao Cai
WTO	World Trade Organization
WV	World Vision Vietnam
YU	Youth Union

CHAPTER I INTRODUCTION

1.1. Rationale

Poverty is a global issue referring to the condition of the inability to meet the needs of daily life, such as shelter, food, education, and healthcare. 2015 figures showed that about 10% of the world's population (about 734 million people) are maintaining a standard of living below US\$ 1.9 a day. Recently, the COVID-19 epidemic crisis has caused a significant impact on the poor, including job losses, rising prices, and health and education shortages. The World Bank estimated that there would be an additional 40 million to 60 million people falling in severe poverty (below US\$1.9/day) by 2020 as a consequence of COVID-19¹. Unrelenting poverty is not merely a common illness, but also one of the most significant challenges facing humankind today, especially in most developing countries. Under scarce resources, policymakers and developmental scholars have worked to find better and more effective means to extract a billion of the poor from the maws of destitution.

In February 1997, 2,900 representatives from 137 countries and 1,500 organizations gathered in Washington, D.C., in Microcredit Summit. This international meeting aimed at promoting the spread of credit to at least 100 million of the poorest households worldwide, especially the families of poor women. Three years later, the Millennium Development Goals (MDGs) came out with a primary goal of eradicating poverty and hunger and identifying microfinance as a newfound and critical approach in increasing self-employment and empowerment among the poor². After the MDGs ended in 2015, the birth of the

https://www.worldbank.org/en/topic/poverty/overview

¹ Retrieve April 20, 2020; from

² Retrieved September 15, 2016; from

http://www.un.org/millenniumgoals/2008highlevel/pdf/newsroom/Goal%201%20FINAL.pdf

Sustainable Development Goals (SDGs) also raised the goal of eradicating poverty and considered it a prerequisite for social and economic development.

Microfinance is an increasingly popular tool in domestic and international development policies that target poor communities. It is a panacea for poverty that emerged on a global scale, providing a pivotal strategy to reduce poverty as well as a sustainable method leading to lasting development. The year 2005 was chosen as "International Year of Microcredit" as a United Nations endorsement of the role of microcredit, a core microfinance service, in the fight against poverty around the world. Accessibility of microfinance services to the poor in both rural and urban communities has played vital roles in the life-changing ventures (Manu et al., 2014). Therefore, many developing countries have adopted the microfinance system in their poverty reduction strategies to mitigate the lasting poverty incidence³.

Microfinance plays a significant role in many countries around the world, especially in developing countries. It not only helps to limit a harrowing problem of any society that is poverty but also empowering for the poor, especially poor women. Small and medium enterprises will also be more confident and sustainable when receiving financial support from microfinance programs. Despite such an important role, the number of people without access to banking and financial services is currently approximately 1.7 billion globally⁴. In other words, they are unbanked. This situation is especially worst in developing countries, Africa and Asia, in particular. For example, the number of inhabitants without a bank account remains at 190 million in India, while this number is 100 million in Pakistan (Global Findex 2017, World Bank).

³ Retrieved November 9, 2018; from

http://www.imf.org/external/np/exr/facts/prgf.htm and http://www.imf.org/external/np/exr/facts/ecf.htm ⁴ Retrieved Jun 20, 2018; from

http://www.worldbank.org/en/news/immersive-story/2018/05/18/gains-in-financial-inclusion-gains-for-a-sustainable-world?cid=ECR_TT_worldbank_EN_EXT_

Numerous studies and reports have pointed out the failure and indifference of the traditional financial system to the poor community. These longstanding mainstream institutions often require borrowers to have physical collateral, good sources of income, and creditworthiness. Complicated and lengthy administrative procedures are also the reasons restricting the access of disadvantaged groups to these formal organizations. On the other hand, high lending rates and exploitation through the undervaluation of collateral are the two main reasons why poor communities are reluctant to work with informal lenders. These situations give credit to evolve microfinance schemes mainly working for poor people. The microfinance system uses social ties and prestige, strict principles in credit provision and repayment, as well as supervision as alternatives to physical collateral.

Since 1972, microfinance has been grown immensely with giants such as Building Resources Across Communities (BRAC), Association for Social Advancement (ASA), Grameen Bank, and Self-Help Groups (SHGs). It revolutionized the horizons as providing financial tools on the grand scale to the most indigent clients in the world. International organizations, governments, bilateral agencies, non-government organizations, and social investors have increasingly paid attention to provide financial services for the poor to improve their living standards. Mainly, the Australian Government Overseas Aid Program (AusAID) and the United States Agency for International Development (USAID) have promoted microcredit as a convenient tool to eradicate poverty. With such financial support, the poor can seize life opportunities easier to build a better life (Nembo, 2010).

Since its inception in the late 1970s, microfinance has created great strides. It makes the donor agencies motivate the idea of financial inclusion when everyone can easily access financial services according to their wishes and abilities. Supporting people to access financial services both in breadth and depth is becoming an essential target for economic growth. Moreover, developing a sustainable microfinance system has been an important issue for economic development and a handy tool in the progress of poverty alleviation.

3

Investors and donors such as BancoSol (Bolivia), Compartamos Banco (a Mexican bank), and SKS Microfinance (a for-profit MFIs, India) have been interested in investing their money in the microfinance market to obtain a high financial return in the long run. Pursuing financial objectives, this growing attention, however, can hinder the development of microfinance guidelines focusing on the poor's benefits. Although these investors keep providing several small loans serving poor borrowers, they tend to use the profit obtaining from interest and repayments to their shareholders rather than enhance the services or expand more clients. Hence, the issues of sustainability and the balance between social and financial goals on the microfinance research agenda become more critical in recent years.

Despite massive global outreach, details on performance, regulatory environment, and real operation and performance of microfinance institutions are not well known, especially in developing countries. Most of the relevant literature on the microfinance field tends to concentrate on breadth compared to the depth of microfinance programs. Various questions that need more intensive answers such as, What kind of supervising system are popular in the microfinance industry? Can social objectives go along with the financial objective of microfinance in the long run? Also, how can policymakers maintain long-term access to the poor to combat poverty without donor funds? Or, how can microfinance institutions be successful without external funds? Indeed, the sustainability of microfinance institutions is a critical problem. These issues remain hidden behind the weak dissemination of reporting standards, deficient financial disclosures, and few public information gateways on the microfinance industry.

Although many pieces of research recommended microfinance as the way forward for the poor to get out of poverty, several failures have been recorded because of institutional unsustainability and inaccessibility to financial services. Then, it is necessary to evaluate and analyze the microfinance sector's overall performance to increase financial inclusion rate and then to empower the low-income people on not only economic and social aspects.

4

Despite a long process of development, the microfinance industry is still young. Furthermore, the empirical works on the issues related to the legal environment and impacts, as well as the performance of microfinance institutions, are limited. Many microfinance programs were established but soon ended for many reasons, such as lack of synchronization, legal environment, and unstable financial situation. Microfinance is characterized by a balance between two objectives, social objective (i.e., poverty reduction) and financial objective to ensure stable profitability. If the development orientation has a deviation between these two goals, then microfinance will not be useful. Therefore, developing a sustainable microfinance sector is an essential object in the process of integration and development.

Setting in the developing region, Vietnam was still one of the world's weakest economies when initiating the economic renovation program (Doi Moi) in 1986. It is a historic milestone in the country's economy when shifting from a centralized economy to a market-oriented economy. The Government of Vietnam (GoV) also implemented a national policy on poverty alleviation through the encouragement of the poor's productive activities. Explicitly, the GoV recognized microfinance as a powerful and useful tool to uplift the poor in fighting poverty. Nowadays, the microfinance sector has existed in Vietnam throughout about three decades. It has been asserting the active development and contribution in supporting the poor and low-income classes to access financial services conveniently and consistently.

Statistically, Vietnam is home to more than 96 million people, of which 73% live in rural areas. 80%-90% of the rural population and 86% of ethnic minorities belong to poor groups⁵. Nearly 60% of Vietnam's labor force is engaging in agriculture, and about 97% of Vietnam's businesses are small and medium (MicroSave, General Statistics Office of Vietnam). With relentless efforts in poverty reduction, Vietnam has transformed from the

⁵ Retrieved 5 March, 2020; from:

https://www.worldbank.org/en/country/vietnam/overview

most impoverished country to a lower-middle-income country. However, poverty is always a great concern in Government policies. The incidence of poverty varies significantly between rural and urban, education, income, and even gender. The poor mainly live in rural, mountainous, and ethnic minority areas. Statistics from the World Bank indicate that about one-third of Vietnam's population is still poor or near-poor. It can be said that the country is a "fertile land" for the development of microfinance services.

However, the World Bank currently selected Vietnam as one of 25 priority countries in the UFA2020⁶ (Universal Financial Access by 2020) due to the imbalance between a large population and a meager rate of financial inclusion⁷. Moreover, the percentage of adults who have not been aware of formal financial services is approximately 69% (Global Findex, World Bank, 2017). Knowledge and financial management programs are of little interest in schools. It has led to the fact that a large proportion of Vietnamese people have little understanding of financial services that can better support their daily life. Consequently, they, especially poor people, choose borrowing from money lenders at very high-interest rates. The unfair situation is also one of the reasons for high-income inequality among social classes and regions in Vietnam. It also causes a supply-demand imbalance of financial services distribution across the country.

The microfinance system in Vietnam is managed mainly by the state banks. Vietnam's achievements in terms of published data are outstanding, with the poverty rate steadily decreasing over the years. However, policy-makers are still familiar with charitable financial aid programs, and alien to the mainstream financial mechanisms when developing financial assistance plans for the poor. The number of poor people and young people, especially those living in rural areas, who do not want to go to university, finding a way abroad is increasing day by day. They want to leave the country regardless of expense, and

⁶ Retrieved 1 January, 2018; from:

http://www.worldbank.org/en/topic/financialinclusion/brief/achieving-universal-financial-access-by-2020 ⁷ The detail is in Chapter III.

maybe even lose their life. They believe that in another country, their life will be less poor and happier. On the other hand, many small and medium-sized businesses are always in a state of debt and ineffective operation due to the lack of financial support. Opportunities for these groups to access small loans and financial services (tools that may help them find a job or do small business or innovation for business) are challenging. Moreover, the state banking system has hardly expanded and provided financial services to remote and mountainous areas in a stable manner. It has made a part of impoverished people unaware of financial services. Thus, there are many issues to consider that still hidden behind the public achievement of the microfinance sector in Vietnam.

The present dissertation chooses Vietnam as a typical case to address the gap in microfinance studies to reduce the total number of the unbanked and underserved. Accurately, it measures the performance of the microfinance industry in Vietnam in providing microfinance services while creating financial sustainability. The subjects this time are microfinance institutions instead of focusing on the beneficiaries of the microfinance system, as many studies have been done. It focused on researching and analyzing the operational mechanism, the legal environment, and the effectiveness of MFIs in Vietnam.

By applying international standards to MFIs across the country, this study highlights the microfinance sector's performance and its limitations. Moreover, it will make an essential contribution to policy-making on national financial inclusion in Vietnam to prioritize the opportunity areas going forward. By pointing out the strengths and weaknesses of the microfinance system in Vietnam, it thereby makes necessary recommendations for Vietnam, as well as references for countries with similar environments. Last but not least, the thesis provides an additional practical reference for investors in making investment decisions for Vietnam's market.

1.2. Research Questions and Goals

From the status of microfinance in Vietnam mentioned above, this study proposes the following research questions:

- 1. What is the present system of the microfinance sector in Vietnam? Does it yield useful results?
- 2. Do microfinance institutions in Vietnam follow the social mission while maintaining the financial objective? What are the crucial elements for running active microfinance institutions in Vietnam?
- 3. Are there differences in the microfinance industry of Vietnam compared to those of neighboring countries?

This dissertation's research objective is to suggest a balanced sustainability approach for microfinance institutions in Vietnam that refers to governance practices, legal environmental, and social and financial objectives as equally important. More particularly, it explores the assess to the potential market for microfinance institutions, identifies the constraints and the potential, and suggests workable approaches to support Vietnam microfinance providers in extending and developing services throughout the country in a financially sustainable manner.

The literature has shown that MFIs are sustainable if they can maintain a balance between providing services to customers and profitability. It depends on the ability of organizations on financial resources, innovation, as well as the operating environment. With these views, the specific objectives of the study are expressed as the following table:

Table 1.1: Objectives of the Research

General Goal (s)	Analysis the Performance and Sustainability of Microfinance Institutions in Vietnam
Key Points	 Current structure and activities of Vietnam microfinance sector Innovations in regulation system and Impact Determinants affecting efficiency and financial sustainability of microfinance institutions Achievements of Vietnam microfinance in comparison with other neighbor countries

Objectives	Outcomes
1. Evaluate the development process, structure, and the position of Vietnam microfinance in the overall socio-economic development	 Overarching picture of the development path and the current structure of Vietnam microfinance sector Evaluation of current activities and services
2. Evaluate innovations in the legal system and the impact on the achievement of MFIs	 Systematization and evaluation on the present regulatory environment that guide and manage microfinance institutions in Vietnam Effectiveness of regulatory innovations concerning performance indicators of microfinance institutions
3. Analyze social and financial efficiency of MFIs, and factors affecting MFIs' financial performance and sustainability	 In-depth measure to discover the real social and financial efficiency, and productivity of MFIs Enabling elements or operational/financial indicators that determine efficiency and sustainability of MFIs
4. Evaluate the structure and performance of microfinance activities of Vietnam and neighboring countries	 A collection of successful regional cases of microfinance efforts and innovation for comparison with Vietnam Comparative analysis of results and innovations between Vietnam's microfinance system and that of the Philippines, Laos, and Cambodia based on international benchmarks
5. Propose suitable solutions for the development and building of comprehensive and sustainable microfinance industry for Vietnam Source: Author	 Main points of the analytical results Policy recommendations for better microfinance industry for Vietnam under the context of globally financial inclusion

1.3. Research Structure

The thesis consists of six chapters in which chapter I provides a general introduction about the rationale, objectives, structure, methodology, and importance.

Chapter II covered an extensive literature review of handbooks, peer-reviewed publications, organization's websites, organization's reports, and other secondary data. It examined the existence of academic literature on microfinance dealing with issues commonly associated with the history, development, models, transformation, and recent issues. As such, the chapter provided an overall look at the demand and supply for financial service to the poor. Nowadays, microfinance becomes famous around the world, which draws the attention of governments, donor agencies, investors, and commercial sector. It is necessary to make policy recommendations to ensure the benefits of service providers while still improving the economic and social benefits for the target clients of microfinance. Based on broad and comprehensive literature, the core of research methodologies can be refined to select relevant data in the coming chapters.

Chapter III and Chapter IV focused on the case of Vietnam.

Chapter III provided broad research on the development and current structure and analyzed the microfinance sector's achievements in balancing between demand and supply as well as product diversification based on industry statistics at the national level. Aside from recent regulation capture, an evaluating of the transformation of microfinance institution was focused. It referred to governance issues existing in the microfinance industry that are either useful or harmful to the development of institutions themselves and the accessibility of target clients. An impact evaluation of legal changes was also included to test whether the innovated regulations have been issued effectively.

Chapter IV was composed of evaluations on efficiency and financial sustainability. While some MFIs had shown good examples, some others were not successful and were indeed failures. The sustainability of an organization requires the financial viability or the high level of financial performance and the adaption to legal frameworks, as well as a clear strategic vision. More precisely, the initiative for MFIs to maintain the double-bottom line mission of enhancing the socio-economic well-being of target clients while being independent of donor aid, in the long run, has made efficiency evaluation a prerequisite in recent years. This chapter also provides a measure to determine the critical factors to support the efficient operation and financial ability of MFIs. Institutions that promote social goals will focus on the factors that may differ from those that focus on profit.

In chapter V, the similar and contrasting examples explored evidence of differences in the development and practices of microfinance and the rationale behind promoting microfinance among neighboring countries. Specifically, this chapter included a comparative analysis tracing policy interventions, national statistics, current structures, and lending practices of Vietnamese MFIs to peer organizations in Cambodia, Laos, and the Philippines. It found out that only Vietnam employs a dual approach to develop and manage the microfinance industry. Moreover, Vietnamese state-led MFIs have strongly linked up with the mass organization such as Women's Union to provide the vital part microfinance services at subsidized rates. An evaluation of this state-led system and its differences from those of neighboring countries is critical for policy and investment decision-making as well as guarantees financial access to the poor. The discussions were drawing on local and global transparency initiatives' experiences to draw a picture of the challenges and the initiatives underway to overcome the present obstacles. This chapter also explored lessons to learn from the development of the microfinance industry in neighboring countries.

Chapter VI summarizes the main points of the analysis results in the previous chapters. The conclusions also include policy recommendations, constraints, and recommendations for future research.

11

1.4. Data and Methodology

The dissertation accomplished by employing both participatory, theoretical, descriptive, and empirical methods.

The study reviewed recent works of literature on microfinance as the theoretical analysis involves in literature review and modelling. The literature review appears in almost chapters using information and secondary data which have been prepared by Asian Development Bank, World Bank, the International Finance Corporation (IFC), and Consultative Group to Assist the Poorest (CGAP). The analyses in each chapter were the results of in-depth interviews, mathematical tools, and comparative techniques. The related information and data set for the evaluation and discussion were produced by State Bank of Vietnam, Vietnam Microfinance Working Group (VMWG), Vietnam Household Living Standard Survey (VHLSS), the Microfinance Information Exchange (MIX), fieldworks, document reviews, questionnaires, interviews, and author's calculations.

Among various approaches to ascertain institutional efficiency, there has been an apparent shift from employing traditional ratio analysis and descriptive method to more comprehensive and quantitative approaches. Due to the lack of data and a small number of microfinance institutions in Vietnam, the mathematical analysis mainly used the DEA-based tools and regression models to measure the efficiency, productivity, and stability of sampled institutions. Further explanation of the research methodology will appear in each chapter of the study.

1.5. Research Justification

Microfinance, in a nutshell, has been a handy tool to help the poor have easier access to financial services. The emergence of microfinance has improved the poor's living standards sustainably coincided with the MDGs since 2000 and SDGs since 2015, especially in developing countries. For example, microfinance can help poor farmers get out of poverty by boosting the agricultural activities, the primary living source. Many researchers have proven that the study of microfinance is critical to developing countries' socio-economic activities. Currently, extensive research on the regulatory framework, structure, and the stability between financial management and social performance aspects become significant. This dissertation is working on these basic ideas and choosing Vietnam as a typical case.

It is noteworthy that obtaining data from the Government and microfinance institutions in Vietnam is challenging. Although the general picture of the microfinance industry is considered accurate, a complete statistic dataset is still missing and out of date. Data are often reported late and cover the small single fact. It has led to very few empirical studies choosing Vietnam as a target for research, especially the studies on the legal environment, the effectiveness and financial sustainability of microfinance institutions.

In order to bring the practical applicability of the present research, the analysis focuses on the actual operating environment and problems of MFIs in Vietnam, which has not been exploited. It can be said that this research used an extensive and unique dataset and information compared to the current researches related to microfinance issues in Vietnam. Moreover, for the first time, an assessment of the impact of legal innovations was made. The measurement was based on a combination of empirical methodologies with many steps of analyses for the most accurate and complete results. Also, MFIs were divided into groups to find good references (leading microfinance providers) for the development and operation of weak and young institutions.

Compared to other studies in finance, economics, and development, most studies in microfinance focus mainly on general reviews of current theories in microcredit and microfinance. Besides, the analyses focused on the social and economic dimensions of microfinance institutions rarely applied the mathematics and quantitative methods. When studying a problem, the author believes that a combination of both quantitative and qualitative methods will help to make more accurate conclusions and contribute to the theory and practices of microfinance worldwide. That is also the methodology of this research.

13

The analyzes and results contribute to enlighten the public, the social investors, and the government on the current situations of the microfinance sector in Vietnam. Moreover, findings on the factors that impact organizations' sustainability will help point clearer paths for MFIs, especially potential NGOs, in promoting a sustainable financial market in Vietnam. The donors and investors can also perceive the opportunities and challenges they may encounter and how they can succeed in their endeavors.

CHAPTER II

EXTENSIVE LITERATURE REVIEWS OF MICROFINANCE: HISTORY, DEVELOPMENT, MODELS AND RECENT ISSUES

2.1. Microfinance: Financial Opportunity for Poor Communities

Compared to the earlier day, globalization has made the boundaries among countries narrower. Countries have to enter the partnership with a lot of problem on global economics, society, and politics to build a helpful environment on earth. Among several development issues challenging the world population, poverty is still the leading factor and is one of the most significant problems that every country has faced. The World Bank (WB) estimated that approximately one-tenth of the global population still live on less than \$1.90 a day, the updated international poverty line (WB, 2016)⁸. Many researchers assume that extreme poverty is the number-one reason of the global uneasiness, war, and political conflict; and focusing on poverty eradication is a mantra for a peaceful world (Huntington, 1968; Sachs, 2008).

After the Second World War, almost all developing countries established State-Owned Development Banks (SODBs) that were financed by prominent international development agencies. These banks stated to accelerate economic growth as well as reduce poverty (Yaron, 2006; Townsend, 2011). SODBs provide concessional credit into predetermined sectors and frequently saved by state bailouts. By the end of the 1980s, most SODBs mainly served a group of customers who had political connection while ignored the target group of customers as the original purpose of establishment (Adams et al., 1984; Morduch, 1999). The situation was much worse due to the lack of financial discipline and

⁸ Retrieved December 20, 2018; from <u>http://pubdocs.worldbank.org/en/503001444058224597/Global-Monitoring-Report-2015.pdf</u>

low-quality loan portfolios. Using national budgets, the poor performance of SODBs also leads to sizable deficits and thus accelerates the rate of inflation.

Microfinance has originated in the early 1700s through the Irish loan system by Jonathan Swift, a nationalist and an author. The Irish system was one of the longer and earlier special credit programs that annually offered small loans with no collateral to approximately 20% of Irish poor households. These loans played an important role in developing rural economies such as non-crop activities and other consumption demand of the impoverished Irish citizens, especially in the Great Irish Famine in the late 1840s. (Hollis and Sweetman, 1998; Hollis and Sweetman, 2004).

During the 1800s, Europe promoted the activities of MFIs with more scale and standards including People's Banks, Credit Unions, and Savings and Credit Co-operatives to support the living of rural and urban poor⁹. Moreover, the Cooperative Movement, a typical example of credit union, established by Friedrich Wilhelm Raiffeisen and his colleagues in Germany in 1864 reached nearly 2 million rural farmers by the year 1901 (Helm, 2006). From here, various adaptations of the model where members with common political, economic, socio-cultural characteristics come together in a group became popular in Latin America in the early 1900s and then in Asia. These programs could be for philanthropic or profit purpose; for example, the socialist government often provides subsidized loans to the rural population to promote poverty alleviation strategy and support the agricultural development (Morduch, 1999; Armendariz de Aghion and Moduch, 2010). One of successful examples was the largest microfinance system in Indonesia, Indonesian People's Credit Banks, established in 1895.

Microfinance rapidly emerged during the period 1950s and 1970s with the high support of governments and the generosity of visionary international donors such as the International Fund for Agricultural Development (IFAD) and Deutsche Gesellschaft für

⁹ Retrieved February 28, 2019; from:

http://shodhganga.inflibnet.ac.in/bitstream/10603/50679/8/08_chapter_01.pdf

Technische Zusammenarbeit (GTZ) in Asia, and the United States Agency for International Development in Latin America. Small and marginal farmers are provided with access to loans from state-owned financial institutions and farmers' cooperatives with preferential interest rates to increase productivity and incomes. However, low lending rates and poor repayments had been the main reasons of the failures of many subsidized programs. Moreover, the funds often delivered to better-off farmers and excluded the poor communities.

In the 1970s, Berger (1989) stated that Latin American, Indonesia, India, and Bangladesh had started the operation of microenterprises supported by USAID and other UN agencies. These countries also popularize the solidarity group model in lending operations to ensure that members are responsible for their loans and that of other members. Especially, tiny loans directed toward poor women who have the investments in microbusiness.¹⁰ It is important to note that many giants of today global microfinance were established during this time including Bangladesh Rural Advancement Committee (BRAC), Foundation for International Community Association (FINCA), ACCION International, SEWA Bank, Self-Help Groups (SHGs), and Grameen Bank.

In 1974, Dr. Mohammed Yunus, an economic lecturer at the University of Chittagong, Bangladesh, inadvertently met a poor woman living in small village in Bangladesh. She used to borrow money from the village moneylenders to buy raw bamboo and make the bamboo chair. After her trading activities, she left with a little profit. For the people like this hopeless woman, poverty is the vicious circle. Yunus confirmed that the poor are challenging to escape from poverty is because of the lacking of access to formal financial services. In 1976, he embarked on his microfinance journey in Jorbra, Bangladesh by starting a small loan of \$27 of his own money (Sengupta and Aubuchon, 2008). His first borrowers were 42 women related to bamboo stool making. In 1983, he founded Grameen

¹⁰ Retrieved September 10, 2017; from:

http://shodhganga.inflibnet.ac.in/bitstream/10603/50679/8/08_chapter_01.pdf

Bank (GB) and provided tiny loans to the impoverished people who are often ignored by the traditional banking system without collateral. Yunus's effort is to eradicate poverty and empower marginalized communities by support them a tool called microfinance to get out of poverty without outside help or charity. He thought that giving the small financial support would motivate the poor to carry out more profitable activities to control their lives and achieve a bottom-up economic development (Yunus, 2007). Since then, the term microfinance has been synonymous with Yunus. Globally, Grameen Banks becomes one of the largest and the most famous microfinance institutions.

However, targeted and subsidized credit programs was rarely successful. According to Risal (2018), the causes of this situation are (i) high operating and management costs of small and medium loans, (ii) poor financial status/insolvency of the agricultural development banks, and (iii) poor debt collection capacity. Financial approach in microfinance emerged which considered credit/ small loans as a financial service and should be priced for the long-term operation. As such, subsidized credit and interest rate ceilings has prevented financial providers from the developments, limited the participation of investors, and benefited better-off populations. It has led to the shift of MFIs to operate under a more banking-like mechanism to both ensure profitability and maintain the original social goals. A typical example of the microfinance movement in developing countries is the Bank Rakyat Indonesia (BRI). By the mid 1980s, its transformed from a state-owned agricultural bank to micro bank and served approximately 22 million micro savers (Risal, 2018).

Microfinance programs has improved and proved that the poor, especially poor women, can afford to be responsible for their loans. Their repayment can help microfinance institutions to cover their cost as well as achieve financial objective while serve large number of target clients. Since 1990s, the microfinance industry blossomed throughout the world drawing multiple financial institutions serving not only poor communities but also microenterprises. In the mid-1990s, World Bank established the Consultative Group to Assist the Poor (CGAP) as an independent policy and research organization. It is to promote financial access for the poor around the world (Buckley, 2002).

Today microfinance is a global phenomenon and widely appears in financial policies to address multiple dimensions of poverty by many governments and organization bodies. Globally, it reaches the MDGs and SDGs in women's empowerment, health, and education. It includes all type of financial services such as micro-insurance, remittances, and nonfinancial products, no longer the space of only micro-credit. It expands in scope including both non-profit organizations like Kiva and BRAC, and for-profit organizations like Citi Microfinance and Mexico's Compartamos Banco.

With the relentless efforts for economic and social development, Yunus won the 2006 Nobel Peace Prize as an economist, visionary, and leader of the community. The Noel Prize called Yunus's work to the community and the birth of Grameen Bank an essential source of community liberation and an important tool for fighting poverty (Norwegian Nobel Committee, 2006)¹¹. Besides, the year 2005 was chosen by the Economic and Social Council of the UN as the International Year of Microcredit to promote the importance of this new development tool in empowering the poor¹².

Throughout the world, about 43% female and 36% male adults cannot access formal financial services¹³. For developing countries, over 70% of the adult population has not formal access to finance. Then, the microfinance industry has developed in the high expectations and become a significant priority for many governments (WB, 2014). With a primarily clear goal of extending small-scale financial services, microfinance is a panacea for the under-banked in developing countries to obtain credit, a necessary tool for social development and economic growth (Fotabong, 2011).

¹¹ Retrieved November 30, 2016; from:

http://www.nobelprize.org/nobel_prizes/peace/laureates/2006/press.html

¹² Retrieved October 10, 2016; from

http://www.yearofmicrocredit.org/pages/whyayear/whyayear_learnaboutyear.asp 13 Retrieved November 3, 2016; from

http://data.worldbank.org/topic/financial-sector

With the support of many world-famous leaders such as Bill and Hillary Clinton, Jimmy Carter and Barack Obama, microfinance has blossomed around the world. Many developmental agencies and financial institutions have recognized its importance in poverty alleviation as well as potential economic opportunities. Globally, the number of microfinance clients has enlarged from 16.5 million in 1997 (Reichert, 2016) to 139 million with loans totaling an estimated 114 billion dollars at the end of 2017 (Microfinance Barometer 2018). In addition to GB, the models of Association for Social Advancement (ASA) and Bangladesh Rural Advancement Committee (BRAC) of Bangladesh, BancoSol of Bolivia, and Bank Rakyat Indonesia (BRI) of Indonesia have been replicated in many developing countries. Microfinance does not seem to be showing any signs of slowing development shortly.

Microfinance has immense potentiality as an effective way to enhance living standards, self-employment, and empowerment, and thus it is a crucial strategy for the attainment of MDGs and SDGs. It helps to build the strong network among people in their communities to enhance the use of health and education services as well as met unexpected needs such as emergencies in health and death (United Nations, 2008)¹⁴.

2.2. Importance of Financial Services for the Poor

Compared to the communities living in/under the poverty line and the rate of coverage of MFIs, the demand for financial services and, subsequently, micro-loans, is enormous. According to a report of Economic Commission for Africa to UN (2010)¹⁵, for example, the Democratic Republic of Congo has 70% of the population belonging to poor groups, and only 0.01% of the total population is the owner of an account at a financial and banking institution. Similarly, these ratios in Rwanda and Burundi are 60% and 10%, and 75% and 4%, respectively. In Zambia and Uganda, financial services do not reach more than

¹⁴ Retrieved October 23, 2016; from

http://www.un.org/millenniumgoals/2008highlevel/pdf/newsroom/Goal%201%20FINAL.pdf¹⁵ Retrieved December 15, 2016; from:

http://www.uneca.org/publications/economic-report-africa-2010

60% of the population. Among 180 million poor households in Asia, approximately 90% of them are difficult to contact with financial institutions¹⁶. An Asian Development Bank (ADB) publication in January 2017 pointed out that the credit gaps between demand and supply are 50% in the Philippines and 30% in Cambodia. MFI penetrations are only 14.1% and 3.7% in Cambodia and the Philippines, respectively. Moreover, the microcredit need across the Cambodia, Philippines, Indonesia, and Myanmar is approximately US\$80 million that is currently met by informal lenders (loan sharks).

Many obstacles have created "a big wall" between formal financial system and the poor. For example, lack of information on formal credit history, lack of sufficient physical collateral, lack of an official guarantor, impersonal relationships, small transaction sizes, and fear of low repayment rate are severe obstacles that formal financial services systematically marginalized the poor (Jurik, 2005; Armendariz de Aghion and Moduch, 2010). In a small local economy, information about the trustworthiness of people was readily available. The lenders can easily check the name and faith of their customers (mainly farmers and small entrepreneurs). But, it becomes more challenging in case of big market or big banks as it is hazardous just to use local information to lend money (Jurik, 2005). Moreover, the poor are often illiterate, challenging to complete paperwork, and locate in small or remote areas far from banks regarding geographical location. As a result, they are often considered as a risky and untrustworthy group and the formal system often excludes them.

On the other hand, given high imposed transaction fee, minimum balance requirements, and collateral regulations are other main limitations that make poor people afraid to access traditional banks in their locality (Gaiha and Nandhi, 2008; Mittelman, 2010). Consequently, they regularly borrow money informally from loan sharks with such a high-interest rate, which is likely hard to pay back. For savings, they often keep at home or use informal forms like Rotating Savings and Credit Associations (ROSCAs) or buy

¹⁶ Retrieved December 15, 2016; from:

https://www.adb.org/sectors/finance/issues/financial-inclusion-microfinance

livestock/land / highly liquid assets (mainly, gold). Of course, these forms always have high risks, such as being cheated or being stolen.

There is an urgent need for microfinance providing formal ways to financial services to prevent people from loan default and cheating. The traditional banking system has often failed to recognize the divergence between the hierarchies of credit availability and credit needs, which cause the limitation to financial services for poor society (Fisher-Sriram, 2002). Moreover, the poor always need to save for overall vulnerability like natural disasters, unforeseen consumption expenses, illness, and drought (Armendariz de Aghion and Morduch, 2010; Hermes and Lensink, 2011).

As such, microfinance support poor communities to build their consumption strategy and future road over time and be successful in business to enhance income-generation activities (CGAP, 2014; Carruthers and Kim, 2011). Furthermore, it ensures the security of saving accounts and provides easy accessibility. Moreover, other services including insurance, money transfers, and remittance are essential to make the poor's life more comfortable. Also, the non-financial services give the poor more chance to receive better education and better health care services. The performance of GB in Bangladesh with high repayment rate is a clear proof that despite being on unsecured loans, the poor are always responsible for their loans and fully able to repay it. Yunus combined the advantages of group lending model and the underlying economic theory of a financial institution to show that given flexibility and support to the poor can take responsibility for repaying loans with high-interest rates (Dowla and Barua, 2006).

By and large, microfinance has supported the poor to fight against poverty cycle, build assets, improve living standards, and reduce their vulnerability in the long run. Next session will discuss the definition of microfinance, and common microfinance lending methods.

22

2.3. Microfinance Concepts

2.3.1. Definitions

As a unique mean of accessing financial services for poor communities and an effective way for international development and poverty reduction, clearly understanding the main operating definitions of microfinance is necessary. Generally, both developing and developed countries have rapidly applied the models of microfinance to enhance the lives of their citizen.

There are many different understandings of the microfinance concept due to the range of services and the targeted clients. In general, microfinance is a collection of financial services including credit, savings, remittance and insurance, and non-financial services to reach people who are segregated by the traditional financial system due to the lack of physical/tangible collateral, high risk of default, and unprofitability (Srivastava, 2005; Yunus, 2007; Akanga, 2016).

Many researchers, economists, and organizations have suggested the concepts of microfinance. It is defined as a development method mostly used in developing economies that grants banking services to support the exceptionally poor in their daily life or in establishing their income-generating activities (Robinson, 1998). Considering the target customers of microfinance services, Otera (1999, p.8) has identified them as poor, low-income, and poor self-employed communities.

In other words, microfinance institutions provide small-scale (micro-) financial services to the poor population who are often ignored by mainstream financial service's providers in the struggle against the poverty to achieve social goals (Hermes et al., 2011; Yaron et al., 2013). CGAP (2010) and Fotabong (2011) defined microfinance as the supply of credit, savings, and other essential financial products to people who locate in both urban and rural regions to shield themselves against the poverty trap. According to ADB, microfinance has been providing financial services covering savings, credits, payment,

23

transfer and insurance for the poor, low-income families and small individual activities. Briefly, microfinance is both a banking instrument and economic development method that serve the spending demands and investment of poor and low-income communities by providing small-scale/micro- financial products.

Other terms frequently used interchangeably in literature and published papers are microcredit, microloan, or micro-lending¹⁷. Microcredit only covers the provision of credit (small regulated loans) to target customers. Microfinance market is where participating organizations offer a wide range of financial services including credit, savings, insurance and other non-financial services (Sinha, 1998). It means that although the provision of microcredit often used equivalently to microfinance as a core service, it is only a component of financial services offered together with various financial services such as micro-insurance, micro-saving, and micro-remittance (Okiocredit, 2005).

Microfinance institutions (MFIs) will offer financial services to people, usually, all populations living in poverty, that are not being served by traditional banks. Specifically, they have employed new approaches to supply small loans to target customers and refrain from taking physical collateral. They could be organization-credit unions, downscaled commercial banks, and savings and loans cooperatives, credit unions, NGOs, and government banks. Along with financial intermediation, many MFIs have provided social intermediation services; for example, group formation, member training on financial literacy and management skills, and self-confidence empowerment (Ledgerwood, 1998).

Generally, MFIs have supplied four types of services: (i) financial intermediation; (ii) social intermediation; (iii) enterprise development services; and (iv) social services (Ledgerwood, 1999; Nembo, 2010) (Appendix 1). Despite differences in legal structure, mission, approaches, and sustainability, these financial providers operate on the common characteristics of serving a clientele more impoverished and more vulnerable than bank

¹⁷ Microcredit, microloan, or micro-lending provides a credit in the form of a small loan to target borrowers.

clients. An estimated more than 10,000 MFIs have existed throughout the world with the number of foreign investments of approximately 10 billion USD (Hartarska, 2005; Long, 2009).

2.3.2. Lending Methods in Microfinance

Lending methods applied by a wide variety of MFIs with the different background have changed over time regarding services, funding, clientele, vision, and mission. These models are just slightly different in structure and function and have common characteristics based on microfinance principles and customer requirements.

Individual lending and group lending are two basic methods. Individual lending directly gives microloans to the individual borrower without the formation of groups. Individual borrowers are then personally responsible for the repayment of loans received. Loan products in this model fit the clients' demand and their repayment capacity, and this helps to reduce loan default risk. Collected client data may support current financial products and result in the development of new products. However, a lower number of people is served in individual lending and the process to collect detailed information on individual clients is costly.

On the other hands, group lending is more popular that regards the joint-liability principle. MFIs can improve their outreach capacity by reducing administrative costs of reaching individuals and processing loans. Moreover, this model saves the time and money of collecting individual information and instead uses the data gathered by groups to assess the safety of lending. Group members are collectively responsible for other members' repayments to ensure the eligibility for future loans from the MFIs. However, this requirement makes members often propose loans with the same size instead of based on their actual needs and affordability. Positively, MFIs can minimize unwanted risks and costs related to member censorship, repayment management, and contract performance for borrowers. Grameen Bank and Village Banking are two major variants of the group method. The section below will carefully examine popular models of microfinance.

2.3.2.1. Rotating Savings and Credit Associations

The oldest and popular informal ways in group-based methodology is Rotating Savings and Credit Associations (ROSCAs). It is the traditional "informal" financial practice that only depends on trustworthiness. Precisely, the individuals, typically composed of women, with similar socio-economic background assemble in a small group to have regular cyclical savings into the group's fund. Regular meetings are arranged to gather a fixed amount of money from all members. The fund will lend to members at the beginning of each cycle, by week, month, or quarter, based on group agreement or lottery or any form of group approval. The dependable lump sum could encourage asset building and promote social ties, especial among members.

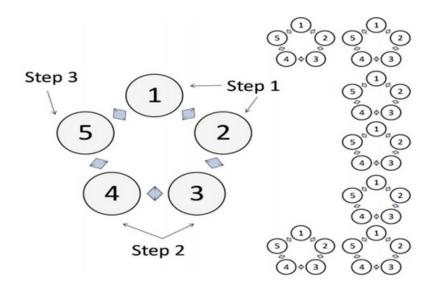
Moreover, the lending, without interest, and applies social collateral (peer pressure) to guarantee that the money will return. However, as the size of savings is often fixed at the beginning, ROSCAs is challenging to work effectively among impoverished communities who cannot afford a stipulated amount of money regularly. Another limitation is that a member has no right to withdraw his savings whenever he needs and only waits until his turn to get the lump money (Armendariz de Aghion and Morduch, 2010).

2.3.2.2. Solidarity Groups and Grameen Bank

Muhammad Yunus developed the Grameen Bank in Jobra, Bangladesh since 1976 with the idea of upon five borrowers in one group. Typically, the group is linked to other groups in the village to create a center (Figure 2.1). This model operates on the harmonious relationship between bicycle bankers in-branch units and authorities to maintain the characteristics of intensive discipline, supervision, and services. In principle, the lending rate will not be too different from the traditional financial system, but it will be much lower than informal loan sharks (Natarajan, 2004).

According to Professor Yunus, the formal financial system basically ignores the poor, the women, the illiterate that worsen the gap between rich and poor classes in society. Because of lacking collateral to access formal financial services, the social power of the poor is limited. He also confirmed that credit is a useful and updated tool to lessen inequalities in developing societies. In Grameen Bank, women have the equal opportunities to receive the loans and prove that they are credible borrowers and potential businessmen.

Figure 2.1: Lending Process of Grameen Bank



Source: Mittelman, 2010, p.25.

Solidarity group method are building on the basic idea that giving a small amounts of money as micro-loans without collateral to a large number of target customers in groups. Removing physical collateral required by conventional banks and replacing by social collateral, the method has extended a new type of lending depending on participation, responsibility, and mutual trust. Each member knows each other in the group very well and has some social bonds. The group is formed on self-selected principle and delivers loans to members on a staggered basis. Loans with the required amount for saving in advance¹⁸ are granted to only two selected members first and then to other members (Figure 2.1).

¹⁸ This requirement called compulsory saving is to ensure regular payments and serve as collateral.

Collective responsibility helps to limit the default and costs of processing loans to the groups. The entire group will become ineligible to receive subsequent loans in case a member fails to meet the repayment rule. Thus, group members come together based on peer pressure and joint liability for each other's loans. In addition, they have regular public meetings to collect payments.

It is worth noting that the success of Grameen Bank has coincided with its lending practices, which principally mitigate the inherent risk of lending to the poor. Lenders provide credit to groups based on two legal principles. First, instituting the practice of group lending, Grameen Bank lends a more substantial amount of money to groups, compared to personal lending, with the assumption that the borrowers will repay together. If any member fails to repay the loan, it will be difficult for the whole group to be disbursed in future loans. These rules are to maintain group pressure and keep individual records clear. Second, each member will be simultaneously responsible for the repayment of other members. The network of peer support pushes them to monitor each other and involve in group members' lives or actions. It is to avoid the worst possible situation and affect the benefits of the whole group.

In terms of data, Grameen Bank currently has more than 7.87 million active borrowers in Bangladesh, of which 97% are female customers with a repayment rate of 97.86%¹⁹. Many countries apply Grameen Bank model to their microfinance institutions, such as United State, Bolivia, Chile, China, Malaysia, Ethiopia, Sri Lanka, Honduras, India, Philippines, Tanzania, Thailand, and Vietnam. Although Grameen Bank has been converted to formal banking since 1983, its loans are still without collateral. Beside Grameen Bank, Latin American models developed by Accion International and BancoSol and MuCoBa in Tanzania are other successful variants of the group lending model.

¹⁹ Retrieved 15 March, 2020; from:

http://www.muhammadyunus.org/index.php/design-lab/previous-design-labs/37-about/about/371-grameenbank-at-a-glance

Grameen Bank, however, has exposed some limitation. First, it needs a considerable fund for operation and personnel, whereas most of the funds depended on external subsidy. An absence of donors might put the bank at stake. Second, the regular repayment system with the interest rate that is higher than that of conventional banks is sometimes not practical as most of the group members are poor who do not have a stable job and depend on basic agricultural activities for the living. Third, peer pressure may drive member to deal with money lenders (loan sharks) who can push them into a cycle of increased borrowing; and thus, poverty cannot be solved. Last but not least, the poor are more likely to be excluded from group formation because group membership selection is mainly based on similar characteristics and equal repayment capacity.

2.3.2.3. Association Model and Self-help Groups (SHGs)

SHGs are a well-known concept example of the association model formed by the poor to offer microfinance services for themselves. The absence of formal credits in the rural areas was the main reason resulting in the establishment of SHGs in India in 1987. This type of group is also built based on group lending method, mutual trust and management among members, and pressure to repay loans in groups (Lalitha, 1998).

The target community will form a "voluntary association" to meet their production and consumption needs. This unregistered group includes around 10-20 female members in the rural areas involving in income-generating activities (Ajai, 2005) to foster their lives or meet emergency needs. Selected members of the SHGs have standard features in terms of gender, religion, political, economic, and cultural orientation. Members periodically contribute a fixed amount as savings to establish a group fund. This fund is distributed to members as un-collateral loans and at a fixed interest rate (Bowman, 1995). Despite the appearance in other countries, especially in South Asia, most SGHs are located in India. It is indeed the Grameen Bank replication model of Bangladesh (Sarabu, 2016)²⁰.

²⁰ Retrieved 20 March, 2020; from:

2.3.2.4. Village Banking Model/ Community Bank Model and Foundation for International Community Assistance (FINCA)

The village banking model is the official version of the association model. The idea of village banks was first formed in Bolivia in 1984 by Dr. John Hatch. He suggested that farmers and low-income entrepreneurs should be helped form groups that could share the same loan and ensure repayment²¹. Members then could receive the credit to invest in their farming operation as well as improve their living standards. The idea of informal mutual support groups is considered the initial premise of microfinance and the engine of development.

Originating from the idea of Hatch, Foundation for International Community Assistance (FINCA) in Costa Rica, a village banking institution, devised a cutting-edge village banking model. This model aims to build solidarity groups with 10-20 members, predominantly female heads-of-household, to ensure financial sustainability. The time to set up village banks, choose management committee, train members, and create bylaws can last from 1 to 3 months. The first loan (about US\$50) will be distributed to the village bank by the implementing agency (the local headquarters of FINCA or its affiliates). This loan must be repaid weekly by equal installments (both interest and principal) over four months or 16 weeks (Hatch, 2004). The village bank collects the payments and then transferred to the sponsoring organization for the eligibility of subsequent loans (Figure 2.2). If there is a failure of paying the required amount, further credit requirement will be rejected. Same as Grameen Bank, the village banking model employs social collateral/peer pressure to reduce the credit risk. In addition to FINCA, the other international organizations, including Save the Children, World Relief, Catholic Relief Service, Freedom from Hunger have also adopted the village bank methodology for their use.

https://www.researchgate.net/post/Which_is_the_most_popular_microfinance_model_around_the_world ²¹ Retrieved 3 December, 2016; from: http://www.finca.org/our_work/microfinance/financial_services/village_banking/

http://www.finca.org/our-work/microfinance/financial-services/village-banking/

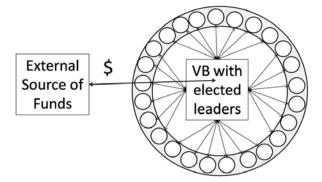


Figure 2.2: Lending Process of Village Banks

Source: Mittelman, 2010, p.27.

The government has little or no support for unregistered forms of institutions like village banks. They are independent organizations with great flexibility in forming the group as well as the level of savings and interest rate regulation. Because the members are both owners and administrators, the village bank is a highly democratic and self-governing organization (Hatch, 2004). However, the heavy reliance on external resources to lend funds to members can be difficult for the organization. In the same vein with Grameen Bank, members in village banks bear the high risk because a member is not only liable for his loans but to that of others (Stiglitz, 1990).

2.3.2.5. Cooperative

Although it does not include the poor in the ownership structure, this model is quite similar to the model of associations and village banks. Cooperative members include middle and upper-class individuals who trust each other to join and work in an independent association voluntarily.

Furthermore, a cooperative is a democratically-controlled enterprise that can be termed semiformal. These financial institutions raise capital through savings of the members and then lend based on the minimalist approach. Members are also customers who create policies and regulations for cooperatives. It means that instead of operating under banking laws, the Ministry of Finance and a league is its supervisor and governor, respectively. Cooperative banks in England and the Cooperative Rural Bank of Bulacan in the Philippines are two typical examples.

2.3.2.6. Credit Union

Unión Progresista Amatitlaneca (Guatemala), Vancity Credit Union (Canada), and credit and saving cooperatives networks in Africa are typical cases of this model. Unlike the above models, people who work together or participate in a social community come together in a group. Together, they contribute money and lend to each other at an affordable interest rate to ensure operational costs for the union. These credit unions are small, unique memberdriven, and non-profit oriented. Every member decides the interest rates, loan size, and repayment. Better than ROSCAs, they provide an opportunity for members not only to contribute money but also to borrow at any time.

2.3.2.7. Non-Governmental Organizations (NGOs)

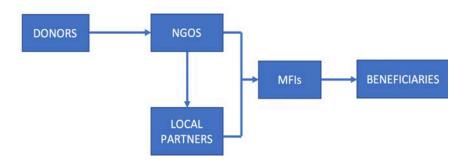


Figure 2.3: The Standard Microcredit Process of NGOs

Source: Torre & Vento, 2008, p.132

NGOs are "external organizations" and often act as intermediaries between donor agencies such as the UN and World Bank and poor communities in many fields. The entry of NGOs into the microfinance market is affirming the importance of microfinance to the community and national and international donor agencies. NGOs' activities are both domestic and international, aimed at disseminating microfinance services and improving the creditworthiness of poor communities through training programs, publications, workshops, and seminars. Moreover, NGOs, in addition to contributing resources, support microfinance programs in creating good practices. Successful NGOs are ACCION International (headquarters in the USA), Kashf Foundation (Pakistan), BRAC in Bangladesh, and KIVA (headquarters in the USA).

Building Resources Across Communities or BRAC (formerly Bangladesh Rural Advancement Committee), developed in 1972, is the largest NGOs in the world in terms of human resources²². This MFI has been providing a diverse portfolio of financial and non-financial products to meet not only the needs of the poor but also small and medium enterprises. It has been now a leading provider in microfinance market and operated in seven countries, including Bangladesh, Pakistan, Tanzania, Uganda, Sierra Leone, Liberia, and Myanmar.

KIVA is the most recent but popular model that is mainly operating online. KIVA creates a community-based intermediary connecting individual lenders. This online model will provide information related to the borrower or small projects that need loans, then promote and receive contributions through Paypal or international payment, disburse, and collect repayments. The interest is used to cover the cost of operation while the principal will be returned to the lenders. Lenders can continue to lend, or donate, or withdraw to use for other purposes. Online lending platforms like KIVA help reduce operational costs as well as mobilize capital from around the world. Moreover, transparency and accountability are two critical factors that make this model attract philanthropic agencies/donors.

2.3.2.8. MC2 Model

Based on Einstein's famous formula, the Cameroonian industrialist Paul Kammogne Fokam developed and implemented the concept of MC2 (Mutuelles communautaires de croissance) about two decades ago. With the interest rates at up to 15%, MC2 has helped

²² Retrieved 15 September, 2019; from:

https://www.euractiv.com/section/development-policy/interview/ngo-founder-sustainable-development-goals-will-work/

approximately a million Cameroonians getting out of poverty and more than four million people indirectly²³. MC2 has initially been a rural development micro-bank model created by the community to maintain local values and customs. The ideological basis of MC2 is as follows:

 $VP = M x C x C = MC2^{24}$

VP: Victory over Poverty

M: Means

C: Competences

C: Community

The MC2 formula means: poverty can disappear (VP) using the right and appropriate tool (M) to promote the capacity (C) of the community (C).

MC2 is based on a community-based micro-banking method where the poor rely on to improve their quality of life sustainably. MC2 (rural version) and MUFFA (urban version) are the two primary development versions of this model over time. The urban version is only for women in urban areas who are very vulnerable to falling into poverty to help them in finding jobs or generating income-generating activities. The model was built and supported by four pillars, including local people, national and foreign partners, AfrilandFirst Bank Group, and NGO Appropriate Development for Africa (ADAF). The long procedure for loan disbursement is a major limitation of MC2, which reduces the capacity to react to emergency loan needs (Serge, 2008).

²³ Retrieved 30 November, 2016; from:

http://www.cameroonweb.com/CameroonHomePage/economy/MC2-A-microfinance-network-overseen-by-Afriland-First-Bank-327600?lang=

²⁴ Retrieved 28 November, 2016; from:

https://www.afrilandfirstbank.com/index.php/en/commitment/our-commitment-to-staff

	Grameen Bank	FINCA	SHGs	MC2	BRAC
Туре	Solidarity Group	Village Banking Model	Association Model	Community-based Micro Banking Method	NGOs
Establishment	1983 in Bangladesh	1985 in Latin American countries	1987 in India	1992 in Cameroon	1972 in Bangladesh
Concept	 Voluntary formation of a small group of five prospective borrowers; Loans with required amount for saving in advance to ensure regular payment; Each borrower must be a member of a five-member group. 	Financially-sustainable solidarity groups of 10- 20 members, predominantly female heads-of-household	An informal association includes 10-20 rural female members who have the same socio- economic background.	Owned and managed by the members of a community who share the common in socio-cultural, traditions, and religious habits.	 Established on the belief that sustainable poverty alleviation must include both economic and social development; Lending through group formation – Village Organizations (VO)
Objective	Mainly providing credits to the poor, usually all women, who in most situations are ignored from formal lending sources.	Focusing on income- generating small businesses to alleviate poverty	Fostering members' life (mainly women) to fight against poverty	Primarily for rural development	Empowering the poor to help them build sustainable capacities to mitigate poverty.
Ownership	Micro-credit Institution % ownership: 95% borrowers; 5% government	Village bank	Village-based financial intermediary	Rural-based micro bank	NGO
Size	23,445 members	More than 10,000 members	33 million members	Over 60,000 members	120,000 members (70% are women) – 5.4 million members
Target Group	Exclusively for the poor, women, beggars, micro-enterprises, students	Financial inclusion for every "Unbanked": poor people, very low-income entrepreneurs	The poor and poorest in a community.	The rural underprivileged, Africa ladies	The poor, women, children
Popular Financial Services	Credit; Life Insurance; Savings	Credit; Savings; Insurance; Money Transfers	Credit; Savings	Credit; Savings; MoneyGram; Insurance	Credit; Savings; Death Benefit
Popular Non- Financial Services	Financial Training	Research for improving impact and innovation	Training	Training	Education and health programs; Financial education and client protection;

Table 2.1: A Comparison among Popular Microfinance Lending Method	Table 2.1: A	Comparison	among Popular	Microfinance	Lending Method
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					Legal aid
Funding Source	 External funds from the Central Bank of Bangladesh; donor agencies; commercial banks' loans; Savings, bond sales, and internally generated funds 	FINCA Microfinance Holding Company;Grants, donations	 Savings from group members; Borrowing from commercial banks 	Mainly from Cameroonian capital: - Savings/deposit collection (over 50%); - Member paid-in shares	Nearly 80% savings, self- funded through social enterprises; donations; donor agencies
Average Loan Size	A little over \$100	\$834	First dose of about \$778	\$100-\$1,000	\$422 (in general) - individual women: \$170-\$2,500 - small enterprise: \$1,400-13,000
Estimated Annual Interest Rates	0% - 22% (interest-free loans are only for beggars)	Above 24%	Up to 9.5%	10% - 15%	27%
Terms and Repayment Schedule	6 months – 12 months Weekly	Starting from 4 months Weekly or Monthly	Minimum period of 3 months Monthly/Quarterly/Half Yearly	6 months – 24 months Monthly	Weekly
Loan Guarantee	 Peer pressure Compulsory savings 	Peer pressure	Collateral-free	Depend on culture and traditional base	- Collateral-free - Compulsory savings

Source: Synthesis by the author

Additionally, there are some other variations of the microfinance model that have also successfully operated such as intermediary model and bank guarantees. The intermediary model is seen as a bridge between lenders and borrowers to create credit awareness and foster financial knowledge for both parties. They can be lenders, microcredit programs, commercial banks, or NGOs. On the other hand, bank guarantees can be government or donor agencies. They receive funds from commercial banks, and distribute them directly to individuals or groups of borrowers with compulsory deposits requirements. Examples of such forms are Latin America Bridge Fund, AfriCap Microfinance Fund (Mauritius), Bellwether Microfinance Fund (India), and Micro Credit Guarantee Facility (Pakistan).

2.4. Current Debates in Microfinance Practices

To date, microfinance has spread and covered numerous countries with all kinds of financial products and services. The word "marginalized" or "socially excluded" now is used instead of "poverty." Moreover, "inclusive finance" or "financial inclusion" including all groups of subjects ignored by the conventional financial system is a broader concept of microfinance. The number of studies on microfinance is plentiful focusing on different aspects. In addition to countless success cases, microfinance nowadays have many new concerns.

2.4.1. Commercialization in Microfinance

Initially emerged as a non-profit and non-governmental initiative, global microfinance has been moving towards a more formal, more commercial, and more profitable trend over the past two decades (Reichert, 2016). The first is the conversion of the Bolivian NGO PRODEM to BancoSol, a shareholder company, since 1992. Since then, microfinance institutions have moved faster from the reliance on donors and gradually worked with market principles and business platform to raise capital faster (Amendariz and Morduch 2010).

Attracted by the impressive growth and popularity of the microfinance, moreover, new for-profit MFIs including commercial banks and companies have increasingly "downscaled" their activities to create a profit-oriented microfinance program in low income areas (Assefa et al., 2013; Crevelari, 2017). Typical example includes General Electric, Barclay's, and Citi Group launching the microfinance departments, or mutual fund for the investment in microfinance space. Using the World Economic Pyramid, the target audience of nonprofits are the poorest of the poor, who have an annual income of US\$1,500 or less, while for-profits serve the unregistered (e.g. immigrants), the disadvantaged, and the marginalized, who are suffered from financial exclusion, social and political exclusion, and marketing exclusion (Torre & Vento, 2008; Crevelari, 2017).

However, there is a competitive sector in the microfinance market covering both nonprofit and for-profit organizations (Servin et al., 2012). The controversy is how they use the funds obtaining from interest and repayments. For example, starting as a non-profit bank, Mexico's Compartamos Banco, founded in 1990, converted to a company operating forprofit purposes in 2000. It became public on the Mexican Stock Exchange in 2007 to call for external funds. As a public company, it hands out the profit to shareholders. Conversely, non-profit institutions such as ACCION International, FINCA, and KIVA working for philanthropic objective tend to use the profit to reach more clients and develop more microfinance programs.

It is necessary for policymaker, microfinance practitioners, and nonprofit and forprofit MFIs to be carefully deciding on the operation to ensure the original mission of microfinance – poverty reduction above all else. Applying business model, MFIs are challenging by cost-benefit determination. Commercialization is essential to avoid the subsidies but it may create the elusive path for MFIs to be a "social business" (Cull et al., 2018).

38

2.4.2. Mission Drift or Trade-offs in the Development of Microfinance Institutions

The commercialization of microfinance sector also diversifies the catalog of microfinance services and products such as insurance, remittances, cash transfers, business development services. According to Hartarska et al. (2013), the trend of commercialization in the microfinance market has a great value to benefit the MFIs to diversify funding sources as well as widen the product range. However, maintaining both development goals is not easy for MFIs and sometimes put the social mission under pressure.

Meeting both social and financial goals (double-bottom line approach) is always a big challenge for MFIs²⁴. Together with increasing the number of clients, accomplishing rapid growth, improving portfolio quality for financial sustainability, MFIs must guarantee the first and foremost objectives of fighting against poverty, female empowerment, and financial inclusion. However, achieving both goals at the same time is always a problem (Copestake, 2007) and whether the joint of more investors is beneficial for microfinance industry.

A more focus on social development goal may deteriorate operation efficiency and financial performance (Gutiérrez-Nieto et al., 2009; Gonzales, 2010). The term "schism" in microfinance is tied to the debate of the ways to both increase outreach and achieve long-term profitability for MFIs (Woller, 2007; Morduch, 2000). Briefly, assuming that small loans always come with high transaction and operating costs, "schism" implies a trade-off between social and financial achievements for MFIs.

Although serving low-income borrowers, the for-profit MFIs have larger incentive to make a profit. They tend to charge higher interest rate, and take on larger clientele and riskier loans to control the financial risks (Downey & Conroy, 2012; Crevelari, 2017) that can put the poor into the debt trap and inflate the interest rate. The co-existence of charitable

²⁴According to Zeller and Meyer (2002), financial performance is referred the level that an MFI can guarantee its full expenses without subsidies, whereas social performance looks for the reach to poverty level of microfinance recipients, the type of services being provided.

and commercialized approach has either developed the industry in attracting more capital from profit-seeking investors and extending outreach or retarded the original incentive of microfinance – helping the poor. Then, the discussion on how to keep a balanced status among social and financial objective become essential of the development of MFIs.

Many empirical studies have been conducted to clarify this controversy. For example, Olivares-Polanco (2005), Cull et al. (2007), Hermes et al. (2011), and Wry and Zhao (2018) conducted studies and demonstrated the existence of trade-offs between operational objectives of MFIs. On the contrary, Paxton (2007) and Kipesha and Zang (2013) denied and pointed out the interaction between MFIs' social and financial goals. Similarly, Gutierrez-Nieto et al. (2009), Mersland and Strom (2010), and Louis et al. (2013) also investigated the interaction or interrelation between these two development goals.

Caserta et al. (2018) found out that non-profit MFIs have no mission drift as their objective is to maximize the welfare of clients with high enough incentive-compatible repayment. Moreover, they concluded that the role of government is very important in supporting the development new cultural business, especially for very poor or small entrepreneurs, to avoid the trade-off in microfinance industry. Ibrahim et al. (2018) showed that high interest rates on loans are essential to achieve profitability and financial viability. However, they suggested that the government should supervise the annual interest rate cap to avoid the unethical hunger of profit growth causing mission drift. Professional management and institution-buildings are also important to create financially healthy and socially effective MFIs instead of facing trade-offs (Wry & Zhao, 2018).

2.4.3. Governance Practices within Microfinance Sector

Microfinance have faced the challenge of both achieving sustainability and building good governance system to be more useful tool against poverty. Several researchers and international organization have defined "governance" in microfinance in different ways. Appearing since the Asia crisis, this issue is still new in the field of development in general, and microfinance in particular. Corporate governance in MFIs is "*a process that involves a system of check and balances between owners and other stakeholders who set the standard and objectives of accountability of a given institution; leadership and commitment to ensure fulfillment of the institution's mission and protection of its assets over time; and guidance by the board of directors, the governance is under the direction of the board*" (Rock et al., 1998, p.1).

Hartarska (2005) explored the relationship of governance to the operation and performance of MFIs in Central and Eastern Europe and the Newly Independent States. He indicated that there was no the linkage between better-performing MFIs and performance-based compensation of managers whereas lower wages worsen outreach. Moreover, the government mechanism has hardly contributed to the achievement. According to Lapenu and Pierret (2006), clear strategic vision, transparency, and efficient management are important to build a good governance. Specifically, governance within MFIs refers to two approaches: political approach and economic approach. The first one focuses on the legitimacy and integration while the other one focuses on the cost efficiency to optimize resources.

Similarly, the concept of governance in the financial sector differs in terms of private and public (Kayastha, 2013). Private governance is tied to transparency, management machine, accountability, internal laws, and service process. On the other hand, the public side favors laws, policies, and regulations. Kayastha proposed the new concept dubbed "institutional governance" and discussed on a group of public and private dimensions of institutional governance in Nepali MFIs.

MicroSave (2015) conducted a study on the governance in India focusing on four categories: board composition and structure (size, representation of women, independence), board administration and procedures (independent directors, quality of board members), commitment to roles and responsibility, and governance and responsible finance. The

41

relationship between achievement and corporate governance is exploited by Mersland and Strom (2008 & 2014) based on global data. They have shown that MFIs will work more effectively with local directors, female CEOs, and internal board auditor. In other words, the local management framework and female leadership work better than the international management system. Moreover, bank regulation does not affect financial performance and outreach.

Corporate governance is also studied by Ssekizivivu et al. (2018) based on data from 179 active clients of MFIs in Uganda. They concluded that the lack of fully constituted board committees and shareholders rights have limited the efficiency of board of directors. Financial expertise is essential but the improvement of corporate governance also needs to be concerned in the context of commercialization. On the other hand, Bibi et al. (2018) pointed out that there is a link between efficiency level of governance and gender. They emphasized that the participation of female chairs and female directors in MFIs is an important determinant to achieve social and financial objectives.

Different MFIs in different countries have operated in different political, social, cultural, religious, and economic system. It is to say that the impact of governance is necessary to ensure the effectiveness of MFIs in specific cases.

2.5. Conclusion

This chapter reviewed the history, development, and popular models of the microfinance sector throughout the world as well as discussed recent issues.

There are several directions for the future of microfinance that might be promising. The transformation from non-profit to for-profit organizations, in which some MFIs are going public, drive to more aggressive marketing and loan collection practices in the quest for profits of investors. In addition to calling for savings from customers, contemporary microfinance also operates other activities to increase income (Armendariz de Aghion and Morduch, 2007). They have increasingly searched for public and international financing as

42

well as expanded the operation scope to serve their clients in microfinance market better. Old models such as ROSCAs and credit union have limited funds to lend while NGOs act as intermediaries with financial institutions and target customer groups to make efforts to increase financial resources.

The purpose of this chapter is to go through critical theoretical bases as well as the primary operational models, goals and principles of microfinance. It is worth noting that most of the present MFIs face the challenge of achieving sustainability, institutionalization, and governance practices that might cause some failure in delivering financial services efficiently. Impact assessment, client targeting, regulation and policy, and management practices are also important issues in recent years. As a mantra of modern times, the continual development of microfinance models and activities is bringing more life-changing opportunities for millions of poor people around the world.

The following chapters will focus on market analysis and the current situations of microfinance institutions in the case of Vietnam. As a typical example of Southeast Asia in microfinance development, Vietnam has also been facing many limitations and challenges to achieve long-term sustainability goals as well as the effort of financial inclusion of global microfinance.

CHAPTER III

TRACING AND EVALUATING THE INSTITUTIONAL CHARACTERISTICS AND GOVERNACE PRACTICES OF MICROFINANCE SECTOR IN VIETNAM

This chapter focuses on issues related to the development, structure, legal system, and governance practices of the microfinance sector in Vietnam. An overall and specific analysis of the current issues helps provide a background for building a financial inclusion environment throughout the country. Moreover, the information and analysis data are useful in planning and improving the expansion and performance of the microfinance sector in the country. The database might be useful to not only policymakers, government agencies, donors, and microfinance practitioners but also researchers and scholars who concern about the analysis and evaluation of the structure and operation of microfinance systems in developing countries.

3.1. Potential Market for Microfinance

3.1.1. Current Situations

The Doi Moi reform in 1986 was an important milestone to help Vietnam join the group of low middle-income countries and operate a market-oriented and socialist economy. To date, about 5.8% of Vietnamese are living below the poverty line²⁵ (Figure 3.1), which is an impressive achievement dropped from 63.7% in 1993. The poverty rate varies significantly between rural (7.5%) and urban (2%) regions. The population as of 2018 is more than 96 million people, and about 73% of them reside in rural areas²⁶. A high proportion

http://www.gso.gov.vn/default_en.aspx?tabid=783

²⁶ Retrieved 15 September, 2019; from: http://www.worldometers.info/world-population/vietnam-population/

²⁵ Retrieved 10 April, 2018; from:

of rural people makes a living based on primary agricultural crop cultivation and raising of small livestock with low productivity.

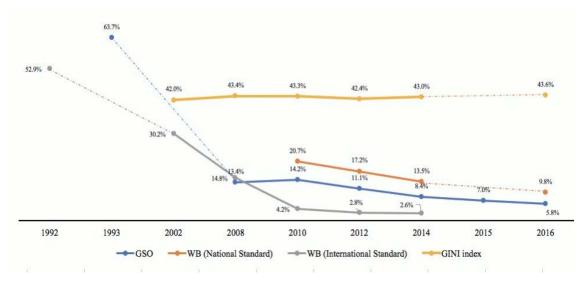


Figure 3.1: Vietnam: Poverty Headcount Rates and GINI Index Over Time

Note: International Standard: 17,290.9 Vietnamese dong (2014) or US\$1.9 (2011 PPP) per day per capita

The data from the UNDP²⁸, however, revealed that approximately 75% of Vietnamese is just above the poverty line. They belong to near poor groups who are very vulnerable to slipping back into the poverty trap in cases of economic, climatic, and health shocks. Besides, these groups still can be considered poor by the multi-dimensional definition. The near poor and low-middle-income people, unfortunately, are often excluded by many poverty reduction and social programs. Moreover, the low rate of poverty at the national level does not mean an equal among population groups and regions across the country. For example, the multi-dimension poverty rate of the ethnic minority is 35.7% on average (La Hu and H'Mong have exceptionally high rates at 84.9% and 82.9%, respectively)²⁹.

Source: WB27, GSO of Vietnam

²⁷ Retrieved 5 February, 2018; from:

http://povertydata.worldbank.org/poverty/country/VNM

²⁸ The Factsheet on Poverty in Vietnam. UNDP. 2017

²⁹ ibid.

Furthermore, the Gini index has gradually followed the upward trend (Figure 3.1) showing an increase in income inequality. From 1992 to 2012, the daily spending of the poorest increased 10% from US\$0.8 to US\$2.1, whereas that of the richest rose from US\$7.2 to US\$24.3³⁰. Similarly, poverty reduction and growth are not distributed evenly among regions and within the region. For example, the South East has the highest monthly income per capita (about US\$150) which is more than three times that of the North West (about US\$50)³¹. The gap in absolute income per capita between urban and rural households has increased from US\$220 in 2004 to US\$310 in 2014³².

3.1.2. Lack of Microfinance Services and Products

According to WB (2007), even the poorest segment of the population can contribute to the national wealth, and enhance their living standards if they have access to the necessary capital. As discussed in Chapter 2, formal financial services, however, typically avoid poor people, especially the poorest. It is also the origin of the emergences and rapid development of the microfinance system in the world and Vietnam.

Demand for financial services is not only about the need for "money" to guarantee the daily life such as basic consumption needs but also the capital to generate income activities. The facts in the previous section highlight a "huge unmet demand" for financial services that target the poor, especially when it comes to serving the people who are living in rural and remote regions and have a high demand for agro-related financial services. The primary income sector is agriculture, but these communities still suffer from a critical shortage of technology, infrastructure, and market stability. Therefore, microfinance is often a useful mechanism through which these difficulties can overcome.

The popularity of formal financial services has been nominal in Vietnam. The providers are not well-adapted to the growing needs as well as able to fulfill all aspects of

³⁰ Oxfam, 2017

³¹ ibid

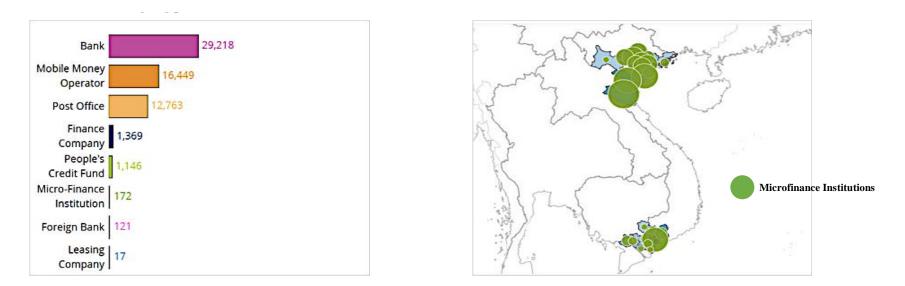
³² ibid

demand. UN (2015) pointed out that about 70% of Vietnamese citizens could not access formal financial services. WB also stated that Vietnam still lagged behind the local rate of financial inclusion. According to 2014 figures, 69% of the Vietnamese adult did not have a bank account at any bank. The proportion of the poverty group having the formal bank account is only 18.9% in compared to the average percentage of East Asia and Pacific at 60.9%³². Out of 137 countries, Vietnam ranks 78th regarding the availability of financial services, 60th regarding the affordability of financial services, 112th regarding the soundness of the bank (2017 World Economic Forum - WEF - Global Competitiveness Report). In terms of the number of financial transaction points per 100,000 adults, Vietnam ranked 104 out of 144 countries surveyed (WB, 2015).

Like everywhere else, without sufficient collateral and viable business plans the Vietnamese poor have limited access to loans and voluntary deposit services. The market segment for Vietnamese, especially the poorest, is not well served regarding outreach and products on offer. Many remote regions do not have access to formal banking services so that the poor there often face constraints in confronting a bank. As shown in Figure 3.2, there are 61,255 mapped financial access points across the country, of which only 172 belong to microfinance institutions. Furthermore, most of the microfinance access points have concentrated in the North and the South such as Ho Chi Minh, Dong Nai, and Long An.

³² Percentages are for 2014, retrieved 5 February, 2018; from: http://datatopics.worldbank.org/financialinclusion/country/vietnam

Figure 3.2: National Overview on Access Points



Source: retrieved 5 February, 2018; from the MIX: http://finclusionlab.org/country/Vietnam/analytics?title=National-Overview *Note*: Nearly 27% of financial access points locate in Ha Noi and Ho Chi Minh.

Furthermore, the capital still does not meet the needs of the market as many microfinance schemes are difficult to mobilize capital competing with commercial banks. The supplies of products and services are then not transparent, people in rural areas remain looking for "black credit" and other saving rotation forms such as "Hui" (ROSCAs) with high risk. The subsequent sections will discuss these issues.

3.2. Sector Characteristics

3.2.1. Emergence and Development of Microfinance Sector in Vietnam

Microfinance sector in Vietnam derived from the social protection policies for the poor in the realization of the Government's policy concerning ensuring social security and sustainable poverty reduction. Government, donor agencies, and saving facilities provide cheap credit to the poor to help them improve incomes, and build up equity and valuable cushion against unforeseen situations. (Llanto, 2000; SRV, 2002).

Traditional credit cooperatives have been the main financial intermediaries in the financial sector of Vietnam since 1956. At the commune level, they will represent the State Bank of Vietnam (SBV) to provide loans to individuals, farm households, small businesses, and production cooperatives. On behalf of the SBV, these cooperatives were supervised by the local People's Committees to operate as the local financial intermediaries within small communities. Unfortunately, most of them had failed and collapsed in the late 1980s due to the increasingly non-performing loans when rural collectives went bankrupt. The other reasons were the absence of the insurance system and refinance policies, and the improper supervision (Putzeys, 2002; Doan, 2005).

After the "Doi moi" policy in 1986, the Government of Vietnam (GoV) reorganized and expanded the financial system in 1988 to keep up with the rapid economic transformation. The agricultural reforms also created a huge and urgent demand for financial services to meet productive capital. As a result, the inception of microfinance occurred in 1989 when the Vietnam Women's Union (VWU) launched the first credit program dubbed "Women help each other in the family economy" to alleviate poverty. With the primary purpose of empowering women as well as develop the role of VWU in the national credit programs, the program received a lot of positive responses from the local Women Unions (WUs). It started with mutual assistance, lending plants and animals, exchanging production and farming experiences, and then expanded to capital support for poor women doing business. The expansion led to the creation of the Capital Aid Fund for Employment of the Poor (CEP) in 1991, which is the first MFI established under the Grameen Bank model and more currently the most extended standing microfinance network in Vietnam.

In 1990 and 1993, the establishment of two financial institutions, the Vietnam Bank for Agriculture and Rural Development (VBARD) and People's Credit Funds (PCFs), respectively, contributed to addressing the great need for financial services for agriculture. The establishment of the Fund for the Poor in 1995 (later Vietnam Bank for the Poor - VBP) as a not-for-profit bank supported VBARD³³ in monitoring and disbursing concessional loans to target customer groups. Gradually, VBP became independent of VBARD and changed its name to the Vietnam Bank for Social Policies (VBSP) operating on a commercial basis and focusing on serving the poor.

In 1997, with the promotion of a program called Hunger Eradication and Poverty Reduction (HEPR) of the Vietnamese government, the government of Belgium provided financial and technical support to microfinance programs and VWU to strengthen the access to financial services for people, especially in remote and mountainous areas. Similarly, the implementation from 2003 to 2005 of the programs called Extension of Microfinance and Micro-insurance to informal female workers and the establishment of the Microfinance Working Group in 2004 helped to popularize financial services gradually across the country to serve target clients. As a result, the scale of the microfinance sector has increasingly expanded with the issuance of the first Decree in 2005 on microfinance.

³³ VBARD was a policy bank assigned by the SBV to distribute concessional loans to the poor in rural areas in Vietnam.

Vietnam began authorizing the activities of foreign professionals in the national financial system after officially joining the WTO in 2007. The country's recovery from the global economic downturn in 2007 was rapid but uneven. As such, the quick expansion of domestic credit to motivate the economy resulted in a lack of available liquid funds for some of the banks. Moreover, the recent growing economic turmoil has made inequality worse between classes, urban and rural areas, and regions. These situations require the involvement of microfinance to provide a broad scope of financial support that allows people to set up a business or empower themselves from un-guessable shocks. Therefore, with the support of local and international non-government organizations (NGOs), bilateral and multilateral official development assistance programs, Mass Organizations (MOs) ³⁴, and local governments, various microfinance programs were deployed in Vietnam with the aim of fighting against poverty, especially for women and children.

Figure 3.3 illustrates evidence on the significant increase of Vietnamese MFIs during the period from 2000 to 2015. Looking exclusively at micro-credit, the expansion of MFIs regarding capital mobilization and outreach has gradually increased the number of active borrowers. The clients are low-income and receive small loans (up to US\$1,500 or VND 30 million) in the early stages. When they get "graduated" or become "small-traders," they tend to access the services of formal institutions to receive more massive loans. A decline in the number of borrowers of un-licensed MFIs from 600,000 in 2010 to 480,000 in 2012 has led to a drop in the total number of borrowers in microfinance industry. On the other hand, the outstanding loans from 2009 to 2015 are not much fluctuation, but it kept increasing year by year in general. Positively, the loan size tends to be larger to serve better the demand of clients for various purposes (average loan amount of un-licensed MFIs ranges from US\$152 to US\$236 per client) (Bezemer and Schuster, 2014).

³⁴ MOs in Vietnam include Women's Union (WU), Youth Union (YU), Famers' Union (FU), Veteran Association (VA), and Elderly Association (EA) with a complete network from the central level to village level.

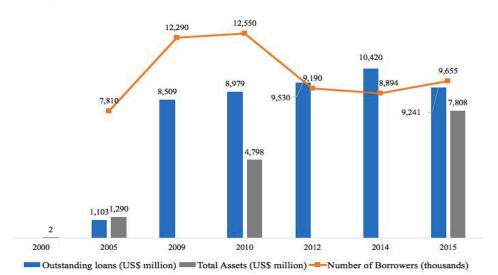


Figure 3.3: Vietnam Microfinance Landscape (in General)

Source: Nguyen (2009), Nguyen and Le (2013), IFC (2014), MIX market, Author's calculation

Note: includes MFIs reported to MIX and VMFWG; The data of outstanding loans for 2000 and the number of clients for 2000 are not available.

The concept of microfinance in Vietnam is similar to the general concept applied in most countries. It is the distribution of financial and non-financial services such as subsidized credit, savings, insurance, financial education, financial management, and business training to a perceived unmet demand among the poor and small-enterprises. The main purpose is to diversify income generating activities besides agricultural production such as small industries, trade, and small business. This sector is led by the GoV and MOs with the join of many donors and NGOs programs to develop and mobilize the social interventions of poor communities. Moreover, improving financial inclusion, including the safe construction and sustainable development of the microfinance system has been a core policy towards 2020 to serve the poor and micro business in the country.

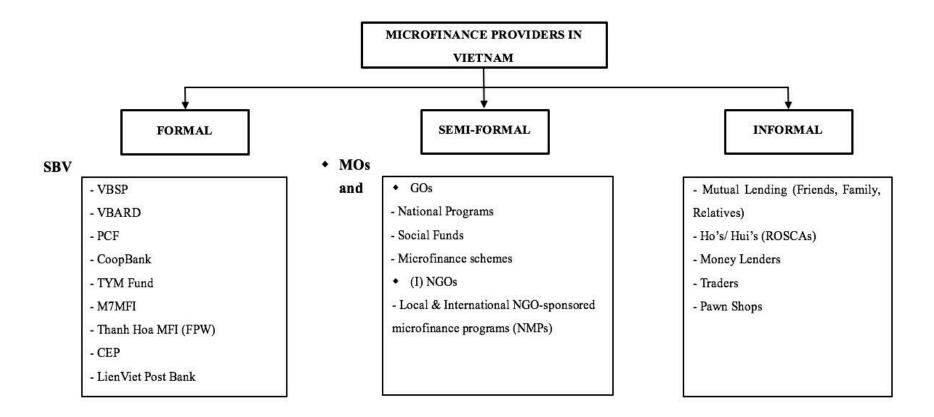
3.2.2. Main Institutional Types

Microfinance sector in Vietnam includes a variety of institutional models to operate microfinance activities such as state-owned banks, commercial banks, non-bank financial institutions (NBFIs), credit unions/cooperatives, social funds, and NGOs. This diversity refers to differences in the regulatory frameworks and can make the market fragmented.

Vietnamese Government's policies in microfinance have been regulated through state-owned banks, mainly the SBV. Subsidy programs have also been supervised and governed by the GoV in the cooperation with MOs to stimulate the development of MFIs. MOs' functions include the provision of a loan guarantee, group selection and formation, delinquency management, and members' credit history examination. They work with local authorities and state banks and under the GoV management to ensure a uniform distribution of credit at preferential interest rates to all target customers.

Generally, microfinance service providers in Vietnam can be formal, semi-formal and informal (Figure 3.4).

Figure 3.4: Classification of Microfinance Providers in Vietnam



Source: Updated and compiled by the author based on documents from ADB, VMWG, and Vietnam News on Microfinance *Notes*:

SBV = State Bank of Vietnam, VBSP = Vietnam Bank for Social Policies, VBARD = Vietnam Bank for Agriculture and Rural Development, PCF = People's Credit Fund, MOs = Mass Organizations, GOs = Government Organizations, (I) NGOs = (International) Non-Governmental Organizations, CEP = Capital Aid Fund for Employment of the Poor, Thanh Hoa MFI (FPW) = Thanh Hoa Fund for Poor Women

3.2.2.1. Informal Service Providers

World Bank (2007, p.53) called the informal providers as a "*semi-structured and truly private informal finance mechanism*" that appears in every small village of Vietnam. Until the mid-1990s, credit for households was mainly provided informally by this group. It can be mutual lending (family, friends, relatives), and Phuong/Ho's/Hui's³⁵ (ROSCAs) in flexible forms with/without interest. The ROSCAs are often for special events such as a wedding, funerals, and New Year's celebrations.

The other critical informal source is moneylenders who often charged at about 7-10%/month or 0.3-0.5%/day (equivalent to 125-200%/year) for the short-term loans (ranging from US\$50). The cost for borrowings is over three times higher than that charged by formal financial providers. The persistent high interest rate is because loans with noncollateral requirements always go along with the high risk of default. Also, providing small loans to many people, especially in rural, mountainous and remote areas, results in high transaction costs per lent. Additionally, pawnshops and traders are other sources of informal credit existing in local markets who also require the high price for borrowings.

Borrowing at high interest rates is very risky because the borrowers, who are often the farmers, unskilled workers, small traders, or poor households, are unable to pay the principal and interest when the loan is due. Consequently, debt collection may happen in the forms of "terrorist" mental, threatening the health and life of the borrowers and their relatives. In case the debtors are unable to repay, the money lenders can seize valuable assets such as houses and land.

Today, the informal lenders remain popular in rural and remote areas of Vietnam where most of the people have low levels of education and high illiteracy rates. They are

³⁵ "Phuong"/"Ho" (in Vietnamese) is an association originated from the Northern region, including 5-20 members who live in the same ward or village and do the same job such as farmers, veterans and small traders. A member is appointed as the group leader to periodically collect contributions in cash (\$2.5 to \$500) or kind (mainly rice) from members, and then each member can have a chance to borrow money on the rotating basis. Operating in the same manner as "Ho", "Hui" is the name that people in the South give this informal lending form (WB, 2007; McCarty, 2001).

very vulnerable during the harvest period. Moreover, not everyone can easily access and be disbursed formal loans, even in emergencies like illness, funeral, and wedding. Although the expansion of the formal and semiformal providers has positively resulted in a lower interest rate, their lending procedures are complicated and time-consuming while provided loans are fixed-amount. With informal ways, anyone can borrow money very quickly at any time and any amount. That is why many Vietnamese people still choose to deal with the informal sources, especially in an emergency.

3.2.2.2. Semi-Formal Service Providers/ Non-licensed Microfinance Programs

Given a relatively limited amount of access to state-led banks and commercial banks as well as the popularity of the informal lenders who might keep the poor in the poverty trap for long, there is an urgent call for the services offered by semi-formal providers or unlicensed MFIs.

Semi-formal MFIs are simply microcredit institutions and usually only operate within a small geographic scope. These providers are authorized to allocate credit but are not accepted to publicly mobilize savings from non-members. As of 2017, there are about 80 large and medium semi-formal MFIs and over 250 small-scale microfinance schemes operating in many localities across the country (data from the SBV)³⁶. They operate under the control and regulation of the different legal and regulatory frameworks. In other words, being not subject to the license of the SBV, these institutions are governed by different authorities depending on their types involved in the provision of microfinance services.

Notably, most of the clients are MOs' members. MOs with effective outreach at the grassroots network co-service to manage credit and savings schemes as well as link customers to other financial providers. MOs primarily implement the semi-formal group with the support of the Government Organizations or (International) Non-Governmental Organizations.

³⁶ The number of MFIs in Vietnam was only 1 and 9 in 2000 and 2005, respectively (Binh Nguyen, 2011).

- Governmental Organizations (GOs)

GOs are non-bank institutions including national programs, social funds targeting poverty alleviation, and microfinance schemes directly managed by MOs.

The national budget financially supports the national programs and social funds (i.e. Job generation program, National program for poverty alleviation, and Greening program for barren hills and unused lands). Microcredit is often the major component that provides the small loans to target groups with meager interest³⁷ or without interest. On the other hand, instead of receiving fund directly from the national budget, the microfinance schemes have been financially supported by the donors such as AusAID and Grameen Trust whereas MOs do provide them with a broad network to reach the target communities.

- (International) Non-Governmental Organization ((I)NGOs)

Foreign partners and sponsoring donors mainly support social and charitable programs/ projects aiming at sustainable development. As such, they carry out microfinance activities as a part of their operation in Vietnam. At the end of the operating period, the debt or equity of a project is in existence or increasing resulting in the need to prolong the project or transfer into another project. This process led to the emerging of NGO-sponsored microfinance programs (NMPs) in Vietnam in the early 1990s. This group includes small but growing non-state-led institutions, including local and international NGOs in partnership with MOs (mainly VWU) as the executors at different levels.

Interestingly, the direct management of NMPs is based on the commune level to be more comfortable for the poor to reach. During 1990-1993, the first NMPs were created by the VWU and the Food and Agriculture Organization (FAO). Many microfinance schemes have been developed by the VWU and other MOs in various communes to reach the poor effectively under the financial and technical supports of (I)NGOs and development agencies. NMPs often activate credit programs in remote areas and provide small, collateral-free, and

³⁷ The interest rate varies from 1.2% to 3.6% per year for the 3-years or longer-term loans (GSO).

short-term loans with regular installment repayments through guarantee groups. In addition to lending and mobilizing savings, NMPs have provided essential activities such as agricultural promotion, nutrition, pre-school education, and healthcare communication.

According to collected data, about 80% of Vietnam MFIs have legal status as NGOs. The participation of NGOs in the Vietnamese microfinance sector not only increases financial resources but also provides their experience in implementing programs for the poor and low-income groups. INGOs often operate under the international standards to provide excellent results in loan repayments and effectively access to the poor, especially female clients. They mainly operate following popular models, including Grameen Bank (i.e., Vietnam Plus, Sustainable Rural Development - SRD, and Action Aid Vietnam), Village Bank (i.e., Save the Children Japan, Netherlands Development Organization - SNV, Plan International, International Fund for Agricultural Development - IFAD, and World Vision), and Social Group (i.e. Save the Children US, Adventist Development and Relief Agency International - ADRA).

However, most of the local experts in microfinance are generally familiar with the Vietnamese way of doing microfinance activities without an international perspective. Because the concept of separating from the government's intervention is still confusing in contemporary Vietnam, the operation of NMPs in microfinance market is still modest. According to data from GSO, NGOs only contributed about 5% of the total loan balance of the microcredit market. Now that many NMPs in Vietnam have at least seven years of experience, but most of them are still geographically scattered and operate within limited areas of one province. As mentioned above, operating microfinance activities is not their primary objective. Joining in microfinance market is sometimes only an entry point to implement other activities of NGOs in Vietnam.

The future of NMPs in Vietnam is questionable as sponsoring donors, and social investors are increasingly expected them to not only reach the target clients but also remain

58

financially self-sufficient. In short, there are still several challenges facing NMPs, as follows:

- (i) The financial status of many NMPs is not stable in the long run because they are created to serve specific social purposes in the short term, and may change operational goals at the end of the project³⁸;
- (ii) Human resource is inadequate in both quantity and quality as most of NMPs have developed from social programs/projects, and the professionalism in microfinance services is not high. Small number of credit officers, part-time and non-specialized staff has caused the problem of punctuality and responsibility. The understanding on microfinance of many staffs is limited, especially at the local offices. Despite working for the same target groups, the training of microfinance staff in each organization and region is under the regulations of separate programs and rules. It has created an unprofessional environment for organizations operating in the field of microfinance.
- (iii) High-interest rate³⁹ and minimal loans size that increases the transaction costs are the main constraints to increase the number of clients;
- (iv) There is a lack of legal framework such as labor recruitment, taxation requirements, directions for future, and mobilization of both public and member to support and protect the operations of NMPs. As mentioned they are legally restricted from taking public deposits; And since national capitals are often underdeveloped, international capital markets play a critical role in their future funding. However, the regulation for these activities is unclear. In practice, many

³⁸ During the period 1993-2004, there were various microfinance programs sponsored by local and international NGOs coming to Vietnam. Examples include Rabobank Foundation (Netherlands), German Development Bank (KFW2), IFAD, United Nations Population Fund (UNFPA), and Japan Ministry of Finance and National Life Finance Cooperation (NLFC) of Japan. However, most of them had stopped the microfinance activities or changed to other types of activities in Vietnam. Meanwhile, their local partners (MOs) received the international experience and remaining capital to work with other NGOs (VMWG, 2014; ADB).

³⁹ The typical interest rate is around 1.2% per month charged by the NMPs whereas that charged by the formal sector is 0.7-0.8% per month (GSO).

NMPs also focus on saving mobilization from many external sources to maintain their operation that is illegal in Vietnam.

3.2.2.3. Formal (Regulated) Service Providers

This group composes of a mix of state-owned and private banks, cooperatives, and four licensed MFIs. Microfinance market remains dominated in breadth and depth by three regulated MFIs including the VBARD, the VBSP and the broad network of PCFs distributing small loans (mainly rural loans) in different approaches. Notably, the most important institutions are two state-led organizations, the VBSP and the VBARD, cooperating with the VWU and the FA and having branches across the country to operate most microfinance activities.

The VBP was founded in 1995 and then reconstituted as the VBSP in 2003 to take over the national plans on poverty alleviation. The Bank then largely influences the microfinance market. It directly allocates concessional credit at below-market interest rates with a collateral-free basis for productive purposes to only target individual (rather than enterprises), including rural poor, poor students, and disable and migrant workers. The VBSP is active throughout the country and mainly cooperates with the MOs, especially the VWU, to deliver its financial and non-financial services. Remarkably, the VBSP is ranked as the second largest MFI in Asia operating in 63 provincial branches, 8,495 communal mobile transaction points, 612 transaction offices in districts with more than 8,000 staffs.

Entrusted as a separate institution, a non-profit entity and a social policy lender, the VBSP highly receives the subsidization of the government and international donors⁴⁰. Regarding the operation network, in addition to its central branches, the bank also coordinates with local government committees to carry out its activities. Therefore, VBSP has been the most massive microfinance in the country. The bank also receives annual transfers from the government budget to cover their operational and financial costs, but is

⁴⁰ World Bank had supported the rural finance projects of VBSP in 1996, 2002 and 2008.

exempted from tax and deposit insurance with no obligation regarding reserve requirement regulated by the SBV. However, the VBSP often provides "one-off" loans or "stop-and-go" credit that may put the poor in difficulties if they need more capital to improve their lives or invest in a business. Moreover, it does not have the own distribution channel in reaching the poor and rural households, and thus all loans have to be channeled and supervised through mainly the VWU.

The SBV established VBARD in 1990 that followed the policy bank model. Since 1995, VBARD transformed into a commercial bank and give out subsidized credit from the national budget toward the rural market. It has the most extensive nationwide network of 2,233 branches covering almost every province. In the past, the major criticism about the VBARD was that they divided households into those who can access their services (mainly credit) and those who cannot. It mostly excluded the very poor or low-income households from the chance to receive loans at low-interest rates. Consequently, the poor were forced to turn to friends, relatives or money lenders for loans. With legal and financial support from the government, VBARD has channeled concessional government loans to rural households operating small businesses.

The People's Credit Funds (PCFs) is also a critical formal provider of the microfinance market in Vietnam. Founded in 1993, these funds are commune-level small-scale savings and credit cooperatives. Also, they are member-based and member-owned organizations. PCFs is a dynamic partner of ADB in distributing credit programs to target customer groups. Statistically, their system consists of 1,147 funds and 1,037 local staff. On a legal basis, the SBV supervises them under Vietnam's Cooperative Law (CIL) to mobilize local idle funds from its members and non-members, and grant microcredit⁴¹ to only

⁴¹ Retrieved 15 January, 2017; from:

http://www.microfinancegateway.org/sites/default/files/mfg-en-paper-achievements-and-problems-of-peoples-credit-funds-in-vietnam-mar-1999.pdf

http://www.afd.fr/lang/en/home/pays/asie/geo-asie/afd-vietnam/cac-du-an-cua-afd-tai-viet-nam/appui-auxentreprises-et-microfinance/du-an-quy-tin-dung-nhan-dan

members, including local rural farm households, entrepreneurs, the rural poor, and disadvantaged people. In 1993, PCFs and other credit institutions established Central People's Credit Funds (CCF) to improve the performance of PCFs. In July 2013, CCF transformed into the Cooperative Bank (Coop bank), the first cooperative bank in Vietnam, to expand its customer base and services.

Initially formed as semi-formal MFIs, TYM (Tinh Thuong Fund), M7 MFI, Thanh Hoa MFI (FPW), and CEP have successfully obtained the license to transform into formal providers in microfinance market in 2010, 2012, 2014 and 2017, respectively.

Established in 1992 and managed as an independent MFI, CEP, a Grameen Bank replica, is a non-profit MFI operating in Southeastern Vietnam and Mekong Delta. It is the most successful NMPs, and operates under the umbrella of Ho Chi Minh Labor Federation, a state-related actor. Up to now, CEP's network mainly concentrated in the heart of Ho Chi Minh city and neighboring districts with 17 branches out of its 26 branches (the remaining branches concentrated in some southern provinces). However, it just completed the transformation into the formal sector on 1st October 2017.

TYM, a Grameen Bank replica, is the government-related institution established in 1993 by the VWU of Soc Son district in Hanoi to empower women by providing credit to enhance their living standard and their households. Its political connection with the VWU provides the fund a vast network to spread out their lending activities. TYM does not receive funds directly from the SBV but either AusAID or the Grameen Trust.

M7 + is the third largest microfinance system in Vietnam after CEP and TYM in terms of organizational size. This network was established in 2006 in Dien Bien province. Target customers of M7 + are women and ethnic minorities living in poor and mountainous areas among the poorest provinces in the Northern Mountains and Central Coast region, including Dien Bien, Ha Tinh, Quang Ninh, Ninh Thuan, and Son La. Most of the members of M7 + are semi-formal providers in the microfinance system in Vietnam. Only the M7MFI formed by VWU in 2006 in Dien Bien province completed the transition to becoming a formal MFI in 2012. M7MFI and the other eight members⁴² in the M7 + network have provided services credit, savings, and insurance for over 35,000 customers⁴³.

Representing the official microfinance institution in the central region is Thanh Hoa MFI. Since the establishment in 2008, it has expanded the operation with nine branches to manage 110 communes and wards.

Recently, some non-state commercial banks have been interested in spreading their operation scale to target microfinance clients. A typical example is Lien Viet Post Join-stock Commercial Bank (Lien Viet Postbank). It is the first and only post bank to date in Vietnam and the result of a 2011 merger between LienViet Bank and the Vietnam Postal Saving Service Company (VPSC)⁴⁴. Their operation mainly bases on saving services by taking advantage of the nationwide post office network. However, only a few among the poor know about their services.

3.2.3. Age and Staff Employed

Regarding the number of years of microfinance activities, the MIX has divided the MFIs into three groups as follows:

Group 1, new MFIs: 0-4 years Group 2, young MFIs: 5-8 years Group 3, MFIs mature: over 8 years

http://www.cfrc.vn/vi/m7/gioi-thieu-chung/a-826/vai-net-ve-m7 44 Retrieved 20 January, 2018; from:

 ⁴² M7 DB District, M7 DBP City, M7 Dong Trieu, M7 Mai Son, M7 Ninh Phuoc, M7 STU, M7 Uong Bi, PPC
 ⁴³ Retrieved 10 March, 2020; from:

http://www.lienvietpostbank.com.vn/gioi-thieu/chung-toi-la-ai/content/chung-toi-la-ai

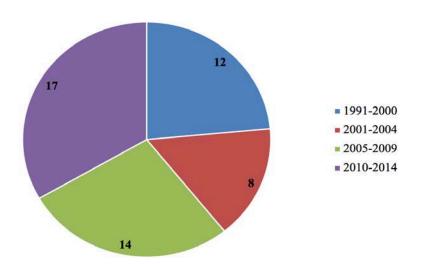


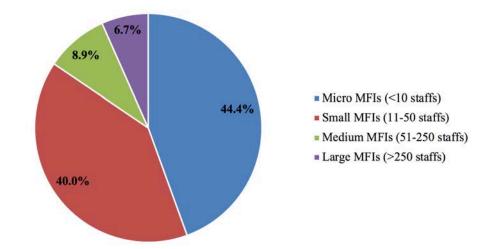
Figure 3.5: Number of MFIs by Starting Period of Operation

Source: Calculated from Data of 51 Vietnam MFIs reported to MIX market & VMWG

The microfinance market in Vietnam is relatively young. The appearance of Decree in 2005 and the Credit Institution Law in 2010 regarding microfinance are essential legal documents for the growth of new MFIs. Today, approximately 38% MFIs started the operation after 2009 (based on the data of 51 MFIs reported to MIX and VWMG). The oldest MFI is CEP, an NGO, which started their activities in 1991. However, there has been a slow increase in the establishment of new MFIs because only four new organizations (3PAD, Daknong Economy Women Opportunity Fund, Cao Bang Poverty Reduction Fund, Community Bank) entered the market after 2014.

Based on data from the MIX and VWMG, Vietnam MFIs have employed a relatively low number of work force. In 2015, the total number of employees was 13,116 of which 5,036 are loan officers (MIX, 2015). The majority of MFIs reported to VWMG (2015) have less than 50 loan officers (approximately 84%). Many Vietnam MFIs either rely on volunteers, mainly students, or part-time staff who are paid by MOs. Only two MFIs reported more than 500 loan staffs in 2016, one is a state-owned bank, VBSP, with 3,481 staffs and other is a credit union, CoopBank, with 525 staffs.

Figure 3.6: Share of MFIs per Staff Category



Source: Calculated from Data of 45 Vietnam MFIs reported to MIX market

3.3. Market Share and Product Development

3.3.1. Microlending Activities

According to Circular No.07/2009/TT-NHNN, micro-credit in Vietnam is the credit worth no more than VND 30 million.

Unlike many other countries, the market credit penetration of public sector in Vietnam is remarkable. The GoV has pumped more than USD 200 million each year to reform the subsidized-lending system of the formal sector. Over 70% (nearly seven million) micro-credit customers and 67% of the outstanding loans belong to VBSP (Table 3.1). Bank's advantage is the provision of micro-credit at low-interest rates compared to loans charged by the VBARD, other MFIs, and informal lenders. However, to get a loan from VBSP, people have to prove that they are the legal poor by submitting a "poor certificate". In practice, this rule has created a gap that someone who is not poor can obtain certificate based on their social or political relationship and then receive cheap loans from VBSP.

⁴⁵ Personal interviews in September 2016 and June 2017, September 2018

MFIs	Year Established	Number of Borrowers ('000)	Share (%)	Outstanding Loans (US\$ million)	Share (%)	Loan Size (US\$)	Annual Interest Rate (%)	Remarks
VBSP	1995	6,863.04	71.04	6,256	67.7	Maximum: 1,500	3.3%-9.6%	Loans for the poor are collateral-free
VBARD	1990	780	8.1	767	8.3		7%-10.5%	Poor ceritficate issued
Coopbank	2013	111.931	1.16	726.19	7.86	Maximum: 2,500		- by the local authorities are required
PCFs	1993	1,100	11.4	1,294	14	Average amount of 1,000	About 10% (12%-18%)	
Other MFIs	Since 1991	800	8.3	198	2.14	50-1,000	About 20%	In practice, the applied interest rate could be higher.
Total		9,655	100	9,241	100			

Table 3.1: Micro-credit Landscape of Vietnam (as of January 1st, 2016)

Source: Bezemer and Schuster (2014), World Bank, USAID, MIX market, Vietnam News on Microfinance Market, Personal Interviews and Fieldworks in 2015, 2016, and 2017, Author's calculation

Note: Statistics refers to the loan amount of less than 30 million Vietnamese dongs (US\$1,432) which mainly deliver to poor households;

Data for VBARD and PCFs are only for their poor clients;

VBSP = Vietnam Bank for Social Policies; VBARD = Vietnam Bank for Agriculture and Rural Development; Coopbank = Co-operative Bank of Vietnam; PCFs = People's Credit Funds;

--- = data not available.

Table 3.1 also points out other main lenders, including the VBARD and PCFs. By the end of 2015, PCFs has lent to 1.1 million clients (11.4% of the market share) and reached approximately US\$1.3 billion of outstanding loans (14% of the market share). The VBARD is just placed right after PCFs in the market. Although VBARD and PCFs are established to serve poor and near-poor households at the beginning, they have increasingly moved their outreach to larger farmers, urban areas, and small and medium-sized enterprises that are better off. It made their market share in the microfinance market lower than that of VBSP in recent years (see also Figure 3.7).

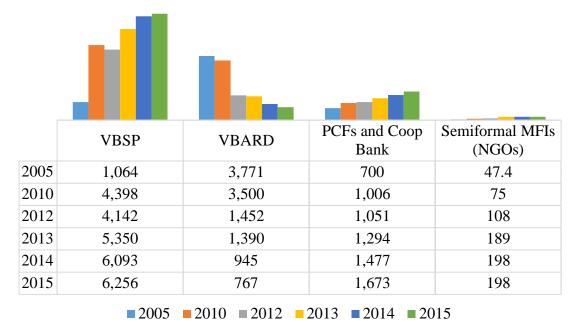


Figure 3.7: Outstanding Loans (US\$ Million)

Source: ABD, VMWG (2014), VMWG (2016)

The remaining several licensed and unlicensed MFIs target women and the poor with the flexible and small loans in size and interest rate. It is critical to know that despite the success of many microfinance programs and NMPs, they only reach about 8.3% and 2.14% of the micro-credit market concerning the number of borrowers and outstanding loans, respectively (Table 3.1). Positively, their growth in the customer base and loans portfolio is

steady in recent years under the support of the GoV and ADB. Even though outstanding loans have increased regularly, credit activity has not had many breakthroughs due to the limitations of savings activities and capital resources (Figure 3.7).

Figure 3.7 also shows that the market scale is in the upward trend in general, except for VBARD. Total outstanding loans still ensure the increase over the years as a testament to better service to the target customers.

The source of household credit has been increasingly shifted from VBARD to VBSP between 2004 and 2008. However, VBSP has strongly received the subsidy from the Government to provide cheap credit to the sizeable poor community in the country. It may bring about the limitation of the loan size as evident in Table 3.2.

MEL	Ratio of Loans			Amount per loan ('000 VND)			
MFI	2004	2006	2008	2004	2006	2008	
VBSP	9.1	15.6	24.4	4,483	5,992	7,829	
VBARD	36.3	34.7	28.3				
Other banks	3.4	3.4	3.7	48,116	70,807	168,178	
Employment support fund	1.6	1.2	0.7	6,102	4,806	33,881	
PCFs	3.5	4.1	4.1	10,764	14,054	18,236	
Sociopolitical organizations	4.8	6.7	5.3	3,284	4,503	5,973	
Money Lenders	9.8	7.7	7.1	6,395	7,192	14,188	
Friends and Relatives	28.3	24.0	24.0	9,012	11,235	17,534	
Others	3.2	2.7	2.5	5,948	6,694	9,253	

 Table 3.2: Sources of Borrowing and Amount per Loan

Source: VHLSS in 2004, 2006, 2008

Note: VND = Vietnamese dong; exchange rate was about VND20,000/US\$1 in 2008; --- = data not available.

Although the data on informal loans with unreasonably high-interest rates are incomplete, this is the method that many people in remote rural and mountainous areas choose to use because of the convenience and time-savings. As shown in Table 3.2, informal lending from money lenders, and friends and relative was 7.1% and 24%, respectively. The share of this sector in providing credit to farm households was recorded at averaging 68% in 1990 (Ministry of Agriculture and Food Industry of Vietnam), about 73% in 1992, over 30% in 1998 (Nghiem et al., 2005; Tsai et al., 2014), about 10.7% in 2002 (VHLSS, 2002), and 11% in 2011 (VMWG). Many pawnshops currently also provide emergency loans but at a very high-interest rate and strict agreement that might harm the poor.

3.3.2. Micro-savings

Traditionally, many Vietnamese still keep cash outside of the banking system, especially the poor and people living in rural areas. Therefore, savings activities are still limited compared to lending activities in the microfinance sector.

Savings products of MFIs are not as diverse as commercial banks, mainly compulsory savings and voluntary savings. These two essential products refer to the affordability as well as the financial status of clients, who are the poor, low-income households, and small businesses. However, currently, only official MFIs are allowed to deploy voluntary savings products from the public legally. Most Vietnamese MFIs have a small operational network, depend on MOs, and still, receive funding to sustain their operations. It results in interest rates for voluntary savings that are not as high as that of commercial banks. As a result, the development of this product is still minimal.

Most semi-formal MFIs still focus on compulsory savings as a guarantee for loans. The size for compulsory savings is not strict and can accept just only a few thousand VND, but clients must deposit the money regularly at group meetings. Each institution has its way of calculating the norm of compulsory savings, usually from 1% to 5% of the loan value. After a specified amount of deposits, customers can access loans at a rate higher than their savings. It is a requirement to access loans, and the customers can only withdraw their deposit just after fully repaying the debts.

VBSP, the market leader, has launched micro-savings for the poor through savings and loans groups since 2009. Members are allowed to deposit with a minimal amount, from VND 1,000 (about US\$0.05). Without coming to the bank office, they can directly send the money to either the local savings and loans groups or VBSP's staff. Table 3.3 shows that the market shares of VBSP are over 70% and 45%, followed by PCFs with 13.48% and 28% regarding the number of depositors and deposit total, respectively. The remaining MFIs have a negligible portion in the market. Despite the legal implementation of savings mobilization, their competitiveness is still low due to the additional costs of collecting deposits.

However, VBSP has been unsuccessful in mobilizing savings from the poor out of big cities and provincial towns. For the year 2015, average deposit balance per depositor is just about US\$355 that is much lower than that of Co-op Bank at US15,676. Recently, many MFIs have demonstrated in expanding micro-saving scale by the fact that the number of depositors is higher than that of active borrowers (based on data from MIX).

MFIs	Number of Depositors ('000)		Share of 2015	Deposit (US\$ million)			Share of 2015	
_	2013	2014	2015	- (%) -	2013	2014	2015	(%)
VBSP	8,000	8,000	6,016	70.23	1,130	1,956	2,136	45.69
VBARD	1,050	1,050	400	4.67	1,164	1,164	206	4.41
Co-op Bank		44.1	45.24	0.53		442.6	709.2	15.17
PCFs	1,230*	1,396	1,155	13.48	22.9*	1,394	1,309	28
VPSC	310	320	330	3.85	204	241	267	5.71
Other MFIs	560	620	620	7.24	48	48	48	1.03
Total	11,150	11,430	8,566	100	2,569	5,246	4,675	100

 Table 3.3: Micro-savings Landscape of Vietnam (2013-2015)

Source: MIX, ADB (2016), Author's calculation

Note: * including the number of depositors of Co-op Bank; --- = data not available.

3.3.3. Other Products and Services

In addition to the vast expansion of micro-credit and micro-savings, most of MFIs, especially NMPs, recently have developed other financial and non-financial products such as micro-insurance, micro-payment, agricultural technical training, financial education, and business development support.

Microinsurance has been operating independently from the microfinance since the late 1990s. This service is essential as a form of social protection for the poor and vulnerable households. However, the legal framework on micro-insurance for low-income customers is still not available. Only Prudential, Dai-ichi, and Manulife are legally accepted to provide micro-insurance in Vietnam. Women and children under the age of 18 are Prudential's customers. During 2011-2013, Prudential made about 3,102 insurance contracts for poor women in TT Hue, Quang Tri, and Khanh Hoa province. However, the company has stopped providing this product due to the high operating costs compared to premium earned. Despite targeting workers in industrial zones, Dai-ichi still does not provide any related product. To date, only Manulife has implemented micro-insurance to the members of VWU who are from 20 to 50 years old, low and unstable income, and live in remote and rural areas. Statistically, less than 5% of poor and near-poor households in Vietnam are covered by micro-insurance. The insurance products, generally, are mainly toward salary employees and better-off groups and neglect the rural communities and the poor.

In the trend of urbanization, many people in rural and remote mountainous areas tend to find work in urban areas or work in other countries. They often send their savings to support their family and relatives in their hometown/home country. As a result, the demand for money transfer services has increased in recent years. According to the CIL (2010), only banks can provide payment services. Vietnamese MFIs still have many limitations on the quantity and quality of this service. The VBSP, for example, provides remittance services at a limited level due to lack of infrastructure. Furthermore, the legal framework for digital banks as well as correspondent banks is "an infant" in the microfinance sector. That is a big obstacle for exploiting the potential, providing payment and transfer services for microfinance clients.

Organizations with large scale and customer base such as VBSP only provide financial services and often ignore non-financial services. Other MFIs has been doing well with this task. TYM has been providing educational programs, training courses to develop social skills, and soft skills for its customers. CEP has been implementing community development services focusing on health, sanitation, environment, and financial knowledge to help the customers improve the efficient use of financial services in everyday life. Although their operational network is not as vast as leading MFIs, these services have helped them increasingly gain the trust from customers. Most beneficiaries have appreciated the social benefits of these non-financial programs in raising awareness, increasing confidence in community activities, as well as improving the quality of life more sustainable ways.⁴⁶.

In general, the application and development of mentioned products and services still ambiguous, especially risk management, micro-insurance, emergency loans, and remittances. Microfinance programs were originally created to help the poor and marginalized communities without any commercial objectives, but many MFIs recently have changed their intentions and looked for both, commercial gains and social success for the sustainability in the long run.

3.4. Governance Practices for Microfinance Sector

Many Vietnamese citizens have needed accessing banking services since microfinance was born in Vietnam in the early 1980s. Correspondingly, more legal works have been passed to outline and guide specific responsibilities and regulations for

⁴⁶ Based on the fieldworks in 2015, 2016 and 2017, 2019 in TT Hue Province, Quang Tri Province, Da Nang city, and Ho Chi Minh city.

microfinance activities aligning with poverty alleviation. However, weak practices and priority to state sector remain in the vulnerability of the microfinance system.

3.4.1. Current Legal Framework and Discussion

The introduction of economic reform in 1986 had brought out the high demand, the gap in microfinance services as well as the importance of poverty reduction. The involvement of microfinance activities in the country has been then increasingly formalized. Semi-formal MFIs are encouraged to transform into licensed small-scale financial institutions under the SBV's supervision. Moreover, many laws and ordinances governing the operation of microfinance sector separately from state-led banks have been passed. This section explores the current regulatory structure being applied to operate MFIs and microfinance activities in Vietnam.

Primarily, microfinance activities in Vietnam were controlled by the Civil Law, Law on Cooperatives, and Law on the State Bank and Law on Credit Institutions issued in 1995, 1996, and 1997, respectively. As the most critical mass organization, the VWU was accepted to mobilize deposits in 2000 (Official Letter of the GoV, January 17th, 2000) and officially provide microfinance services in 2002 (Prime Minister's official letter No.209 and No.699). The interest rate gradually became liberal since 1996 and fully liberalized in May 2002, except for the VSPB (Decision No.546/2002/QĐ-NHNN). With ADB's technical assistance by the agreement TA VIE-3741 in January 2002, Vietnam became one of the Asian countries having approved new legislation for assisting microfinance development.

During the working for official Decree, policymakers suggested to have a separate law for MFIs to specify their operations, broad scope of business and other issues (Official letter of the Vice Finance Minister, No.583/TC-TCNH and No.7877/TC-TCNH, 2004). As a result, the Decree No.28 was passed in March 2005 to allow the establishment of independent and dedicated MFIs. Officially, microfinance has become a legal part of the national banking and financial system in Vietnam. 2005 also makes sense when it was also the year selected by UNDP as the year of micro-credit. Accordingly, current semi-formal MFIs including NMPs, social-political and social organizations, charity funds, and social funds, if eligible, can be converted into regulated/formal MFIs within two years. As the "license-applying organization", MOs should implement all microfinance schemes. The SBV is the regulator issuing license and supervising the MFIs and also approving management and executive board, audit committee. Nevertheless, the limited supervisory capacity of the SBV, unprofessional nature of MOs in finance, institutional weakness of MFIs, subsidized credit, interest rate controls were the significant challenges at that time. Decree No.165 issued in 2007 was a revision of Decree No. 28. However, the system of legal documents still maintains and implements both of these Decree simultaneously.

A significant step forward, the most important event, in the microfinance development milestones in Vietnam, was the enactment of the Credit Institution Law (CIL) in 2010, granting legal acknowledgment of all MFIs. This regulation in place have turned the microfinance sector in Vietnam into profitable investment. From then on, MFIs are a unique entity in the national financial system. However, only official MFIs operate under the CIL, the management and control of the Ministry of Finance, and the supervision of SBV. It aims to protect financial consumers and build a more sustainable financial inclusion in the country through. However, the guidelines for the CIL were not completing while some MFIs were operating under the Decree No.28 and Decree No.165. For example, TYM and CEP have been confusing which implementation rule should follow.

In 2011, the Prime Minister ratified the National Microfinance Strategy up to 2020 to strengthen and enhance the quality of microfinance activities in the country. This roadmap aims to integrate microfinance into the formal financial market by promoting the development of emerging MFIs and transform them into formal credit institutions under the management of the SBV. Nonetheless, despite the encouragement of the Government, the transformation progress has been slow and reluctant.

Effective Date	Law No./Events	Remarks	
August 1995	The VBP was established.	It is the first formal not-for-profit bank in Vietnam.	
November 1997	Hunger Eradication and Poverty Reduction (HEPR) Program	Enhancing the access to credit and social services for the poor	
January 2000	Official Letter from the Government Office	The VWU is allowed to implement micro-savings.	
January 2002	- TA VIE-3741 Technical Assistance Project with the ADB	Embarking the new legal framework to suppor microfinance evironment	
	 Decision No.546/2002/QĐ-NHNN "On the implementation of the mechanism of negotiable interest rates in VND commercial credit activities of credit institutions for customers" 	MFIs are free to build their interest rate, except for the VBSP.	
2004	The Vietnam Microfinance Working Group was established.	It has become an essential part in the microfinance sector of Vietnam that supports the implementation of the rules and guaranteed the access for target clients.	
March 2005	Decree No.28/2005/NĐ-CP "On organization and operation of small-sized financial institutions in Vietnam"	A legal milestone that prepares for the policy framework on the formalization of microfinance activities	
November 2007	Decree No.165/2007/ NĐ-CP		

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1 able 3.4: Significant P	oints in the Regulator	v Framework of Microffi	nance Sector in Vietnam

	"Amendment, supplementation, and repeal of some provisions of the Decree No.28/2005/NĐ-CP"		
April 2008	Circular No.02/2008/TT-NHNN	MFIs are not allowed to establish in the form of the joint-	
	"Guiding the implementation of the Decree No.28/2005/NĐ-CP and Decree No.165/2007/ NĐ-CP"	stock company. Their owners may be MOs and domestic NGOs, but not including foreign NGOs. Individuals or foreign organizations may contribute capital to establish an MFI but not more than 50% of charter capital.	
September 2009	Decision No.1450/QĐ-TTg	Coordinated by the SBV, the Working committee is	
	"On the establishment of the Working committee to assist the Prime Minister in developing microfinance policies and strategies."	allowed to access all level information on micro- financial operations to making recommendations.	
April 2010	Decree No.45/2010/ND-CP	Regulating the operation of local NGOs in Vietnam	
	"On the organization, operation, and management of associations"		
June 2010	No.47/2010/QH12	It is a landmark law. For the first time, MFIs in Vietnam are recognized as an official credit institution, a part of the banking system of the country, and supervised by the SBV (except VBSP).	
	"Credit Institution Law (CIL)"		
December 2011	Decision No.2195/2011/ QĐ-TTg		
	National Microfinance Strategy up to 2020	It is a more explicit recognition of the importance and	
	"Build a safe and sustainable microfinance system in order to serve the poor, low-income people, micro and small enterprise, to ensure social security and sustainable poverty eradication."	position of microfinance in the national banking and financial system.	

March 2012	Decree No.12/2012/ND-CP	NGOs are encouraged to implemented long-term		
	"On the operation registration and management for international NGOs in Vietnam"	projects of at least five years in humanitarian and development domains.		
		They can get the certificate for registration within 45 days.		
November 2012	Circular No.31/2012/TT-NHNN	A capital of \$142 million and additional equity of \$45		
	"On the transformation PCFs into Cooperative Bank"	million by the Government has strengthened PCFs' capital.		
December 2012	Decree No.30/2012/ND-CP	A set up for Social Funds.		
	"On the organization and operation of social funds and charity funds"	However, it did not indicate to microfinance, and there were a few points regarding standard supervision.		
January 2013	- Circular No.03/2013/TT-NHNN	Credit institutions are requested to report all credit		
	"Providing on credit information activity of the State Bank of Vietnam"	accounts regardless of the loan amount.		
	- Circular No.06/2013/TT-BTC			
	Financial regime for MFIs			
2014	- Decision No.381/ QĐ-TTg:	Its purpose is to promote the construction of		
	"On the re-establishment of the Microfinance Working Committee to assist the Prime Minister to guide the development of microfinance operations."	comprehensive, responsible and sustainable microfinance system in the long run.		
	- Circular No.08/2014/TT-NHNN	Many negotiable frames on interest rates were		
	"Interest rates applicable to short-term loans in Vietnamese Dong of Credit Institutions"	promulgated to ensure the benefit of both credit organizations and their clients. The annual interest rate cap is 8%.		

	- Decision 2174/QD-NHNN: Interest rate for short-term loans		
2015	 Decision No.28/2015/ QĐ-TTg "Credit policy for households escaping poverty" Decision No.30/2015/ QĐ-TTg "The amendment and supplementation several regulations on financial management of VBSP" 	 VBSP is guided to improve production and business for stable livelihoods and sustainable poverty reduction. VBSP can preferentially borrow and access idle funds with low interest based on the State budget balance, the official development assistance source, aid, and other low-interest capital sources to lend to the poor and or policy objects. 	
June 2017	Decision No.20/2017/ QĐ-TTg "On microfinance programs and projects of political institutions, socio-political organizations and non- governmental organizations"	Maximum loan size for microfinance clients is VND 50 million.	
February 2018	Circular No.03/2018/TT-NHNN "On licensing, organization and operation of microfinance institutions"	It replaced the Circular No.02 in 2008. The conditions for granting licenses for the establishment and operation of MFIs are improved. For example, minimum charter capital is VND 5 billion. The number of shareholders still limited to 5.	

Source: Synthesis by the author, source of legal documents and their official name (quoted in ""):<u>https://thuvienphapluat.vn/en/index.aspx</u>

As shown in Table 3.4, the GoV and the SBV have promulgated many laws and regulations to support and develop the microfinance sector. Several government agencies have reinforced at the central and provincial level such as the Vietnam Competition Authority, Ministry of Finance for state-owned banks, and the Provincial and Commune People's Committee. However, overall coordination among these regulators and supervisors still lack in the reform strategy.

"Microfinance programs and projects of political organizations, socio-political organizations, NGOs and credit institutions which have implemented before the effective date of this Law are not required to adjust their organization and operation according to this Law. The Prime Minister shall specify the operation of microfinance programs and projects defined in this Clause" (Clause 6, Article 161, CIL 2010)⁴⁷

However, there has not been any specific legal guidance that clearly defines the concepts of political organizations, political-social organizations and NGOs. The MOs are also not discussed the legal acceptance to provide microfinance products. In Decree No.5/2010/NĐ-CP and Decree No.30/2012/NĐ-CP, the Government regulates the establishment and operation of funds, associations, NGOs, and social funds without mentioning their microfinance activities and standard supervision. Due to the lack of guidelines and supervision, many present WUs in the provinces that need to establish microfinance schemes for poor women in localities but are not allowed by the local authorities.

Furthermore, the specific issue of promoting finance to the poor, the opening to foreign financial institutions, and the related methods of financing support to targeted communities have less attention in the country during the global financial integration.

⁴⁷ Source:

https://www.economica.vn/Portals/0/Documents/f6c24d103517f2a8c3ea307d119a2e0e.pdf (English) https://thuvienphapluat.vn/van-ban/tien-te-ngan-hang/Luat-cac-to-chuc-tin-dung-2010-108079.aspx (Vietnamese)

According to Circular No.03/2018/TT-NHNN, for example, the number of shareholders still limited to five. Also, foreign investors are not allowed to establish organizations providing microfinance services independently, but through community organizations such as WUs. Constraints and restrictions on foreign investors who want to participate in the microfinance market in Vietnam actively are still many and not as open as neighboring countries such as Laos and Cambodia.

The recent regulatory system is still giving high priority to state-led banks on a level competitive ground. When coming to the implementation, it is sometimes uneven such as the cases of the mobilization activities of NMPs and the interest rate charged by semi-formal MFIs. Excessive government intervention in the operational support, financial support, and service allocation of MFIs, especially for state-led organizations, is hindering a fair and competitive environment for all organizations participating in the microfinance market.

The main operational objective of VBSP, the largest MFIs in Vietnam, is to focus on distributing financial products to target customers, including women and the poor. However, different ministries are governing and supervising the Bank as in the diagram 3.8 below.

The interventions of many governmental stakeholders from different ministries and departments (nine part-time members and 3 full-time members) in the VBSP's operation without concerning the financial regulatory framework supervised by the SBV have caused the asynchronous when processing the microfinance service to the target groups. Moreover, formal MFIs in Vietnam generally operate in the province and district where their head office locates, and the current regulation does not permit agent banking. These factors have limited the expansion of formal financial services for the low and middle-income segments.

Last but certainly not least, many institutions in Vietnam providing microfinance services up to now are not applying for license, so that they are not be subject to the present regulations and must terminate their operation soon. As such, there is a lack of the practical legal framework to cover all types of current microfinance programs and projects as their unofficial nature has separated them from the scope of banking and finance regulation supervised by the SBV.

Part-time Members	Full-time Members	
Governor of the State Bank of Vietnam (Chairman)	Permanent Vice Chairman	
Vice Ministers (or Equivalent to Vice Minister) of	General Director	
 Ministry of Finance Ministry of Planning and Investment Ministry of Labor - Invalids and Social Affairs Ministry of Agriculture and Rural Development Committee of Ethnic Minorities Government Office 	Head of Supervisory Boad	
 Vice Chairman of Vietnam Farmers Association Vietnam Women's Union 		

Figure 3.8: Vietnam Bank for Social Policies: Board of Directors

Source: Decision No.131/2002/ QD-TTg on the Establishment of VBSP; *Note*: Part-time members are designated people from ministries and departments.

3.4.2. Lending Interest Rate

Interest rate is considered as the cost of borrowing or the price of a loan (Akanga, 2016). It is either the cash flow to compensate the risk of default and expenses of MFIs or the profit generator (ibid).

Legally, the interest rate for private lending must be accepted by all the parties but must not exceed 150% of the official interest rate frame announced by the SBV for the corresponding type of loan (Civil Code No.33/2005/QH11). However, interest rate cap on micro-loan in Vietnam is a controversial issue.

Started in 2002 (Decision No.546) and then in 2014 (Circular No.08), the SBV promulgated a series of legal frameworks on interest rates for credit organizations to deal with their clients. Currently, the short-term lending interest rate cap is 7% for commercial banks while MFIs and PCFs are accepted to lend at least one percent higher, 8% per annum.

It means the maximum interest rate is 12% annum according to the Civil Code mentioned above.

Although the policy frame is public, interest rates are unclear in practice. Many MFIs have charged their clients at rates that are not entirely in line with the SBV guidelines. The annual lending interest rate that CEP offers to its clients is about 20% (Le, 2016) whereas TYM charges an annual interest rate of around 13.5% for microloans. Another example is the case of PCF in Vinh Chanh, An Giang Province that has charged the borrowers at 19% per annum. Many other unlicensed MFIs have charged at rates of 2.78%/month (about 33.36%/year) and also added some other fees that grow up the real cost. The applied interest rates are higher than those of corporate lending because of higher operating costs. The loan costs applying to clients of MFIs are, however, lower than that of financial corporations and much lower than that of other types in the informal market.

The setting of high-interest rates for microloans are to guarantee for the sustainability of the MFIs. Providing many small loans to low income, no collateral and high-risk customers and small-enterprises who are unbanked is much more expensive than loans to the wealthy individuals and large enterprises. Unlike the charities, MFIs then require significant sources of income to cover operation costs. For example, the popular and traditional delivery method is the doorstep service to reach more poor households in mountainous and remote areas. It is good for the clients but very costly for the institutions. Moreover, the information system that collects the financial status and creditworthiness of customers for the microfinance system has not been set up, making the risk of lending activities even higher. Then, high-interest rates are a means for MFIs to offset these problems partially.

The average interest rate for microloans was 35% in 2004 and dropped to 27% in 2011 in East Asia and the Pacific (IFC, 2014). Positively, MFIs in Vietnam are charging their clients at a low price. However, the current applied rules for interest rate ceiling might

not enough to cover the sustainable operation of Vietnamese MFIs. Many MFIs reported an "infrequently breakeven operation" even the average interest rate at 20% per annum. Moreover, the highly subsidized microcredit rates of formal banks who are receiving strong financial supports from the Government might cause an uneven playing field regarding interest rates. It not only negatively affects the outreach but also creates the disincentive for various institutions and especially investors to join in the microfinance market in Vietnam. If they have to be pushed to lower the interest rates, the ability to attain financial sustainability becomes weak. Microfinance is then not a lucrative investment.

3.4.3. Tax Policy

Depending on the operation objectives, each type of MFIs in Vietnam is considerably different concerning the taxable status and tax rate. As a rule, non-profit MFIs are exempt from tax. The operation of these MFIs mainly aims at addressing market deficits in providing financial services to the poor at low-interest rates.

As shown in Table 3.5, the Law explicitly stipulates that VBSP, social funds, charity funds, and NMPs are exempt from taxes and other payments to the state budget. PCFs and other types of microfinance are eligible for a preferential tax rate of 20%. It is the distinction between microfinance service providers in the non-profit case. As mentioned above, the concept of the types of MFIs such as political organizations, socio-political organizations, NGOs is still unclear, which can lead to the arbitrariness of public servants in identifying and determining which organizations are taxable. On the other hand, while the actual goal is profitable, the operation of social funds and microfinance programs that may not strictly in line with the registered non-profit goal cause a risk of evading taxes with their legal "cover."

There were proposals in 2016 and 2017 to amend the tax rate applicable to MFIs from 20% to 17% as financial support. The Circular of the Ministry of Finance in June 2019 on the fiscal regime for MFIs, however, is still a general guide and has not yet applied this

reduction in implementation. Delays in consideration of priorities for MFIs keep many organizations still trying to qualify for tax exemptions to alleviate some of the organization's financial pressure. Improving the quality of operations and personnel is also somewhat affected by these financial decisions.

MFIs	Objective	Taxable Status	Tax Rate	Legal Framework
VBSP	Nonprofit	Tax-exempt	0%	Decision No.131/2002/QD- TTg
VBARD, commercial banks	For-profit	Taxable	25%	Law on Enterprise Income Tax (No.14/2008/QH12)
PCFs	Mutual support among members For-profit (minor purpose)	Preferential	20%	Law on Enterprise Income Tax (No.14/2008/QH12)
Social Funds Charity Funds	Nonprofit	Tax-exempt	0%	Law on Enterprise Income Tax (No.14/2008/QH12) Decree No.148/2007/ND- CP
NMPs	Nonprofit	Tax-exempt	0%	Law on Enterprise Income Tax (No.14/2008/QH12)
Agricultural Cooperatives Other licensed MFIs	Nonprofit: social objective For-profit: financial sustainability	Taxable	20%	Decree No.122/2011/ND- CP Law on Enterprise Income Tax (No.14/2008/QH12)

 Table 3.5: Tax Rates for MFIs in Vietnam

Source: Synthesis by the author

Furthermore, organizations receiving funds to implement microfinance projects for humanitarian and social purposes might make fraudulent use of the tax exemption policy to shield other incomes from taxation if the inspection does not implement. The tax policies do not come with binding and monitoring the proper implementation of "social mission" can create an injustice among taxable MFIs. At the same time, the poor are unlikely to benefit indirectly from this tax incentive because they may still be subject to high-interest rates. Furthermore, when the organizations are not truly "non-profit", and they are not willing to lend to high-risk customers, the targeted groups have no access to credit.

March 2005	January 2009	March 2012
	Decree No.124/2008/ND- CP: Preferential tax rate for PCFs is 20%, for general credit institutions, including MFIs is 25%	CP: Preferential tax rate is 20% for both PCFs and
Ų	\Downarrow	Ų
28%	25%	20%

 Table 3.6: The Legal Formation of Tax Policy for MFIs in Vietnam

Source: Synthesis by the author

Tax policy for MFIs in Vietnam is still not stable, and the application of ordinary tax rates for organizations operating for profit, and non-profit purposes has been causing many inadequacies. As shown in Table 3.6, since the Decree No.28 issued in March 2005 to December 2008, the tax rate applicable to licensed MFIs was 28%. From January 2009 to February 2012, the rate decreased to 25% that was the same as commercial lending but higher than that applied to PCFs. Because non-convertible MFIs are tax-exempt, this policy was not encouraging the transformation of un-licensed MFIs as well as new entries into the formal microfinance market. Since March 2012, the tax rate dropped to 20% for both MFIs and PCFs. Nevertheless, there is not yet clear organizational guidance for non-profit MFIs wishing to transform with appropriate tax policy.

For the indigent clients of MFIs, the tax policy also affects them through the interest rate mechanism. Lenders will seek to adjust interest rates or fees to achieve expected returns.

Thus, the tax burden turns to the borrowers, especially the most miserable people who have less access to different sources of capital.

3.4.4. Institutional Transformation

3.4.4.1. Benefits

Globally, the development trend for semi-formal/un-licensed MFIs is the transformation into formal MFIs to provide more diversified financial products and services. According to the World Bank, this is the transformation from the dependence on funding sources, and government and donor subsidies into the self-sustainability which is operating on a commercial basis and entering the formal financial market (Figure 3.9). The development of microfinance institutions in Vietnam is also not out of this trend.

Figure 3.9: Process to Become Formal MFIs



Source: Ledgerwood, 2006

In Vietnam, this change of un-licensed MFIs is the transformation of social funds, charity funds, NMPs, microfinance schemes into formal institutions operated under the CIL, licensed and governed by the SBV. Without subsidization, the transformed MFIs then will be players in the financial market operating on a commercial basis to compete for clients and resources. They are supposed to transform to "avoid a two-tier system⁴⁸ with different standards" in roles and responsibilities.

The advantage when transferring into formal MFIs is that the institutions are expected to be more developed.

(i) Informal institutions cannot borrow money independently as their legal status is incomplete. Converted into formal MFIs, they are stamped as a miniature bank in the

⁴⁸ 1st tier: the SBV; 2nd tier: specialized commercial banks and non-financial institutions

national financial banking system with its seal and charter operating within the law frameworks. They have the right to raise capital by borrowing from domestic and international organizations⁴⁹ as well as legally receive voluntary savings from the public and members without limitation. The SBV will guarantee for the repayment of these loans by foreign currency. Since then, they can design flexible products to expand operations and reach more and more clients.

- (ii) The formalization will force organizations to be more professional and commercialized. The activities of present Vietnamese semi-formal MFIs are administered and implemented by MOs at all levels. They are often the staff from VWU and Confederation of Labor who work part-time, and thus the specialization is not high. The transformation requires institutions to have their executive management and qualified staff who are knowledgeable about microfinance activities.
- (iii) Being informal institutions, MFIs do not comply with any standards that might limit their development. The transformation will benefit them to be more favorable.
 Operating under the supervision and management of the SBV and State authorities should be more efficient, safer and become a real financial intermediary. Furthermore, the ADB has funded a program to provide technical assistance for the formalization of MFIs.
- (iv) The formal institutions have many opportunities to expand cooperation with domestic and foreign partners. A microfinance scheme can be a commercial entity at the beginning that is easier for the donors to reach. In Vietnam, having a license of operation acts as an excellent administrative tool and a security asset in consolidating the cooperative, investment and business relations of MFIs.

⁴⁹ For example, the Micro-Lending Fund (MLF) of the World Bank, managed by Bank for Investment and Development of Vietnam (BIDV), and Credit Support Fund of the VWU

3.4.4.2. Challenges

Among countries in the region and the world (Table 3.7), Peru is the country with the largest number of transitioned MFIs, followed by India, Cambodia, Bolivia, Uganda, and the Philippines. According to the CGAP, from 1997 through 2007, there were 84 successful MFIs in 35 countries transforming into forms of financial intermediation such as formal MFIs, commercial banks, and finance companies. On average each country has about 2 to 4 transitional organizations in this period.

Table 3.7: Typical Examples Statistics on the Number of Successfully Transformed

MFIs				
Period	Country	Number of transitioned MFIs		
1997 - 2001	Peru	10		
2000 - 2007	India	7		
2000 - 2004	Cambodia	6		
1992 - 1999	Bolivia	5		
2004 - 2005	Uganda	4		
1997 - 2002	Philippines	4		

Source: CGAP

This process in Vietnam is relatively slow with no semi-formal microfinance switching between 1997 and 2007. Along with the main legal framework was issued in 2005 and then in 2010, the ADB assisted a non-refundable aid of US\$1.5 million to support the transformation since 2010 (Banking Magazine of Vietnam, October 2012). However, the majority of remaining semi-formal MFIs in Vietnam is hesitant and disinterest in the transition.

Despite a significant number of microfinance schemes, there are only four semiformal MFIs have successfully transitioned so far including TYM, M7MFI, Thanh Hoa MFI, and CEP. With a large number of branches, TYM' outstanding loan is about VND 1,056 billion with more than 56,000 borrowers up to the end of June 2017. Furthermore, it has mobilized a saving deposit of over VND 756 billion, equivalent to approximately 70% of outstanding loans. Despite these achievements, TYM just became the formal MFI in 2010 and was the first MFI obtaining the license. Another organization is CEP having more than 25 years of establishment and development. For the year 2016, their outstanding loan is about VND 2,700 billion accounting for nearly 94% of total assets. The total number of borrowers is over 316,000 poor and middle-income workers. About 13% of them escape from the poverty and leave the credit program every year. However, it was just awarded the license at the end of 2017.

Legally, all microfinance programs and projects must submit or complete the license application when the total assets reach VND 75 billion or more. In reality, many unlicensed MFIs are falling under this category. However, this rule seems not realistic in case the organizations do not mobilize voluntary savings, nor do they intend to mobilize deposits from the public. They mainly depend on compulsory savings, aids, and equity for the operation. Then, the conversion becomes expensive and rigid whereas the current model is still efficient and lucrative. Only large organizations following market orientation are in need to be licensed to receive voluntary savings according to the provision of the CIL 2010.

By and large, formal MFIs might face more challenges than informal ones in implementing present regulations like taxes and interest rates. There are some major difficulties, listed below.

(i) Higher reporting costs and tax burden: The beginning phase for transformation requires a high expense for the negotiation and operation, and the legal capital for the transformation is at least US\$250,000⁵⁰. It becomes an onerous requirement for microfinance schemes as many of them are just projects without a long-term vision and clear plan.

⁵⁰ Circular No.03/2018/TT-NHNN

- (ii) A constraining and lacking a regulatory framework to govern the operations: While semi-formal MFIs in Vietnam have a very multi-faceted model, the regulations on procedures, implementation, and requirements of transforming into a formal MFI following the SBV regulations are relatively complex and ambiguous, especially at the provincial and district level. The Prime Minister is supposed to issue clear guidance regarding the official transformation of un-licensed MFIs, but this has not yet taken place. Thus, the majority of semi-formal MFIs still does not understand and fully meet the legal requirements of the transition. For example, TYM took two years for waiting and repeatedly completing the required paperwork.
- (iii) Ownership and governance issues: The control over the MFIs will change after the transformation. Official MFIs will regulate as new entities of credit institutions that operate independently with the new mission, healthy vision, and different organizational culture. Despite established and managed by the MOs, the parent MOs like VWU have to re-define their role in the new institutions after the transition. The MFI must have a professional structure and organizational structure rather than a system of part-time employees working in both the WU and microfinance works. On the other hand, INGOs having the special program on microfinance are necessary to have the official connection with a MO as the intermediary step in transformation step. They also need to find a domestic organization (Circular No.02, 2008). After getting the formal license, they become an MFI under the form of multimember limited liability companies. Consequently, the role of INGOs is now secondary. This context is not feasible when looking for partners to do business and then to have to share ownership and management.
- (iv) Uncertainties surrounding the process's outcomes: Being independent requires a long and comprehensive preparation of resources and overall performance. The

institutions need to be well-prepared regarding operational and management adjustments, technologies, and human capital. For example, finding well-qualified staff and board members is challenging in the competitive labor market where the commercial players already entered. In order to build a professional governance and management structure, it is time-consuming and costly in terms of organization, training, and recruitment. Last but not least, as difficulties may arise when joining in the financial market competition, institutional capacity such as the ability to grasp and promote opportunities, accounting system to survive is essential.

(v) Difficulties in mobilizing operation capital: Serving the poor and near-poor communities, MFIs always need more capital to grow the number of clients. However, it seems the most significant difficulty of many institutions. Compared to the long history of state-led banks and commercial banks, most semi-formal MFIs are young and new organizations, so they do not have much experience in mobilizing external financial resources. Derived from programs or projects funded by NGOs, their funding is generally not substantial, whereas donor agencies' financial support is gradually decreasing as Vietnam is no longer among the poorest countries as before. Moreover, many local authorities are not well aware of the nature of microfinance activities, and thus there are not enough attention and support in mobilizing savings of organizations. Additionally, saving ability of poor and nearpoor population as well as of rural people is limited that might limit the savings source for the operation of MFIs.

The facts above show the possibility that many organizations might put an end to the operation of microfinance activities in Vietnam if they do not apply for the transformation. Consequently, the opportunities for access to financial services for the poor can significantly reduce.

3.4.5. Impact of Regulatory Innovation

Although microfinance achievements are affected by many kinds of factors, this part focuses on the side of regulatory policies. It identifies the existing regulatory gaps in the microfinance sector to recommend good regulation changes in Vietnam. In other words, it examines how implemented regulations perform main regulation objectives by applying Regulatory Impact Analysis (RIA), particularly Multi-Criteria Analysis (MCA).

Guided by the OECD in 2008, RIA is a fundamental tool to examine the likely effect of new and already existing regulations. "*Effective regulation is regulation that achieves the policy objective that led to it being made. Efficient regulation achieves these objectives at the lowest total cost – to all members of society*" (OECD, 2008, p.4). As considering the potential economic impact, inappropriate regulations can restrain national growth by creating obstacles in doing business and creating a negative environment. An RIA process includes (1) Identification of the problem \rightarrow (2) Identification of objective for solving the problem \rightarrow (3) Identification of alternatives for obtaining the objective \rightarrow (4) Identification of impacts \rightarrow (5) Decision of the best alternative.

Among decision-making support tools of RIA, MCA was chosen because this method allows for a systematic and explicit assessment, even when "*the impact of a policy cannot be quantified*" (OECD, 2008, p.15). It is an aggregate of all concepts: objectives (goals), criteria (attributes), and criterion scores. Based on the suggested criterion, the weighted scores of each of available policy option are added together and then determine which one best meet the objectives. The outputs of MCA can be used to decide the most preferred policy alternative. In other words, it provides a list of appropriate policies for further review or makes recommendations on which policies should be replaced/removed. (Manual on regulatory impact assessment – Short version for the public service use in the Republic of Armenia).

Microfinance is a part of the overall financial system. However, the fundamental principles for its regulatory framework are likely different depending on institution and client characteristics. The mission that protecting customers and stabilizing financial markets has to be focused. Table 3.8 sets out the main points to consider when developing policies to align with the main goals of microfinance in ensuring social goals (mainly, poverty reduction) and financial sustainability. These aims are to improve the safety of both clients and providers. A specific rule should direct to at least one goal.

Table 3.9 reveals how significant indicators were improved by regulation policies' innovation to obtain microfinance objectives in Vietnam. At first, implemented regulation changes (see Table 3.4) were matched with regulation objectives (see Table 3.8). Next, MCA is applied to determine the impact of regulatory objectives. The criterion framework is the result of microfinance performance indicators in the Microfinance Consensus Guidelines (Ledgerwood, 1998; Schreiner, 2002; Cull et al., 2009) and available data sources. It is supposed that any indicators' achievement is partly affected by regulation changes in that year and later. The linkages are signed by "**•**" in Table 3.9.

Objective	Main reason for including objective	Type and scope of regulation	Examples of regulation measures
A - Promote safe and sound financial service providers	Information problems in deposit and lending business and negative externalities affect safety and soundness of providers	e 1	Capital, liquidity, and provisioning requirements; management and governance standards
B - Guard against systemic risk	Risk of contagion exists among providers caused by negative externalities both among deposit- taking institutions and – to a lesser extent – among credit – only institutions	Systemic regulation: mostly for deposit-taking institutions	Lender of last resort; deposit insurance; payment system oversight
C - Establish a competitive market	Regulation can establish barriers to entry, and providers might benefit from market power when operating in unsaturated markets	considering market power in	
D - Protect consumers	Negative consequences of market failures may hurt loan and savings clients		
E - Improve access	Transaction costs, information problems, and externalities, as well as regulation itself, is all reasons for lack of access	Enabling regulation for all types of financial institutions	Removal of existing barriers; adjusting norms to suit microfinance

Table 3.8: Regulation Objectives for Microfinance

Source: The New Microfinance Handbook - A Financial Market System Perspective, Joanna Ledgerwood with Julie Earne and Candace Nelson, 2013, p.417.

Year*	1995	1997	2000	2002	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2017	2018
Related Regulation Objectives**	Ε	E	E	C A	D	С		А	A C	А	A C	А	А	В	A D	E	А	А
Borrowers									•									
Depositors																		
AOB																		
LLR																		
ROA																		
ROE																		
СРВ																		
OE																		

 Table 3.9: Linkage between Regulation Objectives and Key Indicators

Source: Author's Analysis based on Table 3.3, Table 3.6, and data from the MIX

Note: * Year of Regulation Important Changes

** Regulation Objectives for Microfinance: A - Promote safe and sound financial service providers, B - Guard against systemic risk,

C - Establish a competitive market, D - Protect consumers, E - Improve access

Criterion includes: Borrowers: Number of active Borrowers, Depositors: Number of Depositors, AOB: Average Outstanding Balance,

LLR: Loan Loss Rate, ROA: Return on Assets, ROE: Return on Equity, CPB: Cost per Borrowers, OE: Operating Expense

The number of active borrowers was rising from 2002 to 2010, so this increase can be the result of regulatory policy changes. In this period, the GoV passed many rules focusing on expanding the microfinance market and empowering providers, which are objective A and C. Similarly, the regulatory took attention on regulation objective A that improved the Loan Loss Rate during 2007-2011. In general, the regulation policy is much concentration on Objective A that results in good fact for only the breadth of outreach and the quality of micro-loan products as shown in Table 3.9.

Although the microfinance sector in Vietnam has developed significantly, most of the primary indicators are very fluctuating. The average outstanding balance (Depth of outreach) gradually increases that means microfinance regulation changes do not work well on this criterion. In other words, organizations tend to offer larger loans, which are usually only suited to the needs of middle and high-income customers. For example, that of ACE rose from US\$61 in 2009 to US\$228 in 2015, that of Dariu increased from US\$76 in 2007 to US\$318 in 2016⁵². Moreover, ROA and ROE, significant financial indicators, did not have a good improvement. They achieved a little increase in 2007 and 2012 but were decreasing in general, as also discussed in chapter V. Two last criterions in Table 3.9, cost per borrower and operating expense, are increasing year by year, so it seems the regulations do not have a good effect.

The regulatory framework has gradually completed, but it might not serve the sector in the right way. There are policy and regulatory inadequacy in microfinance sector that does not meet the needs for sustainable growth. Although focusing on the operation of MFIs (Objective A and C), the overall regulation has created obstacles for the sector growth. Additionally, the legislation should pay more attention to protecting the benefit of customers (Objective D) as well as expanding the microfinance market that enables more people to

⁵² Based on data from the MIX

access (Objective E). It needs appropriate regulation to improve the microfinance sector in Vietnam.

3.5. Conclusion

From the analysis and findings, the characteristics of Vietnamese microfinance market are generally similar to other developing countries and can be explained by three main points: (i) targeted clients include needy individuals, low-income households, and micro-enterprises; (ii) sizes of loans and savings are relatively small; (iii) group lending consisting of members who have something in common such as socio-economic or politic background is the popular method to mitigate default.

Since 2005, the microfinance sector in Vietnam recorded an impressive development regarding the number of clients and the establishment of new MFIs. The GoV has built a series of regulations to regulate the microfinance sector as well as put in place a good governance system, especially in response to the entry into WTO. It is expected that MFIs in the country will become more professional toward market-oriented, and eventually, the disadvantaged groups will benefit from these positive changes.

Today, the sector has passed about 30 years of development but it is considered a young industry. The total asset of all Vietnam MFIs accounts for just 2% of that of the banking sector (VMWG, 2015). Many of them are mainly providing small credit based on the financial support from the government and donations and using the work force and network of mass organizations to deliver the services. Only nine MFIs are formal in the market to be able to provide all microfinance services legally. MFIs in Vietnam have been forced to apply for official operation under the supervision of the SBV rather than supported to facilitate operations to serve more poor people and attract investors.

The SBV and Government bodies heavily involve the microfinance sector with a high proportion of subsidized credit. A number of MFIs are at stake because their role as a microfinance-as-charity mission and their operation can grow only with the proportionate increase in subsidies or donations from governmental organizations, international agencies, and supranational organizations. On the other hand, many NGOs and some donors have criticized the subsidized operation of the formal sector which has the massive outreach but distorting the microfinance market with below-market rate loans. NMPs and other microfinance schemes are also receiving funds with subsidized interests from international donors and using the broad network of MOs to provide microfinance services, but it is not worth considering in comparison with the formal providers. Consequently, this subsidization system has precluded a fair and competitive environment for all players in the microfinance market. It makes investing in microfinance market in Vietnam not a lucrative investment. It is also the reason why there are very few for-profit MFIs in the country.

Another significant point is the segmentation and overlapping of the microfinance market in Vietnam. The GoV has encouraged the operation of small microfinance schemes and allowed best practices to reach a large number of clients. However, there is a small number of providers has a vital market share or can make a strong influence on the sector development. The VBSP and VBARD are still the market leaders, even in the low-end part. Additionally, many microfinance schemes have operated in small and medium scale affiliated with MOs to take advantage of their nationwide network, governance experience, and legal cover, and limit the overhead costs like personnel, office, and utilities. Working under the same "umbrellas" might weaken the capability of MFIs and also a reason of the market overlapping. However, MOs might prefer this mechanism as it strengthens their position in the market competition and predominantly serves their members.

Regarding the diversification, the range of provided products of many microfinance programs and projects is limited with credit and compulsory savings. Other services such as micro-insurance, micro-leasing, and non-financial services are still weak. Legal corridors do not support MFIs accessing to capital to expand services as well as applying for proper operation in microfinance market. Furthermore, there is a lack of the channel to reach the poor effectively, and doorstep method is prevalent. Mobile banking services and the settingup of subsidiaries in this sector are limited. While most of the semiformal MFIs have the offices in big cities such as Hanoi and Ho Chi Minh city, their activities often operate in poor communes/provinces and remote areas where the majority of populations are poor. The setting-up of new branches and outlets in the operational regions might be one of their difficulties as the procedure is strict and unclear. As a result, the operational costs of microfinance activities are quite high and can hinder the ability of MFIs to be financially sustainable.

Moreover, a client can obtain loans from many lending institutions because of the distinct lack of linkage among MFIs. Mighty MOs have the most influential role in loan distribution and extension to the targeted population, but this heavy involvement might not address the market need and therefore, allocate credit at the suboptimal level. Moreover, corruption is ever-present on all levels in developing countries like Vietnam. Therefore, a management method going from bottom to top, from inside to outside seems to be consistent with the current characteristics and limitations of the microfinance sector in Vietnam. Although the sector passed the infancy stage, there is much room for future development with the legal framework in place.

Future studies will try to collect more relevant data over a more extended period to better understand the impact of policy reform. The present study will further expand upon the economic and financial stability of Vietnamese microfinance institutions by applying quantitative analyses in the following chapter to make recommendations more accurate. Microfinance is not a new field, but issues of how to have a suitable policy, system, and governance to ensure dual social and economic objectives are not easy for any organization or country.

CHAPTER IV

QUANTITATIVE EVALUATION OF THE SUSTAINABILITY OF MICROFINANCE INSTITUTIONS IN VIETNAM

4.1. Introduction

MFIs are a particular type of organization that has two opposing goals: profit and society. They have been established to improve the socio-economic wellbeing, as well as set up income-generating activities of the deprived class of society and poor communities who are often ignored by the conventional banking system.

Scientists and practitioners alike have been focusing on the long-term sustainability of MFIs. As Schreiner (2000) asserted that unsustainable MFIs would disappear soon so that they can only help the poor in the present but cannot help them in the long run. An unsustainable MFIs is better not to exist (Nyamsogoro, 2010). Although Vietnam has achieved remarkable results in the field of microfinance, challenges remain. According to the National Microfinance Strategy up to 2020, product development, financial sustainability, and outreach expansion are three high prioritized objectives to promote microfinance in the country.

In addition to the assessments and analysis of the policy and operating environment discussed in chapter 3, efficiency, productivity, and financial indicators also play essential roles in creating the long-term sustainability of Vietnamese MFIs. Financial sustainability, as well as the effectiveness of MFIs, are considered to be conditions and measures of an organization's achievements based on international standards (Hollis & Sweetman, 1998). It is essential to understand that the effectiveness of MFIs is not how they achieved but how well they used and managed their resources. Balkenhol (2007), Nieto et al. (2007), Haq et al. (2010), Widiarto et al. (2015), and Emrouznejad and Yang (2018) focused on assessing an organization's efficient use of resources to produce the desired output.

There have been many studies and reports mentioning the success of Vietnam microfinance in expanding the scope of financial services and examining the impact on alleviating poverty and social improvement. However, the methodologies were limited to traditional financial ratio analysis and descriptive analysis. These most common methodologies and issues are hitherto not fit at capturing microfinance performance recently. Furthermore, empirical and quantitative studies on sustainability that can remain the operational goals of MFIs in the long run, are scanty. Sustainability is not only about profitability but also about the ability to sustain long-term operations. Therefore, extensive research studying both the efficiency, productivity, and financial sustainability of Vietnamese MFIs were chosen as the main objectives of this chapter.

This chapter aims to create models for estimating the sustainability aspects of the microfinance sector in Vietnam based on financial and operational ratios. More particularly, it intends to analyze the MFIs from diverse dimensions, including overall efficiency, financial efficiency, social efficiency, productivity, and financial sustainability. The proposed models may provide benchmarking tools to help decision-making about development strategy. Moreover, the evaluation of the relative position of each MFI enables a relative orientation regarding the operation. The analytical results of this chapter also construct a good premise for proposals related to the microfinance industry in Vietnam.

To the best of the author's survey, a two-stage analysis setting for evaluating the efficiency of Vietnamese MFIs is lacking. Then, the chapter decomposed the analysis into different efficiency scores, and, for the first time, the super efficiency score was calculated to rank the efficient MFIs and reveal the most efficient institutions that would be good examples for others. Besides, the Tobit regression model helps identify factors that affect the social and financial efficiency of MFIs. In the next step, the calculation of the Malmquist productivity index of MFIs in a given period showed the cause of the increase/decrease in productivity. Is it, for example, because of management efficiency or technological

innovation? Last but certainly not least, this chapter found critical determinants in maintaining financial sustainability for MFIs in Vietnam to ensure long-term survival and contribute to poverty reduction.

4.2. Literature Review

The microfinance sector has proven rapid growth across the world. Its profitability potential is attracting not only donors but also social investors to join in the industry. The recent participation of commercial banks and private sectors has made MFIs continuously strive to make better use of resources and improve operational efficiency. Efficient and sustainable MFIs will attract investors more than others. At the same time, efforts to improve operational efficiency in order to call for investment from outside may help reduce lending rates as well as operating costs effectively. On the other hand, investors who always care about their profits will be hesitant to contribute capital to MFIs which the starting point is to serve the poor and low-income communities. Therefore, external capital contributors often appreciate the sustainability as well as the efficiency in using the long-term capital of the organizations (Reynolds & Thompson, 2002; Barres et al., 2005; Kipesha, 2013).

To follow the social goal, the sustainability of MFIs is crucial in the long term, and efficiency has been the primary tool in reaching sustainability. As Kipesha (2013) mentioned, efficiency is to make better use of available resources to optimize the output for organizations/businesses. It indicates how well the MFIs utilize the inputs to produce or deliver the optimal outputs. Hence, evaluating the effectiveness of MFIs is essential to have long-term development strategies not only for the organization itself but also for the microfinance industry.

According to Gutierrez-Nieto, Serrano-Cinca, & Mar Molinero (2008), efficient MFIs are supposed to reach dual goals that are coined as 'double-bottom line' objectives, social and financial line. In other words, the operation of MFIs must both ensure comprehensive service delivery to target customers while ensuring financial autonomy (Azad et al., 2015). The 1st goal emphasizes the social mission to ease poverty or the level which microfinance services help the marginalized communities to get out of the poverty trap. For the 2nd goal, organizations need to generate enough revenue to cover operating costs without being dependent on external financing (Ahmad, 2011). Similarly, efficient MFIs through providing financial (and non-financial) services can generate income streams to run well while retaining the social mission on poverty alleviation. They have strategies to allocate resources, such as assets and human resources, appropriately to achieve the desired goals, such as the number of customers and outstanding loans (Bassem, 2008, 2014).

An exact evaluation of efficiency will help institutions in managing uncovered constraints and barriers around achievements and profitability. However, the theoretical basis and methodology of performance analysis for MFIs, especially in poor and developing areas, is still very limited. In comparison to the popular in researching the efficiency of conventional financial institutions such as commercial banks, that of MFIs are less frequently studied because of the late emergence of this sector. There is a distinct need to fill the remaining gaps, considering the importance and contribution of MFIs.

Therefore, the efficiency study of MFIs, the main content of this chapter, is of much worth. The result is supposed to help policymakers reduce excessive inputs, which are inefficient and then to increase the capacity of MFIs. The main issues are how we should compare among MFIs and to what extent MFIs should focus on improving their efficiency. Moreover, the main determinants affecting the efficiency or inefficiency of an MFI should be focused on.

On the other hand, the financial sustainability of MFIs is a total of four aspects, namely financial, economic, organizational, and customer (Woller et al., 1999). Here, the researchers point out that the loan default rate is also a factor of financial sustainability, as the lower the rate, the more MFIs will be able to support future loans. Bogan, Johnson, and Mhlanga (2007), and Kindle (2012) point out that Operation Self-Sufficient (OSS), and Financial Sefl-

Sufficient (FSS) are crucial stages for the sustainability of MFIs. Ayayi and Sene (2010) view financial sustainability as the ability that MFIs can secure their services with revenue as well as create a margin to reinvest in the development of the organization. In other words, financial sustainability is when MFIs can maintain its operations well without external subsidies.

4.3. Empirical Studies

The efficiency issues have attracted researchers up to the present date, and its literature has developed all the time. Measuring the efficiency level of institutions can be done by using *(i)* parametric methods (Stochastic Frontier Analysis-SFA, Thick Frontier Analysis-TFA, Distribution Free Approach-DFA), and *(ii)* non-parametric methods (Free Disposal Hull analysis-FDH, Data Envelopment Analysis-DEA) (Berger & Humphrey, 1997; Mokhtar et al., 2006; Gutiérrez-Nieto et al., 2008). Among them, SFA and DEA are popular.

Many studies have preferred the non-parametric DEA to the parametric SFA due to some limitations of SFA. SFA incorporates stochastic error or measurement errors; therefore, it permits hypothetical testing. Nevertheless, it imposes an explicit functional form and distribution assumption on the error term. Kablan (2012) points out that although it requires a big dataset, this method does not have the function of homogenizing variables with monetary differences in its model, while DEA can do this.

DEA is a favourite methodology in efficiency research, using in almost every field such as technology, agriculture, finance, banking, and production. It can be applied even though the conventional cost and profit function cannot be justified. In other words, DEA relates to the use of linear programming without any assumption of distribution. DEA allows to include multiple input and output variables with different measurement units, so it is very suitable to measure the social and financial efficiency of MFIs in the same model. Moreover, the size needed to run the model does not require big data; the analysis can process in the condition that data of the whole industry is lacking. Because DEA assumes that all institutions have used similar resources and operate in a similar environment, Bankenhol and Hudon (2011) stated that the efficiency comparison would best perform within a single country. A limitation of DEA is that it ignores the measurement errors.

Across the countries, many studies have been done to measure the efficiency of MFIs with different methods and variables (Table 4.1). Based on data from 44 microfinance programs in Vietnam, Nghiem, H.S et al. (2006) conducted research applied both qualitative and quantitative techniques, particularly DEA analysis, to assess their effectiveness. Most institutions are relatively efficient with the average technical efficiency score at 76%. The results from SFA and PLP techniques showed the scores at 69% and 78% respectively. Nieto et al. (2006) applied DEA and multivariate analysis of DEA results to find differences in the efficiency level when combining different input and output variables of 30 MFIs in Latin America. He also pointed out that the type of organization, NGOs or non-NGOs, gave different results in performance.

Based on the data of 2004 from 39 MFIs from Asia ((including two Vietnam MFIs, CEP and TYM), Africa, and Latin America, Haq et al. (2010) have shown that different approaches resulted in different outcomes of cost-efficiency. That is, the production approach is suitable for non-governmental MFIs, and the intermediation approach suit bank-MFIs. Tahir and Tahrim (2013) used DEA to investigate the effectiveness of MFIs from Vietnam, Laos, Indonesia, Cambodia, and the Philippines during 2008-2011. The results indicate that the technical efficiency level had improved from 69.7% in 2008 to 75.4% in 2011. The reason for inefficiency is due to the reduced efficiency of operating and financial expenses.

Author, Year	Places	Methodology
Nghiem et al., 2006	Vietnam	DEA and SFA
Nieto et al., 2006	Latin America	DEA
Qayyum and Ahmad, 2006	India	DEA
Nieto et al., 2007	India	DEA
Nieto et al., 2007	Latin America	DEA
Bassem, 2008	Mediterranean zone	DEA
Qayyum & Ahmad, 2008	South Asia	DEA
Sedzro & Keita, 2009	WAEMU	DEA
Hassan & Sanchez, 2009	Latin America, MENA, South Asia	DEA
Haq. et al., 2010	Africa, Asia, Latin America	DEA
Pal, 2010	India	DEA
Ahmad, 2011	Pakistan	DEA
Islam et al., 2011	Bangladesh	DEA
Kipesha, 2012	East Africa	DEA
Abdelkader et al. 2012	Middle East and North Africa	DEA
Servin et al., 2012	Latin America	SFA
Jayamaha, 2012	Sri Lanka	DEA
Kipesha, 2013	Tanzania	DEA
Singh et al., 2013	India	DEA
Tahir & Tahrim, 2013	ASEAN countries	DEA
Lebovics et al., 2016	Vietnam, for the year 2011	DEA
Abdulai and Tewari, 2016	Sub-Sahara Africa countries	SFA
Azad et al., 2016	Bangladesh	DEA
Wijesiri et al., 2017		DEA

Table 4.1: Main Empirical Efficiency Studies on MFIs

Source: Author's survey

Besides the overview results provided by the DEA, the Malmquist index also plays a vital role in finding the cause of the inefficiency. Azad et al. (2016) pointed out that, although the 2012 data of major 15 MFIs in Bangladesh produced relatively high-efficiency results, the government still needs more specific interventions to protect customers' rights to maintain the long-term performance of these organizations. In another case, the inefficiency of MFIs in Bangladesh for rice farming programs is due to family size and wealth, and land scatters (Islam et al., 2011). On the other hand, Wijesiri et al. (2017) applied a two-step model of DEA to examine the impact of age and size of organizations on the effectiveness of MFIs. He found that older and larger MFIs are higher performance regarding financial objective but tend to be inefficient in achieving the social mission.

Regarding financial sustainability, using cross-sectional data including 300 MFIs from Africa, Asia, and South America, Bogan et al. (2007) had shown that capital structure and assets are important for institutions' performance. Moreover, grants ratio in assets was negatively correlated with the sustainability of MFIs. Ayayi and Sene (2010), using data from 101 countries in 1998-2006, showed that Portfolio at Risk (PAR> 30days) was the most influential factor for financial sustainability. Besides, high-interest rates to increase profits and proper cost management were also essential factors.

Different organizations in different socio-political and economic conditions will depend on different factors to maintain financial sustainability. Therefore, finding these factors for MFIs in each country also plays an essential role in the long-term development of the microfinance sector. Rai (2012), based on data of 26 MFIs in India and Bangladesh, found the determinants of the organization's financial sustainability. As a result, Capital / Asset Ratio, Operating Expenditure / Loan Portfolio, PAR> 30days, number of active borrowers, percentage of female borrowers, borrowers per staff member, the yield on the portfolio, and the age are essential. In another study of 14 MFIs in Ethiopia between 2002-2010, breadth and depth of outreach, cost per borrower, and the dependency ratio played an important part in the organization's financial sustainability (Kindle, 2012). Malhotra (2018) used the balanced panel dataset of 30 Indian MFIs between 2005-2013. He had shown that lower levels of Operating Expense to Assets, PAR> 30days, Capital Asset Ratio, and OSS had significant implications for the financial sustainability.

4.4. Methodology

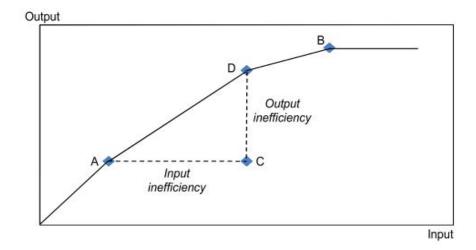
4.4.1. Data Envelopment Analysis

The analyses applied two-steps method to construct the efficiency models for evaluating MFIs in Vietnam. The first step was an application of DEA to differentiate efficient MFIs from relatively inefficient MFIs. DEA technique is well suited in efficiency calculation as it accepts for multivariate analysis. The small number of MFIs in Vietnam is also a motivation to select DEA as it is relatively less data-demanding as compared to other methods such as SFA. The second step employed Tobit regression, a nonlinear model, to find out the determinants which affect the efficiency scores.

Three American scientists, A. Charnes, WWCooper, and E. Rhodes, first introduced the methodology called Data Envelopment Analysis (DEA) in 1978. Since then, much research has applied DEA to evaluate the efficiency in many areas. It is non-parametric and a simple approach to extract the relative efficiency of production units. Using linear programming, this method compares the set of inputs or outputs of the selected objects, here called Decision Making Units (DMUs).

DEA provides the best-practice efficient production frontier by combining efficient DMUs and "enveloping" those that are less efficient, which use higher costs for the same output or produce less output for the same input. According to Fuller and Crawford (2011), effective boundaries mark the points that reach the lowest input level for one output unit or the highest output level for one input unit. Figure 4.1, for example, demonstrates the DEA method for one input and one output.





Source: Hribernik et al., 2013, p.5

The DEA model is based on the best score to evaluate other DMUs. For example, in the image above, DMUs on the frontier (A, D, and B) are the most efficient. These units use minimum resources (inputs) to achieve the desired results (outputs) or produce the most optimal results (outputs) based on given resources (inputs). The DMU C performing below the efficiency frontier is inefficient. The distance from the production frontier stands for the extent of the inefficiency of an individual DMU.

Charnes-Cooper-Rhodes (CCR) and Banker-Charnes-Cooper (BCC) are standard models of efficiency in basic DEA. The main difference between them is the treatment of the nature of return-to-scale (Akram, 2016). CCR is the initial basic frontier model. This optimization model assumes that there is no correlation between operating range and efficiency level. Accordingly, the DMUs will operate under the principle of Constant Return-to-Scale (CRS). However, this is not true to reality, and CCR can be biased downward by scale inefficiency. In 1984, Banker et al. proposed a CCR extension model, BCC. Accordingly, the evaluation of efficiency is not related to scaling efficiency and is associated with the Variable Return-to-Scale (VRS) principle.

Finding out the sources of inefficiency is essential. The question to be asked here is: is the inefficiency of the DMUs due to themselves or the surrounding adverse conditions?

Therefore, a focus on the CCR and BBC scores might be helpful. More detail on the BBC and CCR model concerning efficiency scores will be specified in the following section.

There are three standard efficiency scores in DEA: overall/global Technical Efficiency (OTE/TE) - the score of CCR model, local/pure Technical Efficiency (PTE) – the score of BCC model, and Scale Efficiency (SE). These scores will help to explore the significant sources of inefficiencies among MFIs.

TE is associated with the achievement of DMUs in maximizing their performance (outputs) based on authorized resources (inputs). There are *k* DMUs using *n* inputs to produce *m* outputs. For each DMU (k = 1,..., k), x_{jk} (j = 1,..., n) and y_{ik} (i = 1,..., m) are symbols of inputs and ouputs, respectively. The following mathematical formulation calculates the efficiency of a DMU (Coelli et al., 2005; Worthington, 2000; Qayyum & Ahmad, 2006).

$$TE = \frac{sum \ of \ weighted \ output}{sum \ of \ weighted \ input} = TE_k = \theta = \frac{\sum_{i=1}^{m} u_i y_{ik}}{\sum_{j=1}^{n} v_j x_{jk}}$$

Where:

 θ : efficiency values

 y_{ik} : the quantity of the output i produced by the DMU^k

 x_{ik} : the quantity of the input j used by the DMU^k

ui, vj: output and input weights

TE_k: Technical Efficiency ratio

The maximum efficiency score of a DMU is 1 or 100% to ensure that:

$$u_i, v_i \ge 0$$

Both CCR and BCC have two versions when considering effective boundaries: Output-Oriented linear programming Model (OOM) and Input-Oriented linear programming Model (IOM). First, an OOM based on the best use of the given resource (input) evaluate the outcome (output) of a DMU. Second, an IOM based on the minimum use of resources (input) achieve the required result (output).

If a DMU has achieved an efficiency score of 1 (100%) in both CCR and BCC models, it is operating most effectively in terms of scale efficiency. If the CCR and BCC scores for a DMU are different, it means that the institution presents a scale inefficiency. For example, if the BCC score is 1 (100%) and the CCR score is less than 1 (<100%), the unit will only work effectively in a small (local) area. At this point, the difference between the two scores will produce SE scores as follows (Cooper et al., 2006):

$$SE = \frac{TE_{CCR}}{TE_{BCC}}$$
 or $TE_{CCR} = TE_{BCC}x SE = PTExSE$

For example, SE <1 (100%): the causes of inefficiency are because of the weak operation mechanism and policies of DMUs or the adverse operating environment or both.

A DMU can be operating under Decreasing Returns to Scale (DRS) or Increasing Return to Scale (IRS). DRS relative to the low level of the input increase compared with that of the output. The IRS refers to an increase in the input rate that higher than that of the output. Then, inputs should be transferred from existing DRS to the IRS to increase the efficiency of resource utilization.

Various computer programs can do the estimation of efficiency scores. In this study, the author used the DEAP 2.1 program for evaluation.

4.4.2. Super Efficiency

The model that ranked the DMUs with the maximum efficiency score (1 or 100%) is Super Efficiency proposed by Andersen and Petersen in 1993. The efficient DMUs herein receive efficiency scores greater than 1 or 100%. Cooper et al. (2007, p.309 to p.321) carefully explained the concept and mathematical formulation of super-efficiency in his DEA book. In Figure 4.2, x_1 and x_2 are inputs to obtain the output y. Minimum input combinations locate on the efficiency frontier connecting DMUs A, B, and C. DMU D is not located on the old frontier because it uses more inputs to generate the same amount of output as other units.

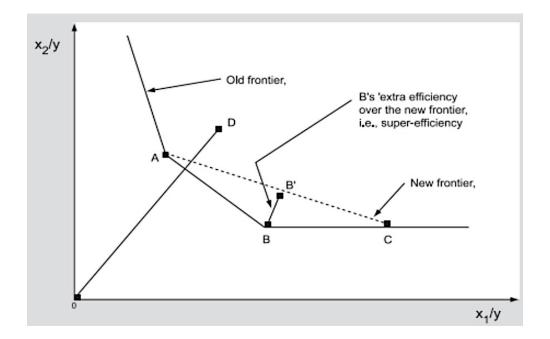


Figure 4.2: Standard and Super Efficiency DEA

Source: Yawe, 2010, p.84

Simply put, further ranking of efficient DMUs is possible by computing efficiency scores over unity. Graphically, DMU B was supposed to be excluded from the old efficient frontier, and thus a new frontier would be plotted including only DMUs A and C. The super efficiency score of DMU B is then calculated by its distance to the new frontier. The 'extra' efficiency symbolizes a permissible addition in its inputs before it was inefficient. As a result, this modification allows for efficient scores to exceed the standard efficient scores. For example, a score of 130% of DMU B means that an increase of inputs by 30% is acceptable to remain efficient (Yawe, 2010).

4.4.3. Malmquist Productivity Index and Its Decomposition

The measurement of productivity change is another significant aspect to consider when dealing with the efficiency and performance of the financial sector. The other aspect of DEA is Malmquist productivity index (MPI) is suitable in this analysis. The application of MPI not only proposes an organizational change in productivity over time but also helps to identify the source of the change.

Compared to other indices such as Fisher and Tornqvist, the MPI based on DEA model is currently the most popular index due to the ability to handle panel data, desirable characteristics, and properties. MPI does not use profit minimization or cost minimization assumptions, so it is a reasonable choice in the case of managers unable or trying to determine the active direction and strategy. Furthermore, this approach enables the decomposition of productivity change.

MPI is a crucial indicator to assess the changes in productivity of DMUs for two consecutive years. The input and output variables in the research period are combined to determine whether the productivity variation is due to technical efficiency change (EC) or technological change (TC). Mathematically, Fare et al. (1994) specify an output-based MPI calculated for sequential time frames, t and t+1, as follows:

$$MPI(y^{t}, x^{t}, y^{t+1}, x^{t+1}) = \left[\frac{D_{0}^{t}(x_{0}^{t+1}, y_{0}^{t+1})}{D_{0}^{t}(x_{0}^{t}, y_{0}^{t})} x \frac{D_{0}^{t+1}(x_{0}^{t+1}, y_{0}^{t+1})}{D_{0}^{t+1}(x_{0}^{t}, y_{0}^{t})}\right]^{1/2}$$

. ...

The above measure is the geometric mean of two Malmquist index during the period (t, t+1). x^t and y^t and (t) stands present the input and output vector for the period t. *Where*:

MPI: Malmquist productivity index

Subscript (t, t + 1): period from t to t+1

Subscript (0): the orientation

D: distance function. Here, the input vector is constant for year t and D shows changes (if any) from year t to year t + 1.

When MPI > 1, it implies productive growth/progress; when MPI < 1, it signifies productivity deterioration/regress; and MPI = 1 refers to a constant.

By rearranging the above equation, MPI includes two components: technical efficiency change (EC), and the technological change (TC) from the year t to the year t+1.

$$MPI = \frac{D_0^{t+1}(x_0^{t+1}, y_0^{t+1})}{D_0^t(x_0^t, y_0^t)} x \left[\frac{D_0^t(x_0^t, y_0^t)}{D_0^{t+1}(x_0^t, y_0^t)} \cdot \frac{D_0^t(x_0^{t+1}, y_0^{t+1})}{D_0^{t+1}(x_0^{t+1}, y_0^{t+1})} \right]^{1/2}$$
$$MPI = \text{EC x TC}$$

The ratio outside the brackets, EC, indicates the magnitude of the efficiency change between two continuous year. In other words, the EC indicates the distance between a DMU and an efficient boundary. When EC> 1, it means that DMU is near the boundary in the year t+1 than that in the year t. It is the result of production technology innovation. Similarly, if TC> 1, DMU is closer to the technological boundary in the year t+1 than that in the year t, and that is technological progress.

The SEC score relates to an increase/decrease in the productivity of a unit when changes in output are the result of changes in input. Accordingly, if the movement within the boundary is in the right direction, the SEC result indicates that the unit is operating within the most convenient range. On the other hand, the PEC scores relate the ability to limit the waste of input to maximize output.

Here, the MPI formula will consist of three components:

$$MPI = PECxSECxTC$$

 $MPI = EC \times TC$

Where:

MPI: change in aggregate productivityEC: change in technical efficiency (under CRS)PEC: change in pure technical efficiency (under VRS)

TC: change in the technological level

SEC: change in efficiency due to scale (under VRS)

According to Grosskopf (2003), a PEC is:

$$PEC = \frac{D_{0VRS}^{t+1}(x_0^{t+1}, y_0^{t+1})}{D_{0VRS}^{t}(x_0^{t}, y_0^{t})}$$

 D_{VRS} :output distance function for VRS

SEC presents the following formulation:

$$SEC = \frac{D_{0CRS}^{t+1}(x_0^{t+1}, y_0^{t+1}) / D_{0VRS}^{t+1}(x_0^{t+1}, y_0^{t+1})}{D_{0CRS}^t(x_0^t, y_0^t) / D_{0VRS}^t(x_0^t, y_0^t)}$$

The PEC is associated with an increase/decrease in the operational and management efficiency of DMUs. The SEC is related to DMUs' improvement/regress based on limiting production costs to achieve required outputs (economics of scale).

4.4.4. Tobit Model

The application of DEA in the first stage identifies whether a specific DMU is efficient or not. There are environmental and institutional determinants affecting or controlling the efficiency scores of MFIs in the first stage. Currently, along with measuring the efficiency of DMUs, many empirical works have examined the determinants of efficiency by employing a second-stage DEA model (i.e., Chang and Chiu, 2006; Gupta et al., 2010; Delis and Papanikolaou, 2009; Wijesiri et al., 2015). The second stage herein regresses the efficiency scores (as dependent variables) obtained from the first stage upon variables regarding institution characteristics and operational environment. The purpose of applying the model is to find out whether there is a relationship between efficiency scores and categorical variables. The selected and identified variables can affect the effectiveness of DMUs.

According to Hoff (2007), the efficiency score variables are continuous in the interval [0,1] or [0%, 100%] with un-negative likelihood. Thus, they are left-censored at 0 and right-

censored at 1. An application of Ordinary Least Square (traditional regression method) on an equation having either censored dependent variables or corner solution outcomes can cause biased results or inconsistent estimator. Then, the Tobit regression model is suggested as the best choice to evaluate relationships between variables.

James Tobin first initiated the Tobit model in 1958. In the DEA method, this model is the second step, after calculating the efficiency scores, to find the relationship between dependent variables (DEA scores) and independent variables (explanation variables). The equation for observation (MFI) *i* is presented as (Wooldridge, 2002, p517-520):

$$y_i^* = \beta' x_i + \varepsilon_i$$

Where:

 $\varepsilon_i \sim N(0, \sigma^2)$, x_i , and β : explanatory variables vectors

- β : unknow parameters
- y_i^* : latent variable

yi: DEA score

$$y_i = \begin{cases} y^* \ if \ y^* > 0\\ 0 \ if \ y^* \le 0 \end{cases}$$

4.4.5. Panel Data Regression Model

Financial Sustainability is a combination of financial efficiency (Financial Self-Sufficiency/FSS) and operational efficiency (Operational Self-Sufficiency / OSS) (Kindle, 2012; Malhotra, 2018). OSS indicates the ability of MFIs to secure operational expenses from operational income. FSS relates to the organizations' ability when it is possible to use the operating income to cover both operational and financial costs. Panel Data Regression Analysis in the study selected dependent and explanatory variables based on the theoretical basis, the appropriateness of the data (i.e. autocorrelation and multicollinearity cause defects in the model), and data collected from MIX market.

The Ordinary Least Square model has the following form (Kinde, 2012):

$$Y_{it} = \alpha + \beta_n X_{it} + \varepsilon_{it}$$

Where:

i=1...N

 Y_{it} : value of dependent variable at time t and for cross section unit i α : individual effect

 β : coefficient

 X_{it} : dependent variables at the time t for cross section unit i

 ε_{it} : error term

4.5. Data and Variable Selection

Since reporting to the global and national database is not obligatory for MFIs, the selection of variables also did purposively on data availability.

The dataset in this chapter is the result of the selection from the database sources of the VMWG, the MIX market, and the author's fieldworks. MIX Market is an organization providing abundant data sources about global microfinance to increase financial inclusion and promote transparency in this field. Currently, MIX market aggregates data of more than 2000 MFIs worldwide with over 90 different parameters related to profile, scale, performance index, and financial index. It is a reliable and vital database source for researchers and practitioners in assessing microfinance operations across the country, the region, and the world. Also, data sources from the MIX market include audited financial statements, information and figures of MFIs from many countries. The reliability and accuracy of this data source are high, and many studies in the microfinance field have used it.

Though the database of this study has the limitation of not capturing all MFIs, it is

worth noting that this is hitherto the best available and updated data on the microfinance sector in Vietnam. Furthermore, intending to provide comprehensive conclusions by employing the number of variables as much as possible, the author also calculated some indicators based on the available database and financial formulations including operating cost, indicators of benefit to the poorest, and interest and fee income.

In order to create scientific and practical testing models, the process of selecting the input, output, dependent and explanatory variables was carried out according to the following procedures. First, the variables must match the content to be checked. Second, variables must not have a strong linear relationship. Third, data is available. Last, the selections of variables for the analyses resulted from the experts' opinions and previous studies.

4.5.1. DEA Analysis

The sample size covered 27 major MFIs in Vietnam, mainly NMPs and social funds, for the year 2014. Regarding the operation of MFIs, intermediation approach and production approach are popular (Athanassopoulos AD., 1997; Fethi & Pasiouras, 2010).

Under the intermediation approach, an MFI is a *financial intermediary* between savers and borrowers that collect deposits and offer loans to the indigent clients to make a profit. They are more or less similar to traditional banks. Although this approach is appropriate for the organization's profitability and sustainability goals, its application in microfinance is limited. One of main reasons is the unavailability of required data. In this approach, inputs can include deposits, acquired loans, employees' expenses, operating cost and total assets. Output variables can be loans placed (gross loan portfolio/GLP), and income.

On the other hand, the production approach studies MFIs as *production units* and is suitable for the social objective. This approach dominated the measure of MFI technical efficiency (Bassem, 2008, 2012; Ahmad, 2011), i.e., the more stable the unit, the more

efficient it is operating. It is more often selected for most MFIs as it focuses on granting loans, rather than mobilizing deposits. Indeed, many MFIs are not accepted to collect deposits (i.e., NMPs in Vietnam), which is a significant component of the intermediation approach. In this approach, total assets, capital, operating cost, and personnel/credit officers (workforce) are typical examples of inputs to produce standard outputs including the number of borrowers and savers (Bassem, 2008, Armendáriz & Morduch, 2010; Haq et al., 2010).

Both production and intermediation approaches are concerned in this study to provide a comprehensive result. The standard inputs are total assets, number of loan officers, and operating cost. A production model would suggest the inclusion of the first and second inputs, while the remaining one is in common with an intermediation model. Four selected output variables include gross loan portfolio, interest and fee income, the indicator of benefit to poorest, and the number of women borrowers. Two first variables are consistent with intermediation models whereas the others are relevant to a production orientation. The exhaustive list of all variables is from the Microfinance Consensus Guidelines prescribed by CGAP⁵³ (Nieto et al., 2007). Table 4.2 gives mnemonics, definitions and measurement units of all selected indicators.

⁵³ The largest consortium of donor agencies

Mnemonics	Variable Name (Usage in literature)	Definition	Unit
Input			
Α	Total Assets (Nieto et al. 2009; Lebovics et al., 2016)	"Total of all net asset accounts for the net of all contra-asset accounts, such as the loan-loss allowance and accumulated depreciation" (CGAP, 2003, p.7), measures MFI size. Larger size institutions might benefit from scale economies and are more likely to be cost efficient in operations.	USD
С	(Total) Operating Cost/Operating Expense (Berger & Humphrey; Pastor, 1999; Worthington, 1998; Nieto et al., 2009, Azad, 2015)	"All expense from an operation, includes personnel expense and administrative expense but excludes financial expense and loan-loss provision expense." (Sector, 2002, p.7)	USD
0	Number of Loan Officers (Jansson et al., 2003; Berger & Humphrey, 1991; Leon, 1999; Tortosa-Ausina, 2002; Nieto et al., 2005)	"The number of personnel whose primary activity is to manage a portion of the gross loan portfolio directly. A loan officer is a staff member of record who is directly responsible for arranging and monitoring client loans." (CGAP, 2003, p.10)	Number
Output			
L	Gross Loan Portfolio (Berger & Humphrey, 1991; Leon, 1999; Tortosa-Ausina, 2002; Worthington, 1998; Nieto et al., 2005)	"Outstanding principal balance of all of an MFI's outstanding loans, including current, delinquent and restructured loans, but not loans that have been written off. It does not include interest receivable." (CGAP, 2003, p.6)	USD
Р	Indicator of Benefit to the Poorest (Nieto et al., 2009; Khan & Sulaiman, 2012; Lebovics et al., 2016)	See the explanation below	Number
W	Number of Women Borrowers (Nieto et al., 2009; Khan & Sulaiman, 2012; Lebovics et al., 2016)	"The number of individuals who currently has an outstanding loan balance with the MFI or are primarily responsible for repaying any portion of the gross loan portfolio." (CGAP, 2003, p.9) Borrowers who are female. This varibale is to measure the breadth of outreach.	Number
Ι	Interest and Fee Income (Nieto et al., 2005)	All income on loans made to clients.	USD

Table 4.2: Selected Input and Output Variables

Source: Author's synthesis based on Literature review, the World Bank, and CGAP

Additionally, the selected inputs and outputs refer to double orientation objectives of MFIs, outreach, and sustainability. The social goal of MFIs is to help the poor, especially poor women, improve their lives, escape poverty, and empower them through the provision of financial and non-financial services. That is why this analysis selects two output variables, the number of women borrowers⁵⁴ and indicator to benefit the poorest as measures of outreach. On the other hand, financial sustainability was concerned through the two proxies, operating cost, and interest and fee income. It implies that MFIs which fail to collect enough income and cover the operational cost cannot be viable in the long run. Although the income is essential, an MFI cannot survive for long if the income is collected at high labor cost. Hence, the number of loan officers is selected as another input.

Undeniably, fighting against poverty is the first and foremost aim of microfinance. The problem here is which method or formula is accurate to quantify the poverty level. *The number of people receiving micro-loans* still cannot answer this question comprehensively⁵⁵. The MIX suggested an indicator to measure the commitment that an MFI had been working for poverty alleviation called *the average loan balance per borrower* (in US dollar). The smaller value of this number indicates the deeper reach of the MFI. This figure is the result of the division between (total) outstanding loans (numerator) and the number of active borrowers (denominator). According to Cull et al., (2009) and Galema et al. (2012), the average loan balance per borrower is appropriate when considering the depth of operations of MFIs and the level of escaping the poverty of customers. Routinely, donor organization uses this standard to measure social performance (CGAP, 2009).

However, Nieto et al. (2009) pointed out that this average value is not satisfactory to measure the outreach in poverty reduction because of monetary units. Specifically, the same amount of money will have different meanings depending on the socio-economic conditions

⁵⁴ In Vietnam, microfinance has empowered women as one of the primary missions by strengthening their contribution to families, economy's roles; so, they can be more active in the development process. Then, poverty not only refers to the economic concept but also links to social condition and exercise of power.
⁵⁵ An MFI that has the high number of borrowers may lend only to the better-off individuals/ groups of the society.

of each country and the average per capita income. Keeping on this way, they suggested the *Indicator to Benefit of Poorest* (P_i) or *Poverty Index*, as below:

$$K = \frac{ALB}{pcGNI}$$

$$P_i = 1 - \frac{K_i - Min(K)}{Max(K) - Min(K)}$$

 P_i ranges between 0 and 1. The value near 1 means that the MFI has reached the poorest in the society.

Where:

K: the ratio of the average loan balance per borrower of MFIs

pcGNI: per capita Gross National Income⁵⁶;

ALB: Average loan balance per borrower

In addition to overall efficiency, evaluating social and financial efficiency used different input-output specifications as shown in Table 4.3. Specification concept in DEA is useful to evaluate the impact of different input variables on output variables. The estimation of various specifications helps to see the various aspects of assessing the effectiveness of MFIs. Then, the organization's strengths and limitations can be identified. The first part of the specification (i.e., ACO) includes input variables while the second part (i.e., WP) refers to the output variables.

⁵⁶ pcGNI of Vietnam in 2014 is US\$1,900. Retrieved 5 June, 2018; from: <u>http://data.worldbank.org/country/vietnam</u>

Mnemonics	Efficiency specifications	Input variables	Output variables	
ACO-WPLI	Overall efficiency	A, C, O	W, P, L, I	
ACO-WP	Overall social efficiency	A, C, O	W, P	
ACO-W	Social efficiency	A, C, O	W	
ACO-P	Social efficiency	A, C, O	Р	
ACO-LI	Overall financial efficiency	A, C, O	L, I	
ACO-L	Financial efficiency	A, C, O	L	
ACO-I	Financial efficiency	A, C, O	Ι	

Table 4.3: DEA Specifications

Source: Author

4.5.2. Tobit Model

The application of the Tobit model after calculating the efficiency scores helps identify the key factors that influence these results. Based on previous researches and literature review, different explanatory variables were selected to clarify the efficiency sources to assist the new and existing MFIs improving their efficiency. The variables selected in the model are not inputs or outputs, but they are elements surrounding the organization's activities considered by decision-makers. Determining how these variables affecting efficiency the level of MFIs is crucial in designing appropriate performance improvement strategies.

The formulation is specified as:

$$Y = f (A, Age, DER, B, SO, ROA, OSS, PAR30, SP)$$
$$Y_i^* = \alpha + \beta_1 A + \beta_2 Age + \beta_3 DER + \beta_4 B + \beta_5 SO + \beta_6 ROA + \beta_7 OSS + \beta_8 PAR30$$
$$+ \beta_9 SP + \varepsilon$$

Where:

 Y_i^* : dependent variables locate within the interval [0,1]. They are efficiency scores

(TE, PTE, SE)

The explanatory variables are specified in Table 4.4 as follows:

Mnemonic	Description	Hypothesis (Expected Effect Sign)
Α	Total Assets (amount in USD)	+
Age	Age of the MFI measured by the number of years since the establishment	+
DER	Debt-equity ratio (in percentage) - Ratio of total debt to total equity	-
В	Number of active borrowers	+/-
SO	Scope of operation, dummy = 1 if MFI has operated in big cities (Hanoi, Ho Chi Minh city) or more than one area/ region, otherwise = 0	+
ROA	Return on Asset (in percentage)	+
OSS	Operational Self Sufficiency (in percentage)	+
PAR30	Portfolio at risk over 30 days (in percentage)	-
SP	Staff productivity (the number of borrowers per loan officer)	+

	Table 4.4:	Description	of Variables al	ong with Ex	pected Sign
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Source: Author

Total assets (A) (size) and Age (experience) of MFIs are important proxies. Regarding quantitative results, the correlation coefficients of these two variables with the dependent variable are expected to be positive (+). Large and/or matured MFIs having more resources at their disposal and more experience on microfinance activities may perform better than smaller and/or new (young) MFIs.

The Debt – Equity ratio (DER) is closely tied to the organization's ability to manage debt risk, so the expected correlation coefficient is negative (-). The higher the coefficient,

the lower the management of MFIs. In other words, these MFIs are heavily dependent on debt to run their operations.

The number of active borrowers (B) can be correlated (+) or uncorrelated (-) with the efficiency scores. Having many ccustomers with high payment capacity will help the organizations achieve cash flows regularly to compensate for their activities and ensure long-term operational efficiency. However, microfinance customers have their own characteristics such as low income and living in remote and difficult geographical areas. Then, serving these groups may increase the operational costs resulting in efficiency reduction.

Scope of Operation (SO) is the qualitative variable. MFIs in Vietnam locating in big cities or more than one area are expected to perform more efficient than those in only one area with low population density. The dummy variable is counted to confirm such an argument.

Expectations for Operational Self Sufficiency (OSS) and efficiency score are positively correlated (+). Accordingly, the MFIs reach OSS meaning that they can guarantee operating and management expenses with operating income. The result of this achievement will bring about the efficiency of the organizations.

Similar to the case of OSS, the ROA is also expected to be positively correlated (+) with the efficiency score. The higher the ratio of ROA is, the more massive the values of assets or equities are.

The loan portfolio is a significant indicator, and its measurement representative is the Portfolio at Risk over 30 days (PAR> 30days/PAR30). The PAR30 value is associated with the risk of overdue debts (here are 30 days), which can affect the current and future MFIs' income streams and service provision. In the case of MFIs facing a low portfolio quality, there are many solutions proposed, such as releasing debts recorded or strengthening the evaluation of disbursement of new loans. Lastly, the factor Staff Productivity (SP) relates to the human resources MFIs in achieving goals. Assuming the model is, the higher the SP is associated with the higher the efficiency scores.

Variable	Unit	MEAN	MEDIAN	MIN	MAX
Total Assets	USD	278,026,442	1,100,000	27,978	6,379,050,000
Operating Cost	USD	12,160,437.45	175,097	37,723.97	249,421,301.8
Number of Loan Officers	Number	105	12	2	1316
Gross loan portfolio	USD	253,243,026	1,049,017	27,554	6,001,490,599
Indicator of Benefit to the Poorest	Number	0.75	0.81	0	1
Number of Women Borrowers	Number	178,619	4,575	130	4,189,000
Interest and Fee income	USD	22,128,518	247,568	4,905.6	474,117,757.3

Table 4.5: Descriptive Statistics for Variables in the Year 2014

Source: Author's calculation

Table 4.5 gives the values of the mean, median, minimum and maximum range of the inputs and outputs considered under DEA method. Considering the value of the variables, the MEAN is the average value of the total, the MEDIAN is the value in the middle of the value range of the variables, the MIN is the smallest value, and the MAX is the largest value.

4.5.3. Malmquist Productivity Index

The MPI analysis evaluates the efficiency changes in major 24 MFIs between 2013 and 2015. There are five variables, including three inputs and two outputs. Table 4.2 (section 4.5.1) shows their detailed definitions. Furthermore, Table 4.6 depicts descriptive statistics of indicator values, including their mean, minimum, and maximum.

Year		2013	2014	2015
Inputs				
Total Asset (USD)	Max	6,129,734,396	6,379,050,000	6,612,232,646
	Min	159,840.03	225,756.88	252,117.83
	Average	290,198,326	312,692,489.4	325,373,374.8
Operating Cost (USD)	Max	138,531,997	249,421,301.8	247,958,724.2
	Min	17,240.175	37,723.97	40,649.42
	Average	7,500,049.7	12,160,437.45	12,270,499.63
Loan Officers (Number)	Max	1,316	1,316	3,481
	Min	2	2	5
	Average	101	117	210
Outputs				
Gross Loan Portfolio (USD)	Max	5,773,396,452	6,001,490,599	6,434,685,129
	Min	153,600.02	200,070.73	228,714
	Average	258,735,620	286,932,641.3	306,339,787.1
Active Borrowers (Number)	Max	7,100,000	7,100,000	6,863,035
	Min	755	775	757
	Average	317,973	321,387	314,110

 Table 4.6: Descriptive Statistics for Variable in MPI Analysis (2013-2015)

Source: Author's calculation

4.5.4. Panel Data Regression Analysis

Based on the relevant studies that have been done, there is no general answer regarding factors affecting the financial sustainability of MFIs. This conclusion makes the analysis in this section important for Vietnamese MFIs in determining which factors are necessary for their financial sustainability.

Through the collection and selection process, data of 16 Vietnamese MFIs over four years (2012-2015) are qualified for this regression analysis. Here, eight independent variables were selected, and the model used is as follows:

$$ROA_{it} = \alpha + \beta_1 * CAR_{it} + \beta_2 * OSS_{it} + \beta_3 * CB_{it} + \beta_4 * GLP_{it} + \beta_5 * (PAR > 30)_{it}$$
$$+ \beta_6 * FEA_{it} + \beta_7 * AEA_{it} + \beta_8 * FRA_{it} + \varepsilon_{it}$$

Where:

ROA: Return on Assets (dependent variables)

CAR: Capital Asset Ratio

OSS: Operational Self Sufficiency

CB: Cost per Borrower

GLP: Gross Loan Portfolio

PAR>30: Portfolio at Risk greater than 30 days

FEA: Financial Expense/Assets

AEA: Administrative Expense/Assets

FRA: Financial Revenue/Assets

 β_i : coefficients – impact of independent variables (explanatory variables) on the dependent variable (ROA)

 ε_{it} : error term

Table 4.7 provides descriptive statistics of indicator values, including their mean, minimum, and maximum.

Variable	MEAN	MIN	MAX
ROA	.0379359	2157	.1258
CAR	.37385	.0393	.8614
OSS	1.294488	.3889	2.1057
СВ	28.60938	8	53
GLP	3.79e+08	151282	6.43e+09
PAR>30	.0047688	0	.0717
FEA	.0297563	.0002	.073
AEA	.0398359	.0004	.1595
FRA	.1856937	.0692	.2651

 Table 4.7: Descriptive Statistics for Variable in Panel Data Regression Analysis

Source: Author's calculation

4.6. Empirical Results and Analysis

4.6.1. Overall Efficiency Scores Suggesting High Performance

TE, PTE, and SE scores for selected MFIs were calculated and reported in Table 4.8. The calculation is for the overall efficiency specification ACO-WPLI. The results reveal some critical features.

There are more MFIs which show pure technical efficiency than technical efficiency. Specifically, 17 out of 27 MFIs are on the technical efficiency frontier under CCR model (TE = 1.00). Whereas, 22 MFIs are turning out to be the most efficient institutions under BBC model (PTE = 1.00). Most of them are NGOs providing microfinance services, except for VBSP. The MFIs remaining efficient under both models such as FWD, ACE, and M7MFI are good at using the inputs to generate lots of loans to targeted clients.

Furthermore, the DEA results found out high average efficiency scores (MEAN) at 96%, 97%, and 99% for TE, PTE, and SE, respectively, under IOM. It implies that inputs can be decreased by 3% without decreasing outputs. On the other hand, the MEAN values are 96%, 97%, and 98% for TE, PTE, and SE, respectively under OOM. Similarly, current resources (inputs) can increase outputs by 3%.

The last line of Table 4.8 shows that the number of MFIs with maximum efficiency points (TE, PTE, SE) at 1 or 100% are 17, 22, and 18, respectively, under both IOM and OOM. Nine MFIs are operating on scale inefficiency while there are five technically efficient MFIs. Overall, overall inefficiency is mostly due to scale inefficiency rather than technical issues, such as management factors.

Table 4.8 also point out that the percentage of MFIs experienced IRS and DRS is about 3.7% and 26%, respectively, under both IOM and OOM model. The MFIs showing IRS, including WDF and C.B., are increasing efficiency by scale. An increase in resources such as assets and the number of loan officers is essential to generate more output (number of women clients, income). Meanwhile, the higher number of MFIs showing DRS, such as TYM and BTWU, are fundamentally large institutions in total assets and the number of credit staff compared to remaining MFIs. These organizations need to focus on making good use of existing resources to ensure efficiency and minimize the use of input resources.

On the other hand, 19 out of 27 MFIs are in the area of the optimal scale, or other words, they do not change their effect on the current scale (CRS). Meaning that most of the production scale (service provision) of MFIs in Vietnam is still relatively small, and they need to improve productivity (output) by changing the production scale effectively.

131

1 F 2 E 3 M7 4 W 5 M 6 CA 7 T.J 8 B 9 A 10 CV 11 M7 12 A 13 F 14 3F 15 W 16 T	WIFI WD OBP 7STU WV	Status NGO NGO	TE 1.00	PTE	SE	RTS	TE	DTD	~ ~	
2 E 3 M7 4 W 5 M 6 CA 7 T.J 8 B 9 A 10 CV 11 M7 12 A 13 F 14 3F 15 W 16 T	OBP 7STU WV	NGO		1.00		I II D	I Ľ	PTE	SE	RTS
3 M7 4 V 5 M 6 CA 7 T.I 8 B 9 A 10 CV 11 M7 12 A 13 F 14 3F 15 W 16 T	7STU WV			1.00	1.00	CRS	1.00	1.00	1.00	CRS
4 V 5 M 6 CA 7 T.I. 8 B 9 A 10 CV 11 MT 12 A 13 F 14 3F 15 W 16 T	WV	NCO	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
5 M 6 CA 7 T.I. 8 B 9 A 10 CV 11 M1 12 A 13 F 14 3F 15 W 16 T		NGO	0.98	0.98	0.998	DRS	0.98	0.98	0.997	DRS
6 CA 7 T.J. 8 B 9 A 10 CV 11 MC 12 A 13 F 14 3F 15 W 16 T	(0) (NGO	0.89	0.90	0.989	DRS	0.89	0.90	0.986	DRS
7 T.1 8 B 9 A 10 CV 11 MT 12 A 13 F 14 3F 15 W 16 T	10M	SF	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
8 B 9 A 10 CV 11 MC 12 A 13 F 14 3F 15 W 16 T	AFPE	NGO	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
9 A 10 CV 11 M ² 12 A 13 F 14 3F 15 W 16 T	HOA	NBFI	0.98	1.00	0.976	DRS	0.98	1.00	0.976	DRS
10 CV 11 MT 12 A 13 F 14 3F 15 W 16 T	BTV	NGO	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
11 MT 12 A 13 F 14 3F 15 W 16 T	A.P	Other	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
12 A 13 F 14 3F 15 W 16 T	WED	NGO	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
13 F 14 3F 15 W 16 T	7MFI	NBFI	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
14 3I 15 W 16 T	ACE	NGO	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
15 W 16 T	PPC	NGO	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
16 T	PAD	SF	0.54	0.54	0.991	CRS	0.54	0.62	0.869	CRS
	VDF	NGO	0.99	0.99	1.00	CRS	0.99	0.99	1.00	IRS
17 SI	ΓYM	Other	0.92	1.00	0.918	DRS	0.92	1.00	0.918	DRS
	EDA	NGO	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
18 BT	TWU	NGO	0.86	1.00	0.858	DRS	0.86	1.00	0.858	DRS
19 M	17NP	NGO	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
20 V	'BSP	Bank	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
21 0	C.B	SF	0.85	0.86	0.983	IRS	0.85	0.86	0.987	CRS
22 D	Dariu	NGO	0.97	1.00	0.965	DRS	0.97	1.00	0.965	DRS
23 M	7CDI	NGO	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
24 CV	WCD	NGO	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
25 0	CEP	NGO	0.99	1.00	0.996	DRS	0.99	1.00	0.996	DRS
26 C	Co.B	CU	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
27 M	/I&D	Other	1.00	1.00	1.00	CRS	1.00	1.00	1.00	CRS
MEAN			0.96	0.97	0.99		0.96	0.97	0.98	
Summar	rv		= 1: 17	= 1: 22	= 1: 18	CRS: 19	= 1: 17	= 1: 22	= 1: 18	CRS: 19

 Table 4.8: DEA Efficiency Score and Composition of Production Frontier

Source: Author's calculation

Notes: CU: Credit Union/Cooperatives; NBFI: Non-Bank Financial Institutions; SF: Social Fund

Table 4.9 presents the frequency distribution of DEA results. The variation in an efficiency level is not much. Regarding overall technical efficiency, 85.19% MFIs achieved scores over 90%. The figures of PTE are 88.89% under both models. Similarly, the percentage of MFIs having SE above 90% was 96.30% and 92.59% under IOM and OOM, respectively. A few institutions are showing the scores under 70%.

			_	-				-				
T. 60° o ° o ro o ro		IOM				OOM						
Efficiency	TE	%	PTE	%	SE	%	TE	%	PTE	%	SE	%
<0.5	0	0	0	0	0	0	0	0	0	0	0	0
0.51-0.6	1	3.70	1	3.70	0	0	1	3.70	0	0	0	0
0.61-0.7	0	0	0	0	0	0	0	0	1	3.70	0	0
0.71-0.8	0	0	0	0	0	0	0	0	0	0	0	0
0.81-0.9	3	11.11	2	7.41	1	3.70	3	11.11	2	7.41	2	7.41
0.91-1	23	85.19	24	88.89	26	96.30	23	85.19	24	88.89	25	92.59
Total	27	100	27	100	27	100	27	100	27	100	27	100
Min	0.54		0.54		0.86		0.54		0.62		0.86	
Max	1.00		1.00		1.00		1.00		1.00		1.00	
Mean	0.96		0.97		0.99		0.96		0.98		0.98	
SD (%)	9.50		9.24		3.12		9.50		7.82		3.86	

 Table 4.9: Frequency Distribution of Efficiency Results

Source: Author's calculation

4.6.2. Specifications Showing Significant Difference between Social and Financial Performance

Table 4.10 reveals significant points when comparing among specific efficiency scores. The average efficiency for overall financial performance, ACO-LI, is high at 92.8%; however, the average score is lower under the specification ACO-L at 89.1%, and the specification ACO-I at 83.7%. In terms of social aspects, the average efficiency score (ACO-WP) is much lower at 54.9%. The average scores for ACO-P and ACO-W are only 19.6% and 50.3%, respectively, showing that MFIs in Vietnam are better at promoting women empowerment than at fighting poverty.

		Soci	ial Efficier	ncy	Fina	ncial Effici	iency
No.	MFIs	ACO-WP	ACO-P	ACO-W	ACO- LI	ACO-L	ACO-I
1	FWD	0.591	0.391	0.431	1.000	0.974	0.956
2	DBP	0.358	0.182	0.286	1.000	0.909	1.000
3	M7STU	0.408	0.159	0.394	0.974	0.964	0.902
4	WV	0.306	0.040	0.306	0.891	0.889	0.755
5	MOM	1.000	0.061	1.000	0.993	0.985	0.934
6	CAFPE	0.759	0.240	0.701	1.000	1.000	1.000
7	T.HOA	0.381	0.036	0.381	0.975	0.955	0.864
8	BTV	0.574	0.242	0.546	0.916	0.833	0.914
9	A.P	1.000	0.938	0.418	0.968	0.894	0.912
10	CWED	1.000	0.212	1.000	0.477	0.452	0.429
11	M7MFI	0.234	0.027	0.234	1.000	0.862	1.000
12	ACE	0.400	0.135	0.400	1.000	0.952	1.000
13	PPC	0.248	0.109	0.220	1.000	1.000	0.888
14	3PAD	0.309	0.271	0.147	0.533	0.533	0.269
15	WDF	0.439	0.224	0.360	0.996	0.996	0.632
16	TYM	0.410	0.007	0.410	0.897	0.812	0.897
17	SEDA	0.396	0.074	0.395	1.000	0.996	1.000
18	BTWU	0.479	0.098	0.479	0.821	0.803	0.745
19	M7NP	1.000	0.129	1.000	1.000	1.000	0.884
20	VBSP	1.000	0.000	1.000	1.000	1.000	1.000
21	C.B	0.071	0.000	0.071	0.847	0.847	0.208
22	Dariu	0.457	0.051	0.457	0.933	0.860	0.920
23	M7CDI	1.000	0.335	1.000	0.868	0.868	0.571
24	CWCD	0.500	0.337	0.452	0.981	0.911	0.937
25	CEP	0.497	0.005	0.497	0.996	0.995	0.974
26	Co.B	0.004	0.003	0.002	1.000	0.754	1.000
27	M&D	1.000	1.000	1.000	1.000	1.000	1.000
	Summary	= 1: 7	= 1: 1	= 1: 6	= 11	= 5	= 8
	MEAN	0.549	0.196	0.503	0.928	0.891	0.837

 Table 4.10: Social and Financial Efficiency Score

Source: Author's calculation

The analysis results show a significant difference between the social and financial performance of selected MFIs. 11 MFIs that were financially 100% efficient (ACO-LI), but only seven MFIs reached this score for social efficiency (ACO-WP). Many MFIs achieved a high score for financial performance but got a low social efficiency score. 22 MFIs (about 82%) have financial performance scores lower than those of social performance. A typical example is Co.B, which is entirely financial efficiency (ACO-LI = 100%), but its social efficiency falls to only 0.4% when calculating ACO-WP. This similar situation has appeared in many MFIs such as DBP, ACE, and PPC.

Only two MFIs, VBSP and M&D, are 100% efficient under all six specifications. The efficiency scores of remaining MFIs are flexible. Choosing an example, M7NP is fully efficient under ACO-WP and ACO-LI, implying that the MFI is both social and financial efficiency. However, while the efficiency score is 100% under ACO-W, that for ACE-P is only 12.9%. So, M7NP's social efficiency mainly relies on serving women by providing loans, and the institution itself does not work well on the goal of poverty alleviation. For financial aspect, M7NP is 100% efficient under ACO-L but only 88.4% under ACO-I implying that it is good at lending but not so good at generating income.

Table 4.11 shows Pearson correlation coefficients with the significant level between social specifications and financial specifications. The overall social efficiency, ACO-WP, and the overall financial efficiency, ACO-LR, have a negative correlation (-0.057), but they are not statistically significant.

	ACO-WP	ACO-P	ACO-W	ACO-LI	ACO-L	ACO-I
ACO-WP	1					
ACO-P	0.504	1				
	(0.007)***					
ACO-W	0.928	0.267	1			
	(0.000)***	(0.178)				
ACO-LI	-0.057	0.011	-0.048	1		
	(0.777)	(0.958)	(0.811)			
ACO-L	0.108	0.0504	0.131	0.912	1	
	(0.591)	(0.803)	(0.514)	(0.000)***		
ACO-I	0.106	0.0602	0.115	0.783	0.629	1
	(0.578)	(0.766)	(0.567)	(0.000)***	(0.000)***	

 Table 4.11: Pearson Correlations between Social and Financial Efficiency Scores

Source: Author's calculation

Note: 1%, 5%, and 10% are denoted ***, **, and * to indicate the statistical significance level corresponding to the statistical confidence level at 99%, 95%, and 90%.

Along with overall social efficiency evaluated by the specification ACO-WP, the analysis also assessed each element of social aspects in detail focusing on female customers (W) or poverty (P), and the relationship between these two issues. The results indicate that both ACO-P and ACO-W have a high positive correlation with ACO-WP with statistical significance at 1%. The figures are 0.504 and 0.928, respectively. As a result, the social goal of MFIs in Vietnam is more about empowering women than poverty alleviation. This conclusion is consistent with the high percentage of female clients in Vietnamese MFIs who are mainly members of the Women's Union.

Similarly, the specifications of financial goals include ACO-L, focusing on loan distribution, and ACO-I, focusing on improving profitability. Both ACO-L and ACO-I have a high positive correlation with ACO-LI at the 1% significance level. Based on calculated data, sampled MFIs are focusing on expanding lending (0.912) rather than improving profitability (0.783). Notably, two financial goals are positively correlated (0.629) and

statistically significant (1%). Thus, the enhancement of this goal will be the foundation for the remaining goal, and all bring financial efficiency to the organization.

4.6.3. Decreasing in Overall Productivity

MPI is a vital basis to evaluate the change (gain/loss) in the productivity of MFIs. Its results help identify the cause of the changes, for example, a lack of technology or management inadequacy. In other words, MPI indicates whether the result of improvement is due to a change in technical efficiency or technological efficiency.

Table 4.12 provides results related to MPI. There was a 5.2% increase from 2013 to 2014, with MPI's MEAN reaching 1,052. However, 13 out of 24 organizations saw a dropin productivity when their MPI scores are less than 1. Specifically, VBSP, which is considered the industry leader in the microfinance sector in Vietnam, received the lowest MPI at 0.783.

Generally, the main contribution in the result of average MPI is from the increase of 7.8% in EC. Eight MFIs (33.33%) achieved an improvement due to changes in technical efficiency, with EC> 1. Co.B is a typical example with EC = 2.102. Although Co.B showed a decrease of technological efficiency (TC = 0.849), this MFI overcame it by a technical change to achieve an MPI of 1,784, the highest level among MFIs during 2013-2014. On the other hand, 10 out of 24 MFIs decreased their technical efficiency. It signifies that this group in 2014 had fewer abilities to work at its optimal scale. The remaining MFIs with EC = 1 have no increase or decrease in technical efficiency; mathematically, the distances from the efficient frontier in these two years are the same.

Only ACE, Co.B, SEDA, WV, and CWED achieve PEC> 1, which means there is an internal improvement in the operation and management of these organizations. The notable change of these five organizations, especially Co.B and WV, has helped PEC's MEAN value reach 1,065. The improvements of 6.5% in PEC over the period, that is, operations and management activities, are the source for the achievements in EC. The contribution of EC in MPI and that of PEC in EC suggested that all MFIs were relatively good at transforming as much as outputs from inputs with the constant scale.

The SEC's 1.4% improvement also contributed to the positive results of the average MPI during this period. The analysis found that 12 MFIs have achieved improvement (SEC> 1) due to size change following VRS principles. For MFIs with SEC = 1, they are still operating on a constant scope that they consider optimal during this period.

In the period 2013-2014, only TCs achieved an average of less than 1 (0.980). Notably, 10 MFIs were having a poor value lower than 1 (TC < 1), that means technological regression. Except for WDF (TC=1), the remaining MFIs reached TC> 1, and they had positive technological progress. These organizations produce higher outputs in 2014 than in 2013 based on existing resources and technological improvements.

For the period 2014-2015, there was a decrease in the average productivity of the 24 sampled MFIs (MPI = 0.996). The improvements are negative, and most MFIs do not effectively use their resources (inputs) to achieve optimal performance (outputs). Co.B, M7CDI, and WV experienced a significant decrease in productivity compared to the previous year, while CWED had a substantial productivity gain (MPI increased from 1,381 to 1,697). M7NP and SEDA achieved the lowest positive change, with 0.1%. 15 MFIs dropped their productivity in 2015 due to a decrease in both technical and scale issues (EC and SEC).

Na	MEL		20	013-2014					2014-2015		
No.	MFIs	EC	PEC	SEC	ТС	MPI	EC	PEC	SEC	ТС	MPI
1	ACE	1.124	1.119	1.005	1.001	1.125	0.981	1	0.982	1.019	1
2	A.P	1.018	1	1.018	1.01	1.028	0.992	1	0.992	1.013	1.005
3	BTV	0.951	0.853	1.115	0.937	0.891	1.026	1.021	1.006	1.002	1.028
4	BTWU	0.963	0.963	1.029	1.002	0.965	1.008	1.023	0.986	1.01	1.018
5	CAFPE	1	1	1	0.948	0.948	0.96	1	0.96	0.972	0.933
6	CEP	1.024	1	1.024	1.021	1.045	0.99	1	0.99	0.997	0.987
7	CWCD	0.959	0.976	0.982	0.99	0.949	0.863	1.025	0.842	1.014	0.875
8	Co.B	2.102	2.101	1	0.849	1.784	1	1	1	1.014	1.014
9	Dariu	0.963	0.939	1.026	1.009	0.972	0.933	0.937	0.996	1.007	0.94
10	FWD	0.973	1	0.973	0.986	0.959	1.027	1	1.027	1.025	1.053
11	DBP	0.915	0.916	0.999	1.011	0.925	0.908	0.908	0.999	1.011	0.918
12	M7NP	1	1	1	0.971	0.971	1	1	1	1.001	1.001
13	M7STU	0.969	0.968	1	0.994	0.963	0.961	0.982	0.978	1.026	0.986
14	M7MFI	0.926	0.9	1.028	1.011	0.936	0.993	0.999	0.994	1.008	1.002
15	M7CDI	1	1	1	1.036	1.036	0.924	0.991	0.932	0.897	0.829
16	MOM	1	1	1	0.881	0.881	1	1	1	0.998	0.998
17	PPC	0.999	1	0.999	1.006	1.005	0.985	0.989	0.996	1.012	0.997
18	SEDA	1.031	1.012	1.018	0.999	1.029	0.984	1	0.984	1.018	1.001
19	TYM	0.878	0.855	1.026	1.016	0.892	1.011	1.018	0.993	1.002	1.013
20	T.HOA	1.012	0.985	1.027	1.008	1.019	0.941	0.943	0.998	1.012	0.952
21	VBSP	1	1	1	0.783	0.783	1	1	1	0.621	0.621
22	WDF	1	1	1	1	1	0.998	1	0.998	1.015	1.013
23	WV	1.744	1.732	1.007	1.011	1.763	1.005	1.012	0.994	1.011	1.016
24	CWED	1.32	1.25	1.056	1.046	1.381	1	1	1	1.697	1.697
	MEAN	1.078	1.065	1.014	0.980	1.052	0.979	0.994	0.985	1.017	0.996
S	ummary	>1:8	>1:5	>1: 12	>1:13	>1:10	>1:5	>1:5	>1:2	>1:19	>1:12

 Table 4.12: Malmquist Index and Components during 2013-2015

Source: Author's calculation

Since, for many MFIs, TC > EC, the productivity improvements during this period were strongly dependent on changes in technology. Overall, many MFIs had an excellent strategy to chase for technological improvement. These changes resulted from technology investments in the distribution of financial and non-financial services to target customers. Also, it is associated with improving the level of technology for staff and investing in modern machinery and equipment to enhance the efficiency of operation and management (technical efficiency). Considering the model, during this period, MFIs have invested more in TC index to improve MPI results compared to the previous period.

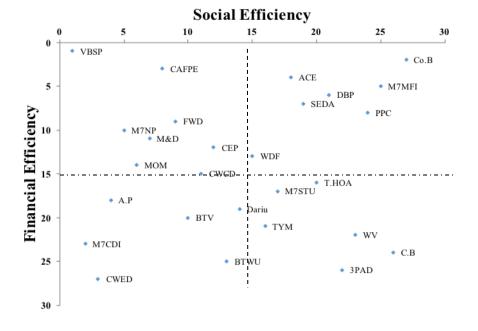
Except for TC, four remaining components registered a negative average change. Although the reduced values are quite close to 1 and the MFIs still operate close to the optimal boundary, this is still an issue to note. The over-focus on promoting technology may affect the strengths that MFIs have achieved in the previous period. For example, the decline of average PEC from 1.065 (2013-2014) to 0.994 (2014-2015) indicates a deterioration in the linkage between inputs and outputs; and then the change in resources may not work for organizational goals. Technically, the performance of MFIs is tending to move away from the efficient frontier.

The results of the empirical analysis also show that very few MFIs have influenced the process as there were no MFIs obtained considerable achievements all the time. Therefore, a super efficiency score should be employed to see the best performers/good references in the microfinance industry that help to draw the benchmark accordingly. It is also the task of the next section.

4.6.4. Four Different Groups of MFIs

The super-efficiency score is the index that helps the ranking of MFIs, especially MFIs which achieve the maximum score (1 or 100%) in terms of overall goals, social goals, and financial goals. The result helps to divide MFIs into four quadrants to express different groups of performance.

Figure 4.3: Comparative Ranking of Social and Financial Efficiency Based on Super



Efficiency Scores

Group 1: The group on the upper left-hand corner is a collection of the leading MFIs in the microfinance sector in Vietnam. The position of this organization is at the top of the chart. The most outstanding unit is the VBSP, with maximum scores in all areas. Similarly, CAFPE, FWD, M7NP, and M&D have performed well with high relative ranks.

Group 2: This group is placed in the upper right corner of the chart. MFIs in group 2 only achieved high results in terms of financial efficiency. Therefore, they could maintain their financial efficiency and improve the social side by allocating smaller loans to more clients or better supporting the economic and social capacity of female clients.

Group 3: This group is placed in the lower-left corner of the chart. In contrast to group 2, group 3 includes MFIs that only achieve high results in social efficiency. For example, BTWU is the typical case in this group that claims to lend only to poor women. Therefore, the MFIs here need to maintain social goals and enhance lending activities as well as strategies to improve profits.

Source: Author's calculation

Group 4: This group is located in the lower right corner of the chart and includes inefficient MFIs. These organizations need to reconsider their current use of resources, organizational models, and management practices to ensure social and financial goals. In bad cases, they may not be able to maintain the organization's existence in the long run.

For specialized organizations like MFIs, developing an appropriate strategy to ensure the two opposing objectives are always challenging. The results of the analysis show that MFIs in Vietnam need to achieve financial goals as a guarantee to reach their social objectives. In other words, MFIs that achieve socially efficient goals will often be financially efficient.

4.6.5. Factors Affecting Efficiency Score

The results of the Tobit model in Table 4.13 indicate that most correlation relationships between dependent variables and independent variables are the same as expected effect signs, except DER and OSS. However, the results of the P-value test just showed statistically significant at some variables. Based on the overall results of the Tobit model in Table 4.13, Table 4.14 clearly shows signs of the relationship between the explanatory variables and the efficiency score.

The variable TA (size) is positively correlated and statistically significant with the social performance scores of MFIs. It suggests that large MFIs are more efficient than small MFIs in obtaining social objective, especially improving women's empowerment. It contributes to the assumption that large MFIs tend to enjoy their current economies of scale.

Similarly, the Age variable also correlates positively with the financial performance scores of MFIs. The statistical significance levels are 5% and 10% for ACO-I and ACO-L, respectively. This result implies that experience leads to high capital/financial resources for MFIs in placing loans and generating income efficiently. Although mature MFIs are expected to achieve social efficiency simultaneously, the results of the Tobit model did not find a link between them.

Variable	ACO-WP	ACO-W	ACO-P	ACO-LI	ACO-L	ACO-I
Tu tu un un t	1.136163	0.6969355	0.9339912	1.532	1.396887	1.925
Intercept	(0.011)**	(0.073)*	(0.048)**	(0.000)***	(0.000)***	(0.000)***
ТА	0.0030803	0.0028147	0.0007292	-0.0003526	-0.0000586	5.03e-06
IA	(0.000)***	(0.000)***	(0.222)	(0.137)	(0.799)	(0.989)
Ago	0.0034606	0.0075395	-0.0063987	0.0047496	0.0065072	0.0141503
Age	(0.535)	(0.151)	(0.298)	(0.153)	(0.059)*	(0.015)**
DER	0.1003792	0.1568857	0.0662578	0.1228741	0.119589	0.2567
DEK	(0.534)	(0.295)	(0.709)	(0.204)	(0.220)	(0.100)*
В	-3.27e-06	-2.99e-06	-9.47e-07	3.54e-07	9.10e-08	-7.59e-08
В	(0.000)***	(0.000)***	(0.076)*	(0.173)	(0.721)	(0.853)
50	0.064742	0.0169927	0.0489988	-0.0929979	-0.1155983	-0.059
SO	(0.383)	(0.801)	(0.543)	(0.045)**	(0.016)**	(0.404)
DOA	6.706422	3.958223	5.161778	7.086464	6.240012	13.236
ROA	(0.053)*	(0.198)	(0.170)	(0.002)***	(0.005)***	(0.001)***
055	-96.58931	-59.42656	-80.94692	-69.00841	-59.43384	-141.2355
OSS	(0.034)**	(0.139)	(0.100)*	(0.014)**	(0.030)**	(0.003)***
	5.0055	3.210838	5.199715	-2.46934	-2.222513	0.7685
PAR30	(0.108)	(0.252)	(0.129)	(0.176)	(0.224)	(0.789)
CD	0.0007739	0.0007144	0.0002733	-0.0000401	-0.0000352	0.0001032
SP	(0.000)***	(0.000)***	(0.085)*	(0.620)	(0.666)	(0.436)

 Table 4.13: Determinants of Efficiency Level

Source: Author's calculation

Note: 1%, 5%, and 10% are denoted ***, **, and * to indicate the statistical significance level corresponding to the statistical confidence level at 99%, 95%, and 90%.

	Fin	ancial Effic	iency	Social Efficiency			
	ACO-LI	ACO-L	ACO-I	ACO-WP	ACO-W	ACO-P	
SO	-	-					
ROA	+	+	+	+			
OSS	-	-	_	-	-	_	
Age		+	+				
ТА				+	+		
В				-	-	-	
SP				+	+	+	

Table 4.14 :	: Effect Signs	of Determinants	Affecting Efficien	cv Scores

Source: Author

In the regression estimating for financial efficiency specifications (ACO-LI, ACO-L, ACO-I), SO, ROA, Age, and OSS, are found to be statistically significant. While ROA shows a positive sign with MFIs' financial efficiency, the negative results on OSS mean that operational unsustainability makes the MFIs financially efficient.

Taking social efficiency scores (ACO-WP, ACO-W, ACO-P) as dependent variables, the coefficients of TA, B, ROA, OSS, and SP are found to be statistically significant. Among them, B and OSS have negative effects on social efficiency, indicating that MFIs with the low number of borrowers, and the operational unsustainability are more socially efficient than the sustainable MFIs with the high number of borrowers. It suggests that the capability of many Vietnamese MFIs is weak, and a high number of clients may cause a high burden. Hence, SP becomes a significant factor of efficiency thought its effect is low in this analysis.

Lastly, debt-equity ratio (DER) and portfolio at risk over 30 days (PAR30) have no significant bearing on the efficiency of MFIs.

4.6.6. Factors Indicating Impact on Financial Sustainability

The goal of financial efficiency is vital to support Vietnamese MFIs as a prerequisite for achieving social efficiency. Therefore, more transparent analysis of the factors that may affect an organization's financial sustainability is essential, and that is the main content of this section. As a result of the Tobit model, ROA plays a vital role in both the social and financial efficiency of MFIs. That is why this financial index was chosen as a dependent value in this regression analysis.

ROA	Coefficient	Std. Error	t	P-value
CAR	.0119779	.0128921	0.93	0.357
OSS	.1119483	.008325	13.45	0.000
CB	0001312	.0001928	-0.68	0.499
GLP	4.53e-12	1.673-12	2.71	0.009
PAR30	-1.204562	.1441167	-8.36	0.000
FEA	1038002	.1388849	-0.75	0.458
AEA	1556468	.0824543	-1.89	0.064
FRA	.3144545	.0708729	4.44	0.000

Table 4.15: Regression Analysis (Pooled OLS Model)

Source: Author's calculation

Table 4.15 contains the results of the Pooled OLS regression model. The four variables, including OSS, GLP, PAR> 30, and FRA, have P-values less than 0.05, which are statistically significant, and these are the factors that have their impact on ROA. In terms of correlation, only PAR30 has a negative effect on ROA; that is, when debt increases, it will negatively affect the present and future of financial autonomy of MFIs. On the other hand, OSS, GLP, and FRA, have a significant positive influence on ROA.

In order to determine whether the Fixed Effect Model (FEM) or Random Effect Model (REM) is suitable under this context and data, the next step was to use the Hausman test. Statistically, Prob> chi2 is 0.6943, and the significance level is higher than 5%; then, this analysis is correct for the null hypothesis. Thus, REM is the suitable model to determine the impact of the above-selected variables on ROA. In other words, the Hausman test indicated that the impact of this model was random. The results of REM are shown in the table below:

ROA	Coef.	Std. Error	t	P-value		
OSS	.1215691	.0078653	15.46	0.000		
GLP	4.28e-12	2.11e-12	2.03	0.042		
PAR30	-1.157877	.1409163	-8.22	0.000		
FAR	.2863943	.0639986	4.48	0.000		
R-square = 0.9311						

 Table 4.16: Random Effect Model

Source: Author's calculation

The results of REM indicate that the P-values of the independent variables selected above, including OSS, GLP, PAR30, and FAR are all less than 5% of the level of significance. It means that these variables have an important impact on ROA with a 95% confidence level. Also, the value of R-square = 93.11% indicates that all four variables selected have a powerful impact on ROA or financial sustainability.

4.7. Conclusion

This chapter determined efficient and inefficient level of MFIs in Vietnam regarding suitable input and output variables. Applying the non-parametric approach, DEA, the evaluation found out which institutions had the best practices, and provided useful recommendations for decision making in the field of microfinance. Relevant indicators, such as size, experience, finance, and scope, were also analyzed to determine the key to the longterm operations of institutions.

The average overall efficiency score has confirmed the effectiveness of Vietnamese MFIs. Specifically, the MEAN value of overall technical efficiency is 96% under both the input- and output-oriented models. The number of MFIs reaching technical efficiency is more than that of obtaining scale efficiency. As such, the leading cause of the inefficiency of MFIs is that they are operating in a range incompatible with existing resources and management capabilities. It requires the authorities and managers to review the strategy to expand the production scale (the distribution of financial and non-financial services) to avoid wastefulness of resources (inputs). Alternatively, limited scaling organizations can reduce existing resources while ensuring current output or enhancing output with existing resources. For example, the current gross loan portfolio (output) can still be achieved by reducing the number of personnel (input) while ensuring the team's management and productivity.

The results of the specifications indicates the difference in the social and financial achievements of Vietnamese MFIs. The overall scores for financial and social efficiency are 92.8% and 54.9%, respectively. Accordingly, MFIs are focusing primarily on the goal of providing loans and increasing profits. It can be said that this is a strategy of these organizations to gradually financial autonomy and get out of the sponsorship of capital from the government and donor agencies. Financial autonomy is also a factor that helps create a healthy competitive microfinance market and attract investors. However, the activities of MFIs cannot far from the original goal of poverty reduction and women's empowerment. The analysis results indicated that NGOs engaged in microfinance activities (NMPs) achieved higher social efficiency scores than other MFIs. Starting from non-profit organizations, these NMPs always strive to maintain their social goals in the long run.

Furthermore, the calculated figures did not indicate a clear link between social and

147

financial efficiency. Super efficiency scores were then used as a base to divide Vietnamese MFIs into four groups according to their social and financial success. The MFIs scoring high in both social and financial performance will be useful references for others in adjusting current operations and formulating future development strategies as they are operating in a similar socio-economic environment and under the same regulatory system.

Regarding the determinants assessed efficiency scores, the study pointed out essential indicators that result in both social and financial efficiency to MFIs. SO (scope), ROA, OSS, and Age are correlated and statistically significant with the specifications of financial efficiency. For example, the longer the MFIs spend their operations, the more accumulated operational experience will make them easier to achieve financial success than other organizations. For social efficiency, total asset (TA), the number of borrowers (B), ROA, OSS, staff productivity (SP) are crucial. For example, the larger the size of the MFIs, the lighter the financial pressure will be, and the more comfortable they will be to consider loans to the poorer. Briefly, each of MFI can map specific direction for resource usage or operation scope based on the institution characteristics and the priority objective.

Another significant index in the DEA method is MPI, a productivity improvement indicator. Vietnamese MFIs have experienced a decline in productivity during the 2013-2015 period. Over time, technology applications have been paying more attention to improving the technological capacity of the team while quickly accessing and providing microfinance services to target customers throughout the country. It is a positive change that contributes significantly to productivity improvement. However, indicators of improvement in operation and management tend to decrease and lead to a waste of available resources. Also, most MFIs are operating far away from the optimal scale, meaning they are not correctly determining whether an increase or decrease of the operation scale is appropriate to achieve the set goals. In the final analysis, a Panel Data Regression Model identified essential factors in helping MFIs achieve long-term financial sustainability. ROA is used as the dependent variable to measure the impact of independent variables on it. OSS, GLP, and FAR have strong positive effects on the ROA with a high confidence level and R-square> 90%. On the other hand, PAR> 30 has an inverse relationship with ROA. The lower the ratio of PAR> 30, the better the financial sustainability of the organization.

In summary, this chapter contributes to scarce research in developing economies, financial stability, and economic welfare. Although the MFIs in Vietnam are operating effectively in an overview, they still do not have a clear direction. Specifically, there are still many issues that need to be resolved to guarantee that organizations can sustainably operate in the long-term while maintain the unique nature of an MFIs. A more focus on social goals, such as poverty reduction, or financial goals, such as increasing profits, can lead to different operating strategies and result in different efficiency scores.

CHAPTER V

MICROFINANCE INDUSTRY IN EAST ASIA AND THE PACIFIC -LESSONS FOF VIETNAM

5.1. Introduction

A considerable part of the urban and rural poor world population has served by microfinance products and services. The Global Outreach and Financial Performance Benchmark Report for the 2017-2018 period summarized the data of 762 microfinance service providers worldwide. The analysis showed that the microfinance industry, in general, is growing at an annual rate of 9.8% for the number of active borrowers and 14.3% for the gross loan portfolio. The microfinance sectors of Asian countries keep standing at the leading edge of the industry's global driving to expand financial inclusion. Notably, the South Asia region leads with the highest coverage of borrowers, 71,125 out of 119,985, and depositors, 57,831 out of 140,612, among the other areas of which Indian, Bangladeshi, and Vietnam are the leading MFIs. Moreover, South Asia has the highest proportion of female borrowers representing 89%.

Successful international MFIs such as Grameen Bank, FINCA International, SEWA Bank, Accion International, and Indian Self-Help Groups (SHGs)-Bank Linkages have proven that utilizing market-based solution microfinance makes an essential contribution in breaking out the vicious cycle of poverty and empowering the impoverished communities. However, the same mechanism in the microfinance sector cannot effectively operate in any given country. There are significant differences among countries where microfinance has emerged, and each country has its socio-economic-political legal construction and governance structure. Therefore, the demand for financial services and ways to effectively administer them could be different among regions and even countries within the region. The analysis based on relevant case studies making strategies for developing sustainable microfinance more prudent. Understanding the dynamics of microfinance development as well as the achievements and policy directions that have been applied in neighboring countries with Vietnam is the main work of this chapter. It examines the key features of the aspects in each country and then emphasizes the issues and priorities now faced in Vietnam.

The chapter analyzed the microfinance industries that have recorded success and are making good strides in the long-term plan. However, data collection related to the recent performance of MFIs in selected countries is challenging. Aside from Vietnam, three case studies, including Lao PDR, Cambodia, and the Philippines, have been addressed to explore and compare the main similarities and differences in the practice of microfinance. Although other countries in the region have significant microfinance imprint, the data collected bases on less than five MFIs, so it cannot represent the entire microfinance sector of that country, and then, this analysis did not include them. As Vietnam is the leading case study of this dissertation, the countries with similar social and cultural characteristics were counted to sketch out an overall picture of the development of Vietnam among other peer countries via different aspects. The selected countries all have had outstanding achievements, legal environment, and development strategies.

Despite the high volume and long operating times of MFIs, microfinance is still relatively new to the global financial and economic market as it only serves certain target groups. Moreover, MFIs are not compulsory to provide their operational data to any international organizations. Therefore, through the support of the Vietnam Microfinance Working Group, SBV, and VWU, questions related to operational data and current issues were sent to the central banks of selected countries. Although the results may not cover the entire microfinance sectors of these countries, the author believes that the collected data and information for analyses in this chapter are up-to-date. For future studies, works in other countries in the region are essential to gather information to strengthen the findings and recommendations. In addition to the above source, a broad range of data and information has been collected from annual reports, internal organization materials, recent researches, and online database and then analyzed to fulfill the argument presented.

5.2. Overview

Table 5.1 provides a summary of the microfinance sector among countries. According to Global Findex 2017⁵⁷ and Global Financial Inclusion Database (World Bank), the percentage of Vietnamese youth over the age of 15 who do not yet have a bank account is 69.2%. Vietnam's ratio is higher than that of Cambodia at 21.67% and of Lao PDR at 29.06%, but lower than that of the Philippines at 34.5%. The ratio of East Asia and the Pacific is 70.6%, and that of the world is 68.5%. These countries have a meager percentage of the population with access to financial services, and this will be a considerable challenge for building a comprehensive microfinance system for everyone.

⁵⁷ Retrieved April 10, 2019; from: <u>https://globalfindex.worldbank.org/</u>

Features	VIETNAM	LAO PDR	CAMBODIA	PHILIPPINES
Background	 one-party system high wealth disparity rate 73% of the total population lives in rural areas 	 one-party system a quarter of population lives below the national poverty line 80% of the total population lives in rural areas 	 multi-party system 80% of the total population lives in rural areas; seasonal fluctuation and natural disasters. 	 multi-party system diverse population; 21.6% of the total population lives under the national poverty line agriculture is essential
Objectives & Year Started	Women Empowerment; Poverty Alleviation; Improvement of Living Standards; Promotion of Social Welfare Services. Since 1989	Promotion of Capital for Income-generating Activities; Poverty Eradication Since 1997	Provision of Formal Financial Services for Ignored Communities; Poverty Alleviation; Economic Development Since 1993	Poverty alleviation; Economic Sustainability; Social development Since 1997
Population (*)	96,462,106	7,169,455	16,486,542	108,116,615
% of population over the age of 15 having a bank (***)	30.8	29.06	21.67	34.5
Borrowed from family or friends (%)	29.5	31.2	35.1	41.2
Borrowed any money (%)	49	42.4	58.7	58.6
Assets (USD	9,368.1	170.4	10,671.4	1,394.4

Table 5.1: Major Characteristics on Microfinance Industry by Country

million) (***)						
Target Clients	women; the poor; micro- enterprises	women; low-income households; micro-enterprises	rural clients; disadvantaged groups; micro, small, and medium enterprises	poor households, MSMEs		
Loan Amount/Case	Up to 50,000,000 VND (US\$2,500)	About 10 million Kip (Up to US\$1,175)	US\$50-US\$300	300,000 Php (US\$7,000)		
Minimum (registered) capital requirement	5 billion VND	Deposit-taking MFIs: one billion Kip Saving & Credit Unions: 100 million Kip	Microfinance deposit- taking institutions: US\$30,000,000 Other MFIs: US\$1,500,000	Rural banks: US\$50,000-US\$500,000		
Recent Challenges	 Lack of regulations for the unregulated MFIs; High subsidies for the formal MFI → unsustainability in the long run; Urgent need of microfinance development toward independent sustainability 	 Lack of support to network among MFIs, government, NGOs, and international organizations; Poor education and experience clients; Domination of State-owned banks; low density of population and cohesion lacking; Undeveloped Infrastructure 	 Huge demand in the different type of loan products; Lack of financial literacy, and client information Lack of regulations for MFIs in rural areas. Problem of infrastructure: decent roads, electricity, phone signal 	 Problem of access to financial infrastructure Archipelagic nature → barriers to financial access. 		

Source: Synthesis based on data from Vietnam Microfinance Working Group (VMWG), Microfinance Information Exchange (MIX), The Global Findex Database 2017, Global Financial Inclusion Database (World Bank), Global Outreach and Financial Benchmark Report 2017-2018, Author's fieldworks

Notes: (*) Data for the year 2019 (https://worldpopulationreview.com/); (***) Data for the year 2017; MSMEs: Micro, Small, and Medium Enterprises

5.2.1. Lao People's Democratic Republic (Lao PDR): Village-based Microfinance System

For Lao PDR, microfinance provides a full range of financial services, including credit, savings, and insurance for low-income households, small businesses, and the poor (endorsed by the Prime Minister, PMO/1760, December 17, 2003).

Back in the early 1990s, Lao PDR started to open up towards a market economy. Located in the center of Southeast Asia, it is one of the poorest countries regarding an estimated per-capita income of only US\$390, 80% rural population, and over 71% citizen living on less than US\$2 a day (Sayvaya, 2012; Granath and Kling, 2018). The first step in microfinance also was in the 1990s. Multilateral and bilateral development agencies (ADB, GIZ⁵⁸, ILO⁵⁹, WB and UNDP), and NGOs had jointly created a credit system and revolving funds on a village-based basis. On the other hand, the government recognized that accessing rural finance and expanding microfinance services are significant for poverty alleviation. Mentioned in the National Growth and Poverty Eradication Strategy (NGPES) in 2004, microfinance has become a leading development program that promotes sustainable economic growth and poverty reduction.

Practically, microfinance schemes were initially small credit groups. The leading mass organizations including the Lao Women's Union (LWU) and Lao People's Revolutionary Youth Union (LPRYU) together with local authorities, and the agriculture and forestry office administer the activities of these programs on the district-level basis. By 1997, related activities included 28 projects carried out by 13 NGOs in 1,050 villages and nine projects implemented by multilateral organizations in 518 villages. Many of them also got involved in savings after a few years of operation. However, the outreach growth of microfinance schemes throughout the country led to the concerns on the viability and

⁵⁸ Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ)

⁵⁹ International Labor Organization (ILO)

sustainability. The government and donor agencies mainly focus on expanding the call for savings and improving the effectiveness of the legal environment.

During 2003-2004, Village Development Funds (VDFs) and village-based funds were established to receive national budget with the aims of fighting against poverty and boosting the village development. The government channeled a subsidy of about US\$5 million to establish many VDFs in 47 most deprived districts. Members together contribute their savings to ensure the financial autonomy of the funds. Besides, members elect an executive committee to run the group with the support of a representative advisory board in the community. Donors drive VDFs in a close relationship with mass organizations, mainly LWU.

Agricultural Promotion Bank (APB) and the Policy Bank (NAYOBY Bank / NBB) established in 1993 and 2006, respectively, are state-owned commercial banks. They are the two main formal MFIs of Lao PDR serving the poor in remote and rural areas. Moreover, the Bank of Lao PDR (BoL) legally classified the microfinance providers into different categories of MFIs in 2008. The microfinance system in the country now includes both deposit and non-deposit taking institutions and regulated and unregulated MFIs.

The regulated/formal MFIs include deposit-taking MFIs (DTMFIs) and Saving and Credit Unions (SCUs) mostly operating in the central region, and non-deposit-taking MFIs (NDTMFIs) operating in the northern region. Their establishment was the result of the collaboration with foreign organizations, or with LWU. However, formal MFIs still neglect the southern region. The number of regulated MFIs has increased from 26 in 2009 to 42 in 2012 serving about 29% of the village in Lao PDR, and to 123 in 2017 including 19 DTMFIs, 74 NDMFIs, and 30 SCUs (Granath and Kling, 2018). They have operated under the BOL's supervision and reached about 247,000 clients. In particular, the number of active borrowers is more than 62,000 with a total loan portfolio of approximately US \$ 88 million⁶⁰.

⁶⁰ Retrieved April 15, 2020; from:

On the other hand, the unregulated/semi-formal MFIs are larger and more mature compared with the regulated ones. About 4,500 VDFs have covered around half of the villages in the country. It consists of both credit funds and deposit-taking funds, accounting for 19% and 81%, respectively, of the total of over 430,000 active membership (Schmidt et al., 2016). Statistically, VDFs are the largest group in the microfinance system allocated 45% in the central region, 30% in the north and the rest in the south. The number of members per VDF in the south is the smallest at only 53 members.

The government and international donors have supported persistently for microfinance development in the country, especially two Thai organizations⁶¹ working in cooperation with LWU. However, with the total population of over 7 million⁶² (census 2019), there is still a massive demand for microfinance products and services in Lao PDR. For example, the potential agricultural loan demand is nearly 50% for agriculture investments and rest for trading activities/building up shops/ buying long-term assets such as houses and rice mills. Many MFIs are both limited to the extent and scatter throughout the country. Micro-credit, mainly subsidize loans, is the major product. Due to 80% of the sector is VDFs, which insists on self-financing through savings mobilization, the microfinance sector is still at the infant stage.

The majority of MFIs are village-based and non-formal, with only 53% of active female borrowers (MIX, 2017). People living in rural areas often find alternative credit with emergency money through informal providers such as relatives, friends, family, and better-off neighbors (Granath and Kling, 2018). Professional moneylenders are unusual, whereas rotating savings and credit groups mostly operate in urban markets. As such, informal lending is prevalent in Lao PDR because of the disadvantages in location and documentation in accessing formal services.

https://www.laomfa.org/about-us/microfinance-in-laos/

⁶¹ Community Organizations Development Institute (CODI) and Foundation for Integrated Agricultural Management (FIAM)

⁶² World Bank

5.2.2. Kingdom of Cambodia: Quick Development for Microfinance Sector

Historically, the Khmer Rouge government destroyed the National Bank of Cambodia (NBC) established in 1954, local banks, and the national monetary system in the late 1970s. Since that time, Cambodia used rice as the primary means of trading other goods such as food, clothing, and supplies (Crawford et al., 2014). The situation changed when Vietnam reintroduced a local currency during its occupation. It helped to rebuild NBC in 1993 and resume the urban banking system as active parts in providing boosts to the microfinance sector in Cambodia (Larson, 2001; Bylander, 2014).

It is worth noting that 80% of Cambodian lives in rural areas; and micro, small, and medium enterprises called MSMEs, which mostly operate in rural areas, have dominated the Cambodian economy. The rapid development of MSMEs is an inevitable consequence of job scarcity. Many Cambodians, especially women, manage to earn a living through small businesses such as scarf weaving, noodle making, and tailoring. Informal moneylenders have been the leading resources for the poor, the marginalized, and MSMEs, especially in rural areas. However, only informal credit cannot handle the working capital for all kinds of small businesses. As a result, the lack of financing prevents them from sustainable and long-time development and empowerment.

Then, the emergence of microfinance in Cambodia is to mainly serve disadvantaged groups such as refugees, the disabled, poor entrepreneurs, and demobilized soldiers. Moreover, several microcredit programs and savings initiated with the primary support from international development community institutions (USAID, ILO, UNDP, and AFD) and NGOs (i.e., GRET, World Vision, Catholic Relief Services) to alleviate poverty and enhance capability for MSMEs. Most of the projects were at first carried out by physically handling cash transfers. One example was the project called "Small enterprise and informal sector promotion" created by the United Nations, resulting in the establishment of the Association of Cambodian Local Economic Development Agencies (ACLEDA) in 1993, the first Cambodian NGO-MFI.

In 1995 and 1998, respectively, with the financial support of the United Nations Development Program (UNDP) and Agence Francaise de Developpement (AFD), the Royal Government of Cambodia established the Rural Development Committee and the Rural Development Bank to meet the demand for financial services for rural agriculture (Heng, 2015). Since 1999, NBC became the primary MFI regulator and extended the financial institution's laws to supervise microfinance activities. The government's free-market policies also made the country more attractive to investors.

As a result, there was a significant transformation of microcredit NGOs to commercial MFIs in the early 2000s (Bylander et al., 2017). ACLEDA transformed from an NGO to an entirely private commercial MFI by 2003 and became one of the largest and most profitable MFIs in the world by 2010 (Milford, 2017). It became a good point for other NGOs to join the microfinance industry in Cambodia formally. Moreover, many of the earliest NGO-MFIs started to go over to for-profit status and to achieve licenses for deposit-taking capability. This immense growth also resulted in the growing number of MFIs established by NGOs and other donor agencies primarily funded by RDB. As a result, the number of customers who have access to micro-loans and outstanding loans has also increased over time (Bylander et al., 2017).

Systematically, the microfinance sector in Cambodia includes formal banks composing the Rural Development Bank, microfinance deposit-taking institutions (MDIs), licensed and registered MFIs, unregistered-NGO providers, informal providers (i.e., money lenders, family, relatives,) providing financial services to help the rural population in alleviating poverty and empower MSMEs. MDIs have covered approximately 90% of the micro-credit market. ACLEDA and Angkor Mikroheranhvatho Kampuchea (AMK) are the two biggest MFIs in the country which are dominating the microfinance sector and expanding their increasing outreach. Many MFIs in Cambodia have no more than 5,000 borrowers, whereas the ACLEDA has served over 400,000 clients (MIX data).

Recently, the banking system has extended the electronic payment culture (i.e., internet or mobile banking, ATMs) to fix the limitations of conventional transaction methods. The portfolio of financial products is, therefore, also more diverse to reach the needs of many customers, as follows:

- Financial products and services: micro-credit, money transfer (local and mobile banking), micro-insurance.
- Non-financial products and services: client education, client reinforcement, comprehensive database for all counterparties, parameter maintenance.

By 2015, Cambodia received a grant of about 10% of all microfinance investments in the world. Only India, with nearly 100 times larger population, exceeded it (Symbiotics, 2016). The microfinance sector in Cambodia mostly reached the target groups. It has served over 2.3 million borrowers in the country of over 16 million people. The total loan portfolio was over US\$7.71 billion, while deposits were about US\$5.66 billion (Global Findex Database, 2017). More than 23.8% of loans distributed to MSMEs or businesses in the agricultural sector represent a relatively high demand for this sector for financial services. Regarding the characteristics of borrowers, 61% are living in rural areas, and 77% are female customers.

Cambodia is a typical case study for the development and effectiveness of microfinance in the context of tumultuous birth and growth of the country. IFC (2009) confirmed that Cambodia, a "microfinance saturated country," is one of the most rapidly developing microfinance sectors globally. It is among the top five countries in the world concerning the number of microfinance borrowers as a percentage of the total population (Gonzalez, 2010). Several MDI such as AMK, AMRET, and ACLEDA⁶³ are now among

⁶³ Retrieved December 20, 2019; from:

the most profitable in the world. Moreover, the development of product diversifications in Cambodia has contributed significantly to the dramatic increase in global deposits compared to loans. It is noted in the Global Outreach & Financial Performance Benchmark Report 2017-2018 which deposits grew faster than loans with a rise of 25.3% compared to the previous year.

5.2.3. Republic of the Philippines: Efficient Regulation for Microfinance Sector

The Philippines experience in microfinance development contributes to many valuable lessons for other countries.

Microfinance in the Philippines at first only included microcredit provided by NGOs, cooperatives, and a few banks. The Philippine National Strategy, designed in 1997 planned to develop an effective microfinance system to support poor communities and private sectors for active participation in the economic environment. In December 1997, the Social Reform and Poverty Alleviation Act was born as an emphasis on the importance of microfinance in the country's efforts to reduce poverty. Accordingly, a comprehensive financial system where all people can access smoothly and efficiently is an essential factor to achieve inclusive growth. The Philippine government, along with international standard-setting bodies, Financial Action Task Fork and Basel Committee on Banking Supervision, has worked assiduously to build a practical legal framework.

Microfinance in the Philippines has followed a market-oriented and commerciallyfocused direction. Microfinance activities are entirely legal activities based on the General Banking Law, issued in 2000, and more than 40 central bank laws. Also, the Philippine Development Plan 2011-2016 strengthened the overall development of microfinance with three key points: (i) diversify the product portfolio; (ii) educate people about financial knowledge and tools; and (iii) facilitate access to financial services (Tavanti, 2013).

https://www.phnompenhpost.com/business/mfis-predict-lower-earnings; https://www.phnompenhpost.com/business/acleda-posts-127m-profits-last-year

Aside from the government and financial regulators, the Philippine microfinance market consists of regulated (licensed) MFIs and unregulated (unlicensed) financial institutions (Fujimoto, 2014). The regulated institutions (bank) are "commercial banks, universal banks, thrift banks, rural banks, cooperative banks, private development banks, and Islamic banks" (Rillo, 2014, p.116). The Center for Agriculture and Rural Development (CARD), a small social development cooperative at the establishment in 1986, has become one of the largest MFIs in the country. On the other hand, NGOs, village banks/solidarity groups, and others belong to the unregulated group. The legal forms of NGOs include corporate and non-profit/cooperative. Traders, input-suppliers, money lenders, ROSCAs, and Saving & Credit associations (ASCAs) have provided financial services informally.

There is a wide variety of microfinance products, and services created to target customers. Commercial banks support the operation of other organizations, excluding the group of informal lenders, by sharing ATM networks, credit checking systems, domestic and foreign money transfer system, and treasury management products. As a result, MFIs reach target clients with an increasing array of short- and medium credit facilities, savings service, and other international financial services. Group-term life, accident and disability insurance, personal provident fund/ contractual savings are also available. Last but not least, modern technologies have been applied increasingly in the sector in the past few years. The broad array of micro-products has served well to small-scale clients throughout the country.

Approximately 15,000 MFIs have provided microfinance services across the country, mainly small loans for low-income households and microenterprises (Fujimoto, 2014). Besides, even people in remote and economically disadvantaged areas, where there is no formal banking office, are supported with financial services by more than 370 microbanking offices (MBOs) scattering in 232 municipalities. Micro-credit value increased continuously from US\$85.79 million in 2002 (ADB, 2017) to US\$1043.6 million in 2017 (Global Findex Database, 2017). As of December 2017, MFIs in the country have served

about 5.2 million active borrowers and 7 million depositors (Global Findex Database, 2017). In terms of e-mobile services, more than 50% of customers are low-income and unbanked. The number of e-money accounts reported by ADB (2017) is 26.7 million, with about 20% of them having high transaction frequency.

The Philippines become the "best in implementing microfinance to reduce poverty". It is also in the top 5 and top 3 of the East and South Asia region and the world, respectively, regarding the overall microfinance business environment (Economist Intelligence Unit/EIU, 2015) and financial inclusion (EIU, 2016). The most important determinants of this development might be the supportive policy and efficient regulatory environment for microfinance. Specifically, MFIs have been encouraged to promote innovative products such as electronic money and mobile banking and operate based on financial sustainability. Due to the excellent business models and government policies, the Philippines is one of the leading countries in the field of mobile banking that partly lessens the operational costs and efficiently serves to the poor.

However, significant unmet demand for microfinance services still exists in the country of over 108 million people (census 2019). The banking offices mostly located in more urbanized regions and ignored the remote areas (Fujimoto, 2014). The National Capital Region (NCR) or Metro Manila accounts for about one-third of the banking offices (ADB, 2017). The geography of an archipelago with more than 7,000 islands has limited the traditional "brick and mortar" ways in providing financial service. Therefore, the development of technology in the field of banking and finance such as mobile banking is essential to distribute financial services throughout the country regardless of geographical or physical infrastructure obstacles.

5.2.4. Discussion

Same as Vietnam, the emergence of microfinance in selected countries is initially for fighting against the social ill, poverty. The microfinance system, in general, includes three

major groups: formal, semiformal, and informal MFIs. However, MFIs in different countries take different forms, as presented in Table 5.2 below.

Country	Formal Institutions	Semiformal Institution	Informal Institutions
Vietnam	State-owned banks, PCFs, MFIs, cooperative bank, non-state commercial banks	Government programs, NMPs	Family, relatives, friends, money lenders, ROSCAs, traders, pawnshops
Lao PDR	State-owned commercial banks, DTMFIs, NDTMFIs, SCUs	Village Development Funds (VDFs)	Relatives, friends, better-off neighbors, indigenous savings/rotating savings, credit groups
Cambodia	Formal banks, MDIs, licensed and registered banks	Un-registered NGOs	Money lenders, family, relatives
Philippines	Bank: "commercial banks, thrift and rural banks, private development banks, cooperative banks, Islamic banks" (Rillo, 2014, p.116)	NGOs (corporate & non-profit/cooperative) Non-bank: "insurance companies, investment houses, financing companies, securities dealers and brokers, fund managers, lending investors, pension funds, non-stock savings & loan associations, pawnshops" (Rillo, 2014, p.116)	Traders, input- suppliers, money- lenders, ROSCAs, and ASCAs

Table 5.2: Variety of Microfinance Providers by Country

Source: Author's Synthesis

Notes:

Formal: regulated & licensed under prudential regulation

Semi-formal: no legislation, unregulated but registered under an Act

Informal: unregistered & unregulated

DTMFI = Deposit-taking microfinance institutions; NDTMFIs = Non-deposit taking microfinance institutions; SCUs = Saving & Credit Unions; ROSCAs = Rotating Savings & Credit association; ASCAs = Saving & Credit associations; MDIs = Deposit-taking institutions; PCFs = People's Credit Funds; MFIs = Microfinance Institutions; NMPs = Local & International NGO-sponsored microfinance programs

The state-owned banks in all countries are the crucial providers and attempt to access

the financial needs of the most impoverished communities. The SBV and the BoL have

supported the microfinance sector with a similar motive. Philippines has also considered designing an MFI regulatory framework starting with 'National Strategy on Microfinance' to help the formal MFIs. However, the formal sector in Vietnam has received high subsidization and protection. Vietnamese MFIs mainly involving in only credit are lower capital requirements compared to deposit-taking MFIs. Semiformal MFIs in Vietnam legally are not allowed to raise capital from public savings, so their capacity in this area is still weak.

NGOs with microfinance activities are the most common type of semi-formal MFIs. They have played an essential role in microfinance development from the beginning. However, the transformation into regulated MFIs of NGO-MFIs (or NMPs) in Vietnam is facing many challenges, as discussed in Chapter III. For other countries, the NGOs have operated in a more convenient environment supported by both authorities and donors. A typical example is ACLEDA in Cambodia.

On the other hand, informal microfinance providers are both unregulated and unregistered. Although there are no precise statistics, they have existed in numerous types of MFIs and are the oldest financial providers. The informal sector in the Philippines serves more than 60% of the credit supply to poor households. It is worth noting that the Philippines allows the operation of informal lenders to be legal as a means to manage them, reduce interest rates for emergency loans, and expand the size of the microfinance market. It is the main difference in the Philippine compared with other countries' systems. In Vietnam and Lao PRD, individual lenders are not recognized as legal money lenders and are warned that they may harm the development of financial markets in general and microfinance in particular.

Cambodia and the Philippines have introduced a wide array of new products in the last few years. Their MFIs have actively engaged in innovative technology such as money transfers and mobile banking and also supported Micro-insurance services as a referral to customers. Although the density of using microfinance services in Lao PDR is still low compared to other countries, the government has collaborated with ASEAN Financial Innovation Network (AFIN) to provide a platform to promote technological innovations, especially e-mobile and e-banking, in the country's microfinance industry⁶⁴.

5.3. Regulatory Environment and Promotion for Market Development

Generally, microfinance in developing countries using market-based solutions has provided financial services toward poverty alleviation and community empowerment. An efficient regulatory framework resulting from a set of prudent policies, promoting, and protecting clients will be a useful tool for the development of MFIs as well as the microfinance market. Table 5.3 provides the fundamental outlook of the regulatory framework among selected countries. The supervision of MFIs in all countries has carried out both on-site and off-site method by the government, the local authorities, and the supervisory institutions. However, there are considerable differences among microfinance practices from them.

⁶⁴ Retrieved September 20, 2018; from: <u>http://annx.asianews.network/content/lao-banking-system-needs-new-tech-boost-access-finance-73318</u>

Country	Main Regulation	Main Regulatory Agencies	Consumer Protection	MFI Interest rates
Vietnam	Credit Institution Law (2010)	State Bank of Vietnam (SBV)	Smart Campaign on Client Protection*	Formal MFIs: up to 12% Semi-formal: about 30% Money lenders: about 60%
Cambodia	LNBC (2006); LBFI (1999); "Parkas" (2007)	National Bank of Cambodia (NBC); Cambodian Microfinance Association (CMA)	Client Protection Principles (CPP) Certification	MFIs & MDIs: up to 18% Money lenders: nearly 70%
The Philippines	General Banking Law (2000); Philippine Cooperative Code (2008); E-money Regulation (2009); Microfinance NGO Act (2015)	BSP; Cooperative Development Authority (CDA); Securities and Exchange Commission (SEC); Insurance Commission	BSP Consumer Affairs Group, National Credit Council, National Anti-Poverty Commission; Microfinance Consumer Protection Guidebook	Cooperatives: no interest rate ceiling Rural banks: about 34% NGO-MFIs: 60%-80% Money lenders: over 120%
Lao PDR	Implementation Guidelines of Decree on Microfinance Institutions (2016)	Bank of Lao PDR (BoL); Provincial Authorities	Law on Consumer Protection, Consumer Protection Provisions Smart Campaign	Formal MFIs: 4%/month VDFs: 1%-4%/month Money lenders: over 20%/month

Table 5.3: Regulatory Environment by Country

Source: Author's Synthesis

Notes: LNBC = Law on the Organization and Functioning of the NBC (the NBC law); LBFI: Law on Banking and Financial Institutions (the Banking Law); BSP = Bangko Sentral ng Pilipinas; DTMFIs = Deposit-taking microfinance institutions; NDTMFIs = Non-Deposit taking microfinance institutions; SCUs = Saving and Credit Unions; MDIs = Microfinance deposit-taking institutions; *To date, about 20 MFIs in Vietnam have followed this Campaign. It includes seven core principles⁶⁵: (1) Appropriate product design and delivery; (2) Prevention of over-indebtedness; (3) Transparency; (4) Responsible pricing; (5) Fair and respectful treatment of clients; (6) Privacy of client data; (7) Mechanisms for complaint resolution

⁶⁵ Retrieved September 15, 2018; from:

https://www.smartcampaign.org/about/smart-microfinance-and-the-client-protection-principles

5.3.1. Lao PDR

The establishment of BoL, the country's central bank, was in 1990 (Law No.04/PSA, June 1990) as the licenser and supervisor over the financial institutions doing banking and similar business. Since 1992, BoL set down the separate regulatory framework including three regulations for DTMFI, NDTMFI, and SCUs. Like Vietnam, non-banks do not have the right to raise capital from outside and issue shares and bonds. Although the need to build a formal legal system to ensure the substantial development of MFIs was very high, it was not until 2004 that BoL established the Microfinance Institution Division (MID) and Financial Institution Department (FID). By 2010, these two offices were merged into the Financial Institution Supervision Department (FISD) to supervise the activities of MFIs (Seibel and Rohmann, 2012; Schmidt et al., 2016).

In June 2008, the Implementation Guidelines was promulgated to officially regulate the registration of DTMFIs, NDTMFI, and other official microfinance projects. This time, BoL clearly defined formal microfinance; and, NDTMFIs can mobilize savings from members. SCUs do not accept non-members to receive their provision of microfinance services. On the other hand, DTMFIs can distribute services to everyone as long as the credit service ratio is at least 80%. The Decree on Microfinance Institutions issued in October 2012 specifically instructed the scope of activities of MFIs. Accordingly, MFIs, including depository and non-deposit taking institutions, and microfinance schemes, legally operate under this Decree (Seibel and Rohmann, 2012). The revised Decree was finally issued in April 2016 named "Implementation guidelines of Decree on Microfinance Institutions" that much emphasis on the operation of DTMFIs, NDTMFIs, and SCUs.

The vast majority of MFIs and VDFs are non-formal and unregulated. They are officially a part of the semi-formal section and receive financial and technical supports from governmental and international organizations such as ADB, GIZ, and ILO. Although it is under the jurisdiction and management of provincial and village authorities, there is currently no specific or formal guide or law for guiding VDFs. The present regulation framework then does not work on the situation of VDFs that led to their unstandardized operation system.

Consumer protection in Lao PDR is the new issues, and the related law has passed by the National Assembly in June 2010 and promulgated by the President in September 2010. However, the implementation and enforcement are still slow. Besides, the Lao Microfinance Association has worked with the Smart Campaign to implement a code of conduct on the Client Protection Principle (ADB, 2015).

The BoL does not impose interest restrictions so that it has high-interest rates at about 4% per month. Moreover, the interest rate for micro-loans may be higher when the additional costs and costs of compulsory savings are included. On the other hand, credit from VDFs being externally subsidized lend at 1.4% per month that is lower than that of deposit-taking VDFs at 2.3% per month. Informal money lenders in Lao PDR provide flexible loans with the interest rates between 15% to 20% per month or higher (Seibel and Rohmann, 2012).

5.3.2. Cambodia

All banking activities in Cambodia are under NBC's exclusive jurisdiction. From 1998 through 2001, NBC carried out the banking and financial system's reform with the division into three main groups, including commercial banks, specialized banks, and MFIs. The Law on Banking and Financial Institutions (Banking Law) and the Law on the Organization and Functioning (NBC law) in 1999 and 2006, respectively, are the two fundamental laws governing the operation of MFIs⁶⁶. Accordingly, they operate as banking institutions for the poor and cannot receive deposits without a separate license from NBC⁶⁷.

⁶⁶ Retrieved November 25, 2019; from:

https://thelawreviews.co.uk/edition/the-banking-regulation-review-edition-9/1169667/cambodia 67 There were seven MFIs granted licenses by NBC at the end of 2017.

In 2007, "Prakas⁶⁸ on Licensing Microfinance Deposit-Taking Institutions" was published to accept MFIs to mobilize deposits from their clients.

In 2004, the Cambodian Microfinance Association (CMA) was created and later became Subdivision of the Associated Banks of Cambodia in 2008. Acting as an NGO based on the Cambodian Law, CMA is a bridge between MFIs and NBC to promote and cover the activities of MFIs. So far, CMA acts as a friend, philosopher, and guide for the sustainable development of its members, including 54 MFIs, seven MDIs, eight leasing companies, and 16 rural credit operators (Bylander, 2018).

In 2006, NBC sponsored and established a credit information collection and exchange system for MFIs called the Credit Information System (CIS). Without a broad guideline, it is, however, still lack of information and usefulness to MFIs. It has resulted in the situation of overlapping loans and over-indebtedness. Two larger banks, ACLEDA and AMK, have operated on their code of ethics because of the shortage.

In 2012, the Client Protection Principle (CPP) Certification was launched to actively promote client protection at the board level (EIU, 2016). The principles help MFIs in the country practice good ethics and smart business. It is crucial that MFIs, especially 10 of the largest MFIs in Cambodia, have been aware of the process of assessing, procedures, and client protection policies before getting the certification. Certificated MFIs will then create an array of products to meet the clients' needs and avoid over-indebtedness. In turn, the clients can use the debt effectively to help their poverty exclusion. Funders (i.e., AFD, FMO, Proparco) are more attractive in the certified MFIs that carry out a thorough process in improving client protection across the operation. Although it is not easy to receive CPP certificates, the microfinance industry will work in good health and become sustainable if all MFIs adhere to the CPP.

⁶⁸ "Prakas": MFI regulations

Even though lending is much more massive in Cambodia due to its rural population, the guidelines for the licensing of NGO-MFIs, mainly those target rural provinces, are limited. NGOs with microfinance operations are still not governed by the government and are not bound by the obligation to report their progress and performance. More particularly, NBC is in charge of supervision and regulation, but has no system for enforcement and giving license to NGO-MFIs. There are many entities with predatory lending products remaining unregistered and unlicensed without any reporting requirements from the NBC and other regulators. Besides, the absence of significant oversight may result in more harmful practices with the high costs of operations.

Moreover, the dominant civil group, Cambodian Microfinance Association, act as a liaison between MFIs and the government without concern to the benefit of microfinance clients (Zhou, 2015). The government still does not regulate the smaller MFIs operating in rural provinces to reach uneducated and rural poor. Inexperienced people have no way to ask for help in case of power imbalance or extreme vulnerability. It will obviously benefit money-lenders.

Cambodian MFIs have regularly charged at a higher rate (between 35% and 45%) for their lending compared to neighboring countries that could be 'extortionate' (Fernando, 2006; Thapa, 2007; Zhou, 2015) while money lenders lend at the interest rate of nearly 70%. There are some reasons as follows, resulting in this situation. Because of the lack of infrastructure, the MFIs have to locate in the nearest village or go door-to-door. It causes an extremely costly venture of reaching each customer in the rural and remote provinces to provide small loan sizes. The competition in rural areas is low where people usually do not receive a good education or are often uneducated; therefore, this is a very favorable opportunity to impose lending rates. Another reason is that the high cost of funding hinders MFIs from remaining sustainable while serving the low end of the market.

Since April 2017, the NBC fixed the interest rate ceiling at 18% for micro-loans to protect the poor from expensive loans by MFIs and MDIs. This policy is also to encourage MFIs to improve operational efficiency such as applying new technology. However, many MFIs and their supporters in the country have criticized this new regulation as the rate cap just nearly halved what they have charged the clients. Consequently, the new rule could increase the serving costs, especially for small borrowers in remote areas, and become the loss-making business for for-profit MFIs. Consequently, many MFIs are no longer ready to provide micro-products, mainly small loans, to poor customers as before. Furthermore, the poor may turn back to deal with the local money-lenders for emergency loans at extremely interest rate.

5.3.3. The Philippines

The Philippines is on the top around the world regarding development policies and regulatory framework for microfinance sector. Remarkably, the BSP is the leading central bank in the world in building a comprehensive support system for financial services, including financial literacy programs. It also focuses on potential practitioners and institutional partners for existing MFIs. Moreover, the Government, civil government, the private sector, and local and international organizations have collaborated to develop a legal framework that is conducive for microfinance activities across the country. For example, the USAID-assisted Microenterprises Access to Banking Service Project (MABS) conducted training courses exclusively for rural banks on how to distribute financial services. USAID and other international donors have the cooperatives of the accounting process, as well as the method of implementation based on international measurement standards, i.e., PEARLS monitoring system.

Before 1997, the country had never promulgated any legal regulations related to microfinance. The leading players were only some NGOs that serve micro-credit to about 192,802 borrowers (Meagher et al., 2006). The National Microfinance Strategy was adopted

in 1997, and the Government ended its provision of credit in 1998. From then on, financial and credit activities in the Philippines are under the regulatory jurisdiction the BSP, with the General Banking Law of 2000 and various appropriate guidelines governing MFIs. The BSP has administrated and supported the development of MFIs by opening opportunities for private-sector investment, as well as welcoming market forces to operate. Thrift banks, rural banks, cooperatives, and NGOs have actively joined in the market with diversified products and services such as credit leasing, deposit, ATMs, transfers, and insurance.

Systematically, commercial banks, rural banks, and thrift banks partly belong to the Bankers Association of the Philippines, the Rural Bankers Association, and the Chamber of Thrift Banks, respectively. On the other hand, the Cooperative Development Authority (CDA) regulated and supervised the Cooperatives. Regularly, dialogue between BSP and the industry associations assists forward the consensus on proposed new regulation or supervisory measures following market-based direction. In March 2015, the CDA revised the Philippine Cooperative Code of 2008 that required all cooperatives to submit annual financial statements audited by certified public accountants (EIU, 2016).

Most of the NGOs having microfinance activities (MF-NGOs) are under the supervision of the Securities and Exchange Commission (SEC) and the BSP. The SEC established the Microfinance NGO Regulatory Council and issued the "Microfinance NGOs Act" (Republic Act No. 10693) to (i) support the microfinance activities of MF-NGOs; (ii) promote small businesses to use financial products to achieve the set goals effectively; (iii) promote poverty reduction programs for poor households (Llanto and Rosellon, 2017). With these supports, MF-NGOs can provide various financial and non-financial services at an affordable cost to target customers. As a rule, MF-NGOs must submit periodic activity reports to the management board, including the Committee, the Council, and the President of the Philippines. These requirements are to maintain a comprehensive and transparent

information management system for the country's microfinance sector and to improve operational opportunities for MF-NGOs timely.

National Credit Council/NCC and BSP makes accessible for modern techniques in delivering microfinance products as well as allow experimentation and innovation to promote financial sustainability for MFIs. Since 2005, the BSP started promoting technology, typically mobile banking, to help people quickly access financial services. It helps to surmount geographical difficulties to reach inaccessible and more indigent clients. The E-money regulation was officially released in 2009 (BSP Circular 649) that supported nonbanks in the playing field of microfinance compared to traditional banks.

Additionally, the regulatory framework and the National Strategy for Microinsurance are other achievements of the Government since 2012. It is among the best countries in the world, providing a suitable environment for micro-insurance to promote insurance coverage among economically vulnerable communities. The diversification in the provision of micro-insurance and similar products by regular insurance companies and Mutual Benefit Association (MBAs) has empowered low-income clients facing vulnerability risks and catastrophic events. ADB and Japan Fund for Poverty Reduction are two principle donors to micro-insurance who are providing mutual assistance from 2008 to 2012 through the Development Microfinance Project (ADB, 2017). Recently, the Republic Act No.10846 (December 2015) amended the Charter of the Philippine Deposit Insurance Corporation (PDIC). This change is to ensure the banks' deposits and to strengthen the governance framework following international best practices.

Regarding the annual interest rate, the Philippine MFIs have the median rates for loans at over 35%, as the MFIs herein tend to follow a high cost and high-yield strategy. The BSP regulates the interest rates that shall not be below the market rates and calculated by the sum of interest, fees, insurance, and tax⁶⁹. Credit, liquidity, operational, reputational and

⁶⁹ Retrieved March 03, 2020; from:

https://www.mftransparency.org/microfinance-pricing/philippines/

interest rate risks become more critical to monitor risks effectively. The informal financial providers charged at an extremely high-interest rate (over 120%) compared to the rate at around 34% of rural banks, and between 60%-80% of NGO-MFIs. For cooperatives, there is no regulation regarding interest rate ceilings.

5.3.4. Discussion

The diversity of providers in the microfinance market is essential to meet the different demands. Hence, it requires an accurate determination of whether or not an MFI should fall under a regulatory environment. There are different practices of how the national context affects the constant adaptions of microfinance models in each country.

All four countries have reached out to the poor communities of the society concerning regulatory framework and market orientation. Based on the banking law, the central bank/the state bank and the government manage and nominate the operation of MFIs. Central banks have always acted as primary regulators in countries that have governed and contributed to creating infrastructure, both literally and figuratively, for the microfinance sector. Namely, SBV, BSP, NBC, and BoL have regulated and sustainably promoted the related activities in the countries.

The Philippines has experienced an encouraging policy and regulatory framework in supporting private players providing a diverse array of microfinance providers as well as products and services. BSP is a critical agency in the process of creating a productive legal environment to support the operations of MFIs, and improve infrastructure and internal monitoring capacity. Additionally, other governmental agencies may take part in administering the registration and other issues, including operation permission and registration fee. For example, NCC and PDIC have guided and supported microfinance policies and secure the sustainable development of MFIs. The Philippines has its own rules for NGOs joining microfinance market, clearly divided for both for-profit and non-profit organizations. The rules help organizations have a more transparent and more stable way of deploying their activities effectively and profitably.

The microfinance industry in Lao PDR is in the early stage of the development, but it is growing with MFIs licensed by or registered with BoL. Meanwhile, international donors have invested significantly in the last few years in the microfinance programs to promote the development of microfinance in the country. The GIZ, as part of the Lao-German Development Cooperation, has been supporting the country in reaching its microfinance development goal by 2020.

Cambodia strives to promulgate policies for the microfinance sector. Since the early 1990s, NGOs have actively involved in the microfinance market with the main purpose of providing financial services to the rural poor. The principal activities include rehabilitation, humanitarian assistance, and poverty alleviation. A sound and market-oriented microfinance sector have mobilized and allocated resources to support sustainable economic growth. NBC also implemented the campaign on consumer protection and financial literacy as a way to promote financial inclusion and help low-income and vulnerable individuals/households out of poverty.

Although all selected countries have created the regulatory framework to cover all microfinance activities, these issues are still a big challenge faced by the countries in improving financial access sustainably. The variety of MFIs suggests diversity in regulation and supervision. Each country has its own MFI regulation, but the focal point might be the same in supervising the institution, protecting the clients, diversifying products and services, applying new technology, and, very significantly, remaining poverty alleviation.

5.4. Performance of Microfinance Sector

This section focuses on the performance of the microfinance sector in selected countries on leading indicators.

5.4.1. Operational Characteristics

As shown in Figure 5.1, Cambodia is the leading performer among peer countries. It is the country with the highest deposits reaching nearly US\$4 billion, followed by Vietnam at about US\$3 billion, the highest assets of microfinance sector at over US\$10.6 billion, followed by Vietnam at over US\$9.3 billion, and the highest number of personnel at 40,376 staffs, followed by the Philippines at 31,110 staffs. Lao PDR achieved the lowest values on these indicators. Lao PDR is still at the infant stage of microfinance development as its values at the bottom in all indicators.

Although Vietnam achieved the high value regarding assets, only four MFIs in Vietnam are categorized as "large credit institutions" with total assets of more than US\$8 million, and that of the rest are ranging from US\$27,000 and US\$5 million (VMWG, 2018). The country also got the highest gross loan portfolio (GLP) of over US\$8.6 billion, followed by Cambodia at over US\$7.7 billion. The reason is that Vietnam focuses on serving individual customers, with small and tiny loans. A large number of customers have access to microfinance loans, resulting in high GLP, while other countries have an even divide between individual customers and small and medium enterprises.

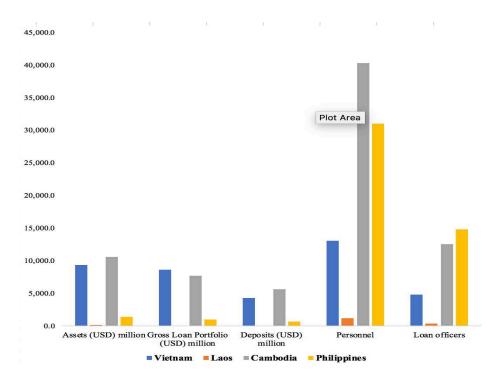


Figure 5.1: Operational Metrics by Country (as of January 2018)

As to personnel and loan officers, Vietnam and Lao PDR are at the bottom of the peer group. Their values are modest compared to those of the Philippines and Cambodia. More than 40 thousand staffs are serving the microfinance clients in Cambodia. That is much higher than in the second country, the Philippines, with over 31 thousand employees. Both Cambodia and the Philippines have invested many forces in serving the inclusive development of microfinance. Both countries added more than 6000 microfinance staffs from 2015-2017. In particular, the Philippines has increased by more than 4,000 loan officers to meet and address credit activities for targeted customers. Vietnam, with 13,118 microfinance staffs, are operating in the smaller scale in the region that just above Lao PDR, with 1,199 staffs. As discussed in chapter III, the majority of Vietnamese MFIs' employees are part-time who often belong to mass organizations and still lacking knowledge and experience in microfinance.

Source: VMWG, MIX 2018

The group lending is the primary model in all four selected countries where people live together in densely populated areas and share comparable socioeconomic background and ethnicity. All countries use the saving-driven method, which requires borrowers to have small and medium compulsory deposits to ensure their timely repayments. MFIs can also afford to cover their operating costs, as well as ensure long-term financial viability.

Table 5.4 presents more information on the scale of microfinance sector of all countries. The highest number of active clients (including active borrowers and depositors) is the reason why Vietnam achieved the relatively significant GLP and Deposits (Figure 5.1) compared to those of other countries. However, table 5.4 shows that Vietnam microfinance has served 7.73% of the population that is lower than that of Cambodia at 13.57%. The Philippines is both the country with the highest population and the only one among the four countries with the proportion of microfinance customers to total population increase in recent years, from 3.87% in 2015 to 4.93% in 2017.

Indicator	Vietnam	Laos	Cambodia	Philippines
Active Borrowers ('000)	7,317.3	43.3	2172.9	5,187.4
% of Population	7.73	0.62	13.57	4.93
- 2015 (*)	8.21	1.04	14.86	3.87
Borrowers in Rural Areas (%)	83.1	55.4	55.5	48.9
- 2015 (*)	16.9	44.7	61.4	36.5
Female Borrowers (%)	52	77	53	92
- 2015 (*)	99	56	80	91
Depositors ('000)	9227.1	178	3999.9	6996.3
Average Loan Balance per Borrower (USD)	1186	3118	3550	199
Average Deposit Balance per Depositor (USD)	468	569	1415	95

 Table 5.4: Number of Clients by Country (as of January 2018)

Source: VMWG, MIX 2018, author's calculation

Note: the italic number is the highest value in each indicator; (*) data for the year 2015

Vietnam, on the other hand, has the most significant percentage of borrowers (83.1%) who are living in rural areas while the percentages in the remaining countries are about 50%. It is a considerable change of microfinance in Vietnam in identifying target customers. If in 2015, rural customers accounted for only 16.9% of the total number of borrowers, this number increased significantly in early 2018 with 83.1%. Similar to Vietnam, Laos and the Philippines also saw an increase in the percentage of rural borrowers, while Cambodia tended to decrease, from 61.4% to 55.5% during 2015-2017.

About 52% of Vietnamese MFI' borrowers are women, while the ratios are 77%, 53%, and 92% in Lao PDR, Cambodia, and the Philippines, respectively. While the Philippines and Laos are still giving priority to female borrowers, Cambodia and Vietnam have made precise changes. Women are the target customers in parallel with other groups, such as micro-enterprises, wounded soldiers, low-income households, and rural poor. It may be a current difficulty for Vietnam as many microfinance schemes are closely working with the Women's Union and often provide microfinance services to Union's members. The decline in the number of women using the service while increasing the number of non-members of the Women's Union can make it challenging to collect information and manage all customers. However, this is also a positive point when the customers are more diverse; many objects other than women will have the opportunity to use microfinance products. It is also a condition that requires MFIs to improve their technical and professional capacities to serve many different customers better. Moreover, it requires that Vietnam has gradually changed to market-driven as other countries to serve the broad customers efficiently.

For the two last indicators in table 5.4, the Philippines and Vietnam have small average loan size and deposit per client compared to those of Cambodia and Laos. It implies that the microfinance sector in both countries, in general, more focused on the poor household or poor individuals that often requires small loans. Vietnam Women's Union directly controls a large portion of MFIs in Vietnam, and their members are mainly poor women and small businesses. Similarly, the Philippines has more focused on implementing microfinance to reduce poverty, and that offers small loans and compulsory savings to suit the need of indigent clients.

5.4.2. Funding Structure

A clear ownership structure is essential for the authorities and investors to understand how the MFIs in each country operate. MFIs typically have three main types of funds: deposits (through customers), borrowings and other liabilities (through investors), and equity (through investors and retained earnings).

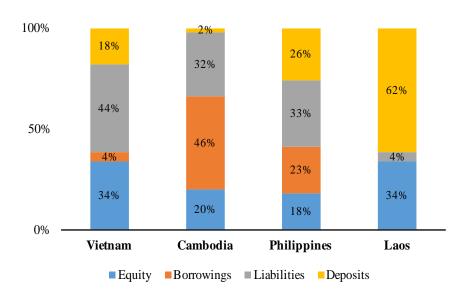


Figure 5.2: Financing Structure (as of January 2016)

Source: VMWG

Notes: the values are median

Figure 5.2 presents that the capital of microfinance in Vietnam has high proportions of equity (34%) and liabilities (44%) compared to other countries in the region. However, the share of loans/borrowings at only 4% is much lower than that of Cambodia (46%) and the Philippines (23%). Other liabilities or payables of Vietnamese MFIs are mainly debts for operational costs/ sponsored and subsidized capitals provided by foreign banks or various local or foreign development projects.

There are four main reasons to explain the meager ratio of borrowings at only 4% of Vietnam.

First, the legal framework for licensed MFIs when borrowing seems to be not suitable for the characteristics of MFIs. For example, many MFIs are not familiar with relevant regulations as a majority of MFIs' staffs are part-time and unprofessional who works for mass organizations at the beginning. Second, the link between MFIs and other financial institutions is limited, which makes MFIs challenging to find out reasonable resources. Third, MFI's business capital to satisfy the borrowing conditions in the formal financial market is limited, and most of the MFIs cannot provide collateral to receive a loan from financial institutions.

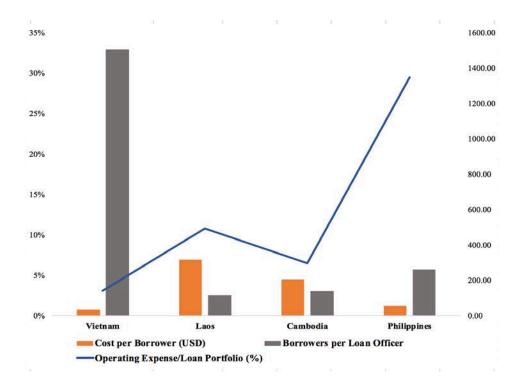
Last but not least, Vietnamese MFIs are not active in a call for investment capital for their development and expansion, and they are still supported to operate in the safe zone. Government and domestic and international organizations remain the primary sources of funding for the operation of MFIs. These non-refundable aids are to actively support MFIs to operate effectively without having to worry about losses. However, it invisibly reduces the dynamism and flexibility of many Vietnamese MFIs in calling for investment from domestic and foreign enterprises and organizations. The Government implicitly assumes this work.

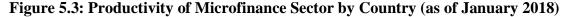
While Cambodia tends to raise capital from loans, accounting for 46%, Laos relies heavily on customer deposits, accounting for 62%, and almost no borrowing. The Philippines seems to have the best capital structure in all four countries with the uniformity of all four primary sources. It helps MFIs in the Philippines to be flexible in all situations when there is a shortage of capital from a single source.

5.4.3. Financial Achievements and Sustainability

As shown in Figure 5.3, MFIs in Vietnam is much productive with the highest number of borrowers per loan officer, 1,507 borrowers/loan officer. It is nearly six times

higher than that of the second country, the Philippines, 264 borrowers/loan officers. The high productivity of loan officers in Vietnam, moreover, led to the remarkable lowest cost per borrowers at just US\$34.6, followed by that of the Philippines at US\$57.2, of Cambodia at US\$206.4, and of Lao PDR at US\$318.7. The highest cost of Cambodia and Lao PDR may be due to most of their MFIs operate in rural and remote areas that have high operating expenses, since their clients are scattered. The lack of infrastructures, such as decent roads, electricity, and phone signal, is another reason. Also, outreach to rural areas is limited because of the low density of population and cohesion lacking. Many clients in these areas are often poorly educated and lack of financial literacy as well as experience in dealing with MFIs.





Source: MIX 2018

Similarly, the overall operational cost (operating expense/loan portfolio) of Vietnam MFIs (3%) is also the lowest among countries. It implies that the assets are being used efficiently and might be profitable for investors and that less income can cover operational

and maintenance costs. In addition to the fact that there are still many Vietnamese MFIs making inadequate loan provision, the primary sources of funding are grants that have significantly reduced the organization's costs. Moreover, the high productivity and low cost of Vietnam result from the relatively small scale and scope of operation of many MFIs since they are often located in only one area.

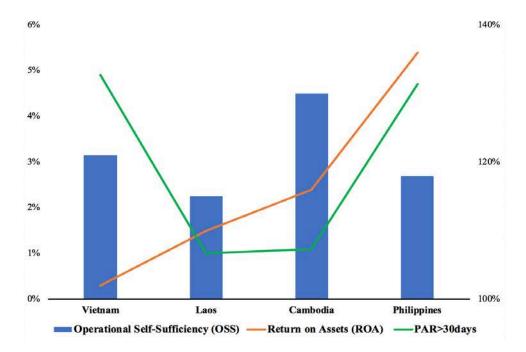


Figure 5.4: Sustainability (as of January 2018)

In addition to the institutional and operational environment, the sustainability of MFIs is often assessed through the criteria: Operational Self-Sufficiency (OSS), profitability ratio (ROA, ROE), and quality of the loan portfolio / Portfolio at risk (PAR> 30days). Figure 5.4 points out ratios of four countries related to sustainability.

MFIs have operational sustainability when the Operational Self-Sufficiency (OSS) index is greater than 100% (Bogan, 2012). According to the standards of MIX and World Bank, MFIs are considered to have a sustainable operation level when the OSS is greater than 120%. In general, all four countries have OSS rates greater than 100%, operating within

Source: VMWG, MIX 2018

Notes: The numbers of OSS are the median values, and for the year 2015; The data of ROA and PAR>30days are for the year 2017.

a manageable scope. The OSS of 121% of Vietnam is just below that of Cambodia at 130%. These values are 115% and 118% for Lao PDR and the Philippines, respectively.

In terms of debt quality, Vietnam and the Philippines have the most significant 30day overdue loan ratio (PAR> 30days) with 4.9% and 4.7% respectively, while Cambodia and Laos have a meager rate of about 1%. It reveals that the management and debt collection activities of Vietnamese MFIs are problematic when this index is only 1.3% in 2015 (MIX, 2016) and 1.1% in 2016 (MIX, 2017). By contrary, for the Philippines, this index is according to the downward trend from 9.3% in 2015 (MIX, 2016), to 8.4% in 2016 (MIX, 2017) and 4.7% in 2017.

In terms of net profit on total assets, ROA, the Philippines had the highest results, with 5%, followed by Cambodia with 2.4%, Laos with 1.5%, and Vietnam with the lowest results with only 0.3%. Notably, Laos had made a remarkable increase in the microfinance business results when the ROA was negative at -0.5% in 2015 (MIX, 2016). Although it is still young compared to other countries regarding scale, MFIs in Laos are taking firm and practical steps in its activities to both meet the social goals and ensure the sustainability of the organizations.

5.5. Conclusion

In order to refer to practical experiences as a reference for microfinance activities in Vietnam, this chapter has selected relevant case studies for analysis. Key points about the context of emergence and development, the achievements, the legal system, and the challenges facing each country have been reviewed and analyzed in order to find useful lessons for Vietnam. Moreover, the main findings are essential to recommend how the microfinance sector in Vietnam should go forward. Comparing the microfinance sector in Vietnam with that in other countries, this generalization covers up some wide disparities within the region. The authorities in Cambodia, the Philippines, and Lao PDR have followed financial deregulation supporting market-driven rather than directly joining and providing microfinance services. This mechanism creates a driving force and a competitive environment for MFIs as well as making the business results (ROA, ROE) of the microfinance sector in these countries increasingly better and better. In Vietnam, state banks still play a vital role in the microfinance system. Moreover, the strong support of governments and local authorities both financially and technically makes competition among organizations very low.

Cambodia is the leading performer with high records on the loan portfolio, assets, personnel, financial achievement. The country has developed a sound and market-oriented microfinance to mobilize and allocate resources for sustainable economic growth. Newly updated policies on microfinance led to the emergence of many microfinance programs formed by NGOs to create more financial opportunities for the poor and MSMEs. For customers, NCB is also interested in building a protection system as well as equipping financial knowledge to accelerate the financial inclusion process and help low-income and vulnerable individuals/households out of poverty.

The Philippines has been prosperous in encouraging policy and regulatory frameworks to support private players providing a diverse array of microfinance products and services. BSP pays attention to creating an efficient regulatory environment for MFIs' operations, building market infrastructure, and promoting sufficient internal supervisory capacity to cooperate with the microfinance sector effectively. On the other hand, NCC and PDIC are two typical government agencies in securing and supporting microfinance policies and the sustainable development of MFIs in the country.

Considering young microfinance industry among countries, Lao PDR has promoted the use of technology in delivering microfinance products to reach the poor in disadvantageous areas efficiently. BoL, international donors, and GIZ have mainly

186

concentrated on developing the microfinance sector to reduce the nation's poverty and thus promote inclusive economic development. Although the size of the microfinance sector is not as large as other countries, Laos is taking a solid step in ensuring debt quality, as well as having an excellent performance in the sustainability indicators of the industry.

Vietnamese microfinance is relatively different from other selected countries as its targeted policy lending with substantial subsidies from the government and international donors. Despite following the same goals of microfinance for social development and poverty alleviation, the microfinance sector in Vietnam employs the dual approach, including market-driven and state-driven, to control the operation of microfinance. In contrast, other countries have followed financial deregulation supporting market-driven rather than directly joining in providing microfinance service in rural areas like the case of VBARD and VBSP in Vietnam.

Another difference in Vietnam's microfinance compared to other countries is the active involvement of mass organizations (MOs) and SBV on behalf of the government and local government authorities in MFIs, especially NGO-MFIs (NMPs). This intervention could cause inequality in executing the operation due to the management teams from MOs often lack knowledge in microfinance and the lack of transparency. Besides, VBSP's subsidized lending activities are distorting the market and creating unequal competition with other types of credit institutions. The SBV then should find solutions to create a fair market for all investors to prevent the restriction on the development of the national microfinance industry.

The interest rates of micro-loans in Vietnam are higher than that of its state-owned banks and seem to be beyond the Vietnamese poor's capacity. However, the average interest rate of Vietnam microfinance is still lower compared to that of peer countries. For example, the average interest rate of micro-loans in the Philippines is over 30%, whereas its inflation rate is lower than that of Vietnam. The high-interest rate is a tool for MFIs to sustain their operation, especially under the context of market orientation. It is also to make access to loans more uncomplicated and more convenient without physical collateral. Positively, the interest rate of MFIs is much lower than that of money lenders providing illegal credit.

Unlike other countries, MFIs in Vietnam are slowly opening for financial technology applications in their operations. The management of information and credit history of customers in many Vietnamese MFIs is still limited, leading to customers' debt, overdue debts, and bad debts creating high risks for organizations. It is also a factor affecting the high PAR index (as shown in Figure 5.4), as well as the low level of financial sustainability of the MFIs (Figure 5.4). Moreover, most of customers are poor/near-poor and live in rural and remote areas with a lack of technology access has the limited capacity in using the technology. Thus, educating and applying technology to the provision of services to customers in a more convenient way is essential. The fundamental solution is to perfect the favorable regulatory environment for the sustainable development of the microfinance industry. It is associated with the enhancement of MFIs' management capabilities as well as the gradual completion of the microfinance sector's infrastructure.

Specific solutions for microfinance to fight against underdevelopment and poverty that suitable for every country is impossible because of socio-economic-political-legal differences. Nevertheless, an appropriate legal and supervisory system is a prerequisite for the positive development of the industry. The NGO-MFIs is noticeable and lack of a formal structure. They require a separate regulation on their ownership and governance, like the "Microfinance NGO Act" in the Philippines. It also requires a constant dialogue among the regulators, the donors, the MFIs, and the clients to improve the legal basis for the proper regulatory environment. The major problem for Vietnamese MFIs is their weak operational autonomy and their reliance on external funding. At the same time, the regulatory agencies of the country need to develop support mechanisms for MFIs to access borrowing resources at a cost consistent with the characteristics of MFIs.

188

CHAPTER VI

KEY FINDINGS, POLICY IMPLICATIONS, LIMITATIONS AND DIRECTION FOR FURTHER RESEARCH

6.1. Introduction

This dissertation has been conducted in the background that the emergence of the microfinance industry has provided a useful tool to develop financial products to the communities who are often excluded from the official banking system. However, it has resulted in some challenges. The microfinance industry has transformed from "credit-extension only" into a much more extensive array of additional products and services such as savings, insurance, money transfers, and e-money. This change comes with greater concern about sustainability and responsibility. It has also sparked an increasing interest regarding how MFIs following market-driven can be sustainable without the subsidization from the government and donors, and whether or not a specific legal framework should regulate and supervise their activities.

With the participation of MFIs, the poor in Vietnam can purchase long-term and high-value assets for their individuals and families such as televisions, motorbikes and houses. Also, they can easily cope with financial problems related to everyday life, such as education, health care, marriage, as well as emergencies such as illness and natural disasters. More than 7 million target customers are receiving microloans from MFIs. It is an excellent achievement for the microfinance sector in Vietnam in efforts to eliminate poverty and improve the quality of life for the poor.

This final chapter is organized in a manner that the next section (6.2) provides a summary of the critical findings of the study as they relate to the research objectives. Consideration of policy implications resulting from the analyses follows in section 6.3, while

section 6.4 highlights the study limitations and proposes further research areas from the identified limitations. Section 6.5 concludes the thesis.

6.2. Key Findings

6.2.1. Characteristics of Microfinance Sector in Vietnam

Generally, the microfinance sector in Vietnam has some common characteristics of the microfinance industry around the world. Vietnam MFIs have mainly provided small loans and savings to targeted clients include needy individuals, low-income households, and micro-enterprises. The simplified method to mitigate default is group lending, consisting of members who have something in common such as socio-economic and political background.

Since 2005, the microfinance sector in Vietnam recorded an impressive development resulting from the issuance of the first Decree on the "Organization and Operation of smallsized financial institutions". It is a starting point for the legal activities of the microfinance sector in the country. The regulatory framework has gradually updated and completed, especially in response to the entry into WTO in November 2006, to provide a foundation for the growth of the microfinance sector in Vietnam. MFIs in the country are expected to become more professional toward market-oriented, and eventually, the disadvantaged groups may benefit from the positive changes.

However, the total asset of all MFIs accounts for just 2% of that of the banking sector in Vietnam. Only 18.9% of the poverty group has the formal bank account while that average proportion of East Asia and Pacific is 60%. Vietnam ranks 112th out of 137 countries regarding the soundness of the bank (Global Competitiveness Report, 2017), and 104th out of 144 countries regarding the number of bank branches per 100,000 adults (WB, 2015). The market for poor Vietnamese is not well-served regarding outreach and products on offer. Many remote regions lack access to banking services, and the poor often face constraints in confronting a bank. Notably, people in rural areas remain looking for "black credit" and other saving rotation forms with high cost and high risk. The present regulatory system is giving high priority to the state-led banks. Mainly, the SBV and Government bodies have heavily involved in the operation of formal MFIs, especially VBSP (the most significant provider), with a high proportion of subsidized credit. This protection has helped formal institutions to broaden outreach at below-market rate loans. Consequently, it not only negatively affects the outreach of remaining MFIs but also creates the disincentive for various institutions to join in the microfinance market in Vietnam. On the other hand, NGO-MFIs (NMPs) and other microfinance schemes have received the funds from international and domestic donors and take advantage of the network of mass organizations (MOs) to provide microfinance services to their members with subsidized interests. However, this support is not worth considering in comparison with that for formal providers. Once again, this mechanism has prevented the microfinance market from a fair and competitive environment. Many present MFIs are at stake as they can operate only with the proportionate increase in subsidies to serve for microfinance-as charity mission.

Despite the encouragement of the Government of Vietnam, the microfinance market is still segmented. There are a few MFIs having the vital market share that can make a strong influence on the sector development. Furthermore, the influential role of mighty MOs in a majority of microfinance schemes has given the same "umbrellas" and might weaken the capability of MFIs. It also led to the market overlapping and then allocates credit at a suboptimal level to MOs' members that may not address the market need. Moreover, the lack of linkage among MFIs causes the case in which a client can sometimes receive loans from not only one lending institutions.

Regarding the diversification, credit and compulsory savings are the primary products while other services such as micro-insurance, micro-leasing, and non-financial services are still weak. "Door-to-door" method is prevalent as mobile banking services, and the setting-up of subsidiaries in the microfinance sector is challenging due to the lack of regulation. As well as, many MFIs only have offices in the big cities whereas their activities locate in other places, poor commune/province and remote areas. The setting-up of new branches and outlets in the operational regions are facing difficulties due to the strict and unclear procedures. As a result, the operational costs of providing microfinance products are quite high and can hinder the ability of MFIs to be financially sustainable.

6.2.2. Regulatory Environment of Microfinance Sector in Vietnam

Although the SBV has been playing a proactive role in creating an efficient regulatory environment to support the microfinance sector, there are still many lacunas. As such, legal corridors do not support present MFIs, especially semi-formal institutions, accessing to capital to expand services as well as applying for proper operation in the microfinance market. The crowding out of small microfinance schemes and NMPs seems to be a negative trend in the context of less stringent regulation to lower operational costs and interest rates for the poor effectively.

As mentioned in Chapter 1, the shifting trend of global microfinance is that MFIs will gradually transform into formal financial institutions and operate under the official financial and banking laws of each country. It is to enhance the financial resources and scope of operations for MFIs. However, this trend is still slow in Vietnam. The majority of present organizations still operate under the financial and technical supports of the government, MOs, and donor agencies. Becoming an official and independent organization is a big challenge for them because of many issues, as mentioned in chapter 3. Only four MFIs successfully transforming into formal institutions (TYM, M7MFI, Thanh Hoa MFI, and CEP) is something that needs to be concerned. It is necessary to take care of policy and environment to promote other eligible MFIs to participate in the formal market of microfinance confidently.

The regulatory framework has gradually completed, but it may not serve the microfinance sector in the right way. There is a lack of the practical legal framework to cover all types of current microfinance programs and projects. Many institutions in Vietnam

providing microfinance services are not licensed. Their unofficial nature has separated them from the scope of banking and finance regulations supervised by the SBV. Then, if they do not apply for the license, they will not be subject to the present regulations and must terminate their operation soon. Moreover, there are policy and regulatory inadequacy that does not meet the needs for sustainable growth. Although much focusing on the operation of MFIs, the overall regulation has created obstacles for the growth of the sector as discussed in chapter 3. Therefore, the legislation should pay more attention to protecting the benefit of customers as well as expanding the outreach to more target communities.

Another issue is the absences of an official agency to maintain social protection and a shared information system to prevent the risk for both institutions and clients. It is also essential to build an even playing field between MFIs and clients regarding providing education services to microfinance clients. Although the microfinance sector in Vietnam passed the infancy stage, there is much room for future development with the legal framework in place.

6.2.3. Efficiency of MFIs in Vietnam and Determinants

MFIs in Vietnam are generally efficient with the mean overall technical efficiency scored at 96%. More institutions are showing pure technical efficiency than technical efficiency. Most of the inefficiency resulted from the scale inefficiency that relates to the wrong scale of operation than the shortage in managing capital and human resource. Then, it is essential to improve the efficiency level by investigation of the waste of inputs or resources. As well as, MFIs in Vietnam can increase their efficiency level by reducing input sources while maintaining constant outputs or increasing outputs with a constant input source.

The specific analyses indicated a significant link between the goals of supporting women and reducing poverty. It can be said that MFIs originating from NGOs promote better social efficiency than other types of MFIs. However, the results showed low scores for overall social efficiency (54.9%) and its simplified efficiency. The present operation strategies, therefore, do not succeed in serving poor women and especially reducing poverty. 11 MFIs were financially 100% efficient while only seven MFIs reached this score for social efficiency. Many MFIs achieved high scores for financial performance but attain low social efficiency scores. 22 out of 27 MFIs were achieving the social efficiency score that is lower than that of financial efficiency. The evaluations came with a conclusion that an MFI in Vietnam should be at first financially sound in order to meet the social mission.

Analyses on both across MFIs and over periods are essential to specify sources on how to address improvement regarding management and sustainability. The results of MPI revealed that MFIs in Vietnam had overall productivity regress during 2013-2015. Over the years, the number of MFIs dropping their productivity increased. The ability of MFIs to avoid waste and take advantage of scale becomes worse in the examined periods. Technological innovations should be accompanied by the assurance of effectiveness in the operation and management of the MFIs. It is to ensure both technical and technological performance for MFIs, which are important indicators in determining overall productivity index, MPI.

The discussions on super efficiency results also discovered a group of leading microfinance providers which attained both high-efficiency financial and social scores regarding capability on cost control, operation improvement, and management activities. By contrast, there is a group of MFIs that achieved low efficiency level on both financial and social side. The current operation of this group could cause their future uncertain, and thus, it is crucial for them to be careful about designing a strategy on the future operation and development. High-performing groups will serve as a useful reference on how they work for socially and financially low-performing groups. It is also an essential point for the authorities to rethink the market in groups to make appropriate decisions.

On the other hand, the determinant analysis showed that indicators such as total assets,

experience, number of borrowers, and geographical areas of operation are significant to determine the efficiency of MFIs. Mature MFIs have the advantage of being financially efficient, while large-scale MFIs are more comfortable to achieve social performance. Besides, the ROA is an essential indicator in both the social and financial goals of MFIs. Therefore, another analysis used the Data Regression Model Panel to find out the main factors affecting ROA. OSS, GLP, and FAR, and PAR30 are factors that will positively/negatively affect ROA, and thus somewhat affect the efficiency and financial sustainability of Vietnamese MFIs.

In general, many Vietnamese MFIs are still operating in moderation, with little specific motivation and strategy in the long run. Focusing or prioritizing on poverty reduction or profitability goals or both is an essential issue in selecting the factors for longterm development to ensure organizational sustainability.

6.2.4. Microfinance Progress in the Peer Countries

Although there are differences among countries in the region, MFIs have grown strongly in Asia in terms of both popularity and high repayment rates.

Cambodia is considered the leading performer among countries with high records on such as loan portfolio, assets, and personnel. The country also has early policies on microfinance development that led to the emergence of many microfinance projects formed by NGOs to improve access to finance for the rural poor. Working on the mission of rehabilitation, humanitarian assistance, and poverty alleviation, a sound and market-oriented microfinance sector has mobilized and allocated resources to support sustainable economic growth. Moreover, the NBC has focused on consumer protection and financial literacy as a way to promote financial inclusion and help low-income and vulnerable individuals/households out of poverty.

The Philippines has been prosperous in encouraging policy and regulatory framework to support private players providing a diverse array of microfinance products and

195

services to the poor. BSP has concerned about creating an efficient regulatory environment for MFIs' operations, building market infrastructure, and, very importantly, promoting sufficient internal supervisory capacity to work with the microfinance sector effectively. Moreover, other government agencies such as NCC and PDIC have guided and supported microfinance policies and secure the sustainable development of MFIs in the country.

Even though the microfinance industry in Lao PDR is in the early stage of the development, BoL and international donors have invested significantly in the last few years in the microfinance programs with the aim of promoting the development of microfinance in the country. As an essential partner, GIZ, as part of the Lao-German Development Cooperation, has been supporting the country in reaching its microfinance development goal by 2020. Besides, the country has promoted the use of technology in delivering microfinance products to reach the poor in disadvantageous areas efficiently.

6.2.5. Microfinance Sector of Vietnam Compared to Peer Countries

Unlike peer countries, the development of Vietnam microfinance mainly bases on targeted lending policy with substantial subsidies from the government and international donors. The microfinance sector has employed the dual approach, including both market-driven and state-driven to control the operation while other countries have applied financial deregulation supporting market-driven. More particularly, MOs and the SBV on behalf of the government and local government authorities heavily intervene in NGO-MFIs (NMPs). This context leads to the case of an unfair market for all investors. Additionally, executing the operation among MFIs is inhomogeneous due to the management teams and staffs from MOs often lack knowledge in microfinance and the lack of transparency.

The interest rates of micro-loans in Vietnam are lower compared to those of peer countries. The low interest rates seem to be beneficial to the borrowers, but it is indeed not good. The customers should be aware that they have to pay more for more convenient services. Compared to the lending procedures of the traditional banking system, MFIs provide access to loans simpler and more comfortable without physical collateral. Moreover, MFIs in Vietnam are still not active in updating technology for their operations due to the lack of capital and policy supports. "Door-to-door" method is widespread; and thus, the highinterest rate is a source for MFIs to sustain their operation, especially under the context of market orientation. Positively, the interest rates of Vietnam MFIs are much lower than those of money lenders providing illegal credit.

To conclude, direct regulation and supervision under the laws have led to some positive outcome in selected countries. The fundamental solution is to perfect a favorable regulatory environment for the sustainable development of the microfinance industry. It is associated with strengthening the organizations' supervisory capacity and increasing the infrastructure development for microfinance sector. The join of NGO-MFIs is significant, and it is in need a separate regulation on their ownership and governance in Vietnam like the "Microfinance NGO Act" of the Philippines. It also requires regular communications among the regulators, the donors, the MFIs, and the clients to improve the legal basis for a proper regulatory environment.

6.3. Policy Implications

Current problems are both opportunities and challenges for the microfinance sector in Vietnam. It is necessary to systematically promote measures that address the barriers and obstacles to the development of MFIs to ensure a stable, stable and fair market for all stakeholders, organizations, investors, and customers.

6.3.1. Customer Protection and Risk Management

Rather than focusing on issuing policies on the operation of MFIs, the government and policymakers should support and hand over authority to a specific organization working for customer protection. The social protection also includes the transparency of rates and policies. Moreover, the regulation would be more enforceable upon larger MFIs. It makes more sense to promote fewer MFIs with more clients, rather than to support all size MFIs that have fewer clients and much higher costs. Aside from MOs, it is essential to establish at least one legal civil society as a middle-man among microfinance clients, MFIs, and the regulators.

Tighter regulation on a reliable credit information system consisting of both positive and negative pieces of information of clients can prevent over-indebtedness for MFIs. The shared system also should be accessible by customers. By enhancing community monitoring and through mass organizations, this management helps to keep track of customers better, prompt updates, and reliably reduce costs due to asymmetric information. Risk management through an information system allows for automatic sharing or updating of information so that other MFIs can monitor clients and prevent general risk.

6.3.2. Product Development

Microfinance development and financial inclusion are unavoidable infrastructures for growing economies in the developing country. It is also relevant to the Vietnamese economy. Steady growth of microfinance giving financial capital to many citizens is sure to have a significant impact in directing the equality and macroeconomics of the country in the long term.

The providers in the microfinance market should focus on the demand side to innovate new lines of products and services. Strategic shareholders should support MFIs to develop diversified products and services that are appropriate to the needs and abilities of poor and low-income clients such as multiple forms of savings and repayment. Micro-loans should be distributed through group credibility, as in other countries, to increase mutual support and payment among team members. Additionally, procedures for disbursing microloans need to be simple and based on specific criteria to minimize transaction costs.

Money transfers, insurance, collection, and payment, for example, have to develop under the needs and capabilities of MFIs. Although the banking sector in Vietnam has adopted new technologies, the application is weak in the microfinance industry where most of the people are poor and often underdeveloped. Investor, mobile service providers and "fintech" software companies should be supported by the government and authorities to join in this industry. Last but not least, non-financial services or social services such as training, consultancy and technical support, and especially financial literacy education also need to promote.

6.3.3. Interest Rate Policy

Microfinance is not a charity that always requires the involvement of the public sector. It serves low-income communities and small businesses, so it is necessary to have a good view of the position of microfinance in the national financial system. The Grameen bank model, for example, operated on the principle of pro-poor practice, and the profitability is continued to shift to the poor. This model also proved that microfinance operations are profitable compared to other industries. Hence, microfinance practices need to follow costeffective and profitable business principles to be sustainable development.

It is crucial that MFIs can decide on lending rates by type of customers or loans. In particular, small and high-risk loans will incur high interest rates, and conversely, large and low-risk loans may enjoy lower interest rates. MFIs and authorities need to develop a clear and specific interest rate and fee framework based on market rates to avoid the borrowers' moral hazard or negativity in loan approval, guarantee, and payment. Additionally, providing products on a sufficiently large scale will help to reduce the average costs. Also, microfinance services for social purposes or applying low-interest rates should be considered for tax exemption to reduce financial burden on organizations.

6.3.4. Operation Management

The present high efficiency of many MFIs in Vietnam is because of the strong supports from the government, NGOs, and charitable donations. However, the MFIs themselves must be accountable for their performance to develop. The government should not provide large and long-term subsidization for the microfinance sector because it will lead to the rise of subjective expectation and the reduction of the MFIs' autonomy. It is necessary to develop a roadmap for transforming semi-formal MFIs into formal ones subordinating to SBV. Similarly, informal providers need to be guided to limit "black credit" that may harm social life, especially poor households. MFIs should have a full reporting system that meets the accounting and governance requirement and adheres to operational safety criteria.

The findings from efficiency analyses have critical implications for both policymakers and managers. Social efficiency is a following result that arises from financial performance of MFIs. Then, the management skills such as taking higher risks and being flexible about the product diversification and terms of repayment to cover operational expenses may further improve MFIs' performance. The SBV should also strategize supervision of management to improve cost-effectiveness in using resources, and to expand operations for scale economies. Moreover, MFIs in Vietnam can now be grouped, which means that benchmarking can be built on the group that an MFI belongs to.

6.4. Limitation of the Study and Suggested Further Research

The study has not observed every aspect of performance and sustainability for financial inclusion as well as the current impact of microfinance services on the beneficiaries.

The main limitation is the lack of full dataset regarding microfinance activities in Vietnam. It is challenging to convince the MFIs to provide the correct information and data in the surveys/questionnaires. Some respondents did not give their response on the current situations of institutions in a wholly accurate manner. Since the microfinance managers and staffs were busy with their schedule at both MOs and MFIs, many of them were reluctant to answer.

The efficiency analyses conducted with 27 MFIs in a short period, so it may be possible that findings may vary if other institutions have also been covered. In turn, the sample MFIs which has been chosen might not be the true representative of the whole industry. Moreover, the comparative study is limited to only three peer countries and some typical issues, and therefore, several other potential case studies outside have been ignored. Because of time limitation, the fieldworks in the peer countries did not include.

The present study has highlighted the performance of Vietnamese MFIs and the capacity of the microfinance sector in financial inclusion with particular reference to the current structure, regulatory environment, and efficiency evaluations. In-depth study of working on other indicators of sustainability such as profitability, and portfolio quality in more MFIs can be taken for further analysis. In-depth study of other parameters of economic models in a more extended period can also be taken for further research. Additionally, in-depth study, including fact-finding trips at MFIs and interviews with microfinance staffs in other countries can provide more actual information on their differences compared to Vietnam. Moreover, the comparative analysis between Vietnam and other peer countries, which have good records in financial inclusion, such as Thailand and China regarding development and policies can also be considered for further research.

This study mainly worked on the side of institutions to clarify the strengths, weaknesses, advantages and disadvantages that MFIs, government, and policymakers are facing. Therefore, in-depth study on the specific characteristics of beneficiaries and impact of microfinance services should be considered. This is especially important for areas where the clients are mainly poor and near-poor.

6.5. Concluding remarks

This study aimed to evaluate the current situations of the microfinance sector and MFIs in Vietnam concerning performance and sustainability. Through an application of mixed methodology, a review of relevant literature, lessons from the experience of other countries and collected quantitative and qualitative information from stakeholders (regulators, MFIs, clients, policy and lawmakers, and experts in the field) and the MIX database, a comprehensive analysis of Vietnam microfinance was performed. It is believed

that some useful conclusions and arguments have been made to answer the relevant research questions of the study, as evidenced by the critical findings demonstrated above.

REFERENCES

- Abdelkader, I. B., Hathroubi, S., & Jemaa, M. M. B. (2014). Microfinance Institutions' Efficiency in the MENA Region: A Bootstrap-DEA Approach. *Research Journal of Finance and Accounting*, 5(6), 179-191.
- Abdulai, A., & Tewari, D. D. (2016). Efficiency of Microfinance Institutions in Sub-Saharan
 Africa: A Stochastic Frontier Approach. *Ghana Journal of Development Studies*, 13(2), 117-139.
- Adams, D. W, Graham, D. H, & Pischke, J. D. V. (1984). Undermining Rural Development with Cheap Credit. Boulder, CO: Westview Press.
- Ahmad, U. (2011), Efficiency Analysis of Micro-Finance Institutions in Pakistan. *Munich Personal REPEC Archive (MPRA) Report*, No. 34215.
- Akanga, F. (2016). Governance of Microfinance Institutions (MFIs) in Cameroon: What Lessons can We Learn?. *Enterprise Development and Microfinance*, 27(3), 219-235.
- Allden, S. (2009). Microfinance and Post-conflict Development in Cambodia and Timor-Leste. SOJOURN: *Journal of Social Issues in Southeast Asia*, 24(2), 269-284.
- Annim, S. K. (2010). *Microfinance Efficiency Trade-offs and Complementarities*. <u>https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1688460</u>.
- Armendáriz, B., & Morduch, J. (2010). *The Economics of Microfinance*. 2nd ed. MIT Press: Cambridge.
- Asian Development Bank. (2000). *The Role of Central Banks in Microfinance in Asia and the Pacific*. ADB Asian Development Bank.
- Asian Development Bank. (2010). Microfinance Assessment of ADB TA-7499-VIE: Developing Microfinance Sector in Vietnam. Hanoi.

Asian Development Bank (2017). Accelerating Financial Inclusion in South-east Asia with Digital Finance. <u>https://www.adb.org/sites/default/files/publication/222061/financial-inclusion-se-asia.pdf</u>.

- Assefa, A. (2013). The Political Economy of Food Price: the Case of Ethiopia. WIDER Working Paper, No. 2013/001.
- Assefa, E., Hermes, N., & Meesters, A. (2013). Competition and the Performance of Microfinance Institutions. *Applied Financial Economics*, 23(9), 767-782.
- Athanassopoulos, A. D., & Ballantine, J. A. (1995). Ratio and Frontier Analysis for Assessing Corporate Performance: Evidence from the Grocery Industry in the UK. Journal of the Operational Research Society, 46(4), 427-440.
- Athanassopoulos, A. D. (1997). Embodying Service Quality into Operating Efficiency for Assessing the Effort Effectiveness in the Provision of Financial Services. *European Journal of Operational Research*, 98(2), 300-313.
- AusAid. (2010). *Financial Services for the Poor*. Available at: <u>https://www.financite.be/sites/default/files/references/files/1026.pdf.</u>
- Auwal, M. A., & Singhal, A. (1992). The Diffusion of Grameen Bank in Bangladesh: Lessons Learned about Alleviating Rural Poverty. *Science Communication*, 14(1), 7-28.
- Azad, M. A., Munisamy, S., Masum, A. K., & Wanke, P. (2016). Do African Microfinance Institutions Need Efficiency for Financial Stability and Social Outreach?. *South African Journal of Science*, 112(9-10), 1-8.
- Azad, M. A. K., Masum, A. K. M., Munisamy, S., & Sharmin, D. F. (2016). Efficiency Analysis of Major Microfinance Institutions in Bangladesh: A Malmquist Index Approach. *Quality & Quantity*, 50(4), 1525-1537.

- Balkenhol, B. (2007). Efficiency and Sustainability in Microfinance. In: Balkenhol, B. (eds.), *Microfinance and Public Policy*. International Labour Organization (ILO) Century Series, Palgrave Macmillan, London.
- Balkenhol, B., & Hudon, M. (2011). Efficiency. In: Armendariz, B., & Labie, M. (eds.), *The Handbook of Microfinance*, World Scientific Publishers, 383-396.
- Banker, R. D., Charnes, A., & Cooper, W. W. (1984). Some Models for Estimating Technical and Scale Inefficiencies in Data Envelopment Analysis. *Management Science*, 30(9), 1078-1092.
- Bassem, B. S. (2008). Efficiency of Microfinance Institutions in the Mediterranean: An Application of DEA. *Transition Studies Review*, *15*(2), 343-354.
- Bateman, M. (2017). Post-war Reconstruction and Development in Cambodia and the Destructive Role of Microcredit. In *Conference Proceedings of the 8th International Scientific Conference "Future World by 2050"* (Vol. 1, No. 3, p. 45-73).
- Berger, A. N., & Humphrey, D. B. (1997). Efficiency of Financial Institutions: International Survey and Directions for Future Research. *European Journal of Operational Research*, 98(2), 175-212.
- Berger, M. (1989). Giving Women Credit: The Strengths and Limitations of Credit as a Tool for Alleviating Poverty. *World Development*, 17(7), 1017-1032.
- Bezemer, M., & Schuster, S. R. (2014). Viet Nam: Financial Sector Assessment, Strategy, and Road Map. Mandaluyong City, Philippines: Asian Development Bank.
- Bibi, U., Balli, H. O., Matthews, C. D., & Tripe, D. W. (2018). Impact of Gender and Governance on Microfinance Efficiency. *Journal of International Financial Markets, Institutions and Money, 53*, 307-319.
- Bogan, V. L. (2012). Capital Structure and Sustainability: An Empirical Study of Microfinance Institutions. *Review of Economics and Statistics*, 94(4), 1045-1058.

- BoL, APRACA & GTZ. (1997). National Consultation Workshop on the Promotion of Rural and Microfinance in the Lao PDR. Vientiane and Bangkok.
- Bouman, F. J. A. (1995). Rotating and Accumulating Savings and Credit Associations: A Development Perspective. World Development, 23(3), 371-384.
- Brau, J. C., & Woller, G. M. (2004). Microfinance: A Comprehensive Review of the Existing Literature. *The Journal of Entrepreneurial Finance*, 9(1), 1-27.
- Brix, L. (2009). Consumer Protection Policy Diagnostic Report: Cambodia. Washington, DC: CGAP, January.
- Brown, M., & Jacobs, R. (2010). Comparative Analysis of Microfinance Policy Frameworks and Legislation of Selected Countries. International Finance Corporation, Washington, D.C.
- Buckley, R. P. (2002). The Fatal Flaw in International Finance: The Rich Borrow and the Poor Repay. *World Policy Journal*, *19*(4), 59-64.
- Bui, T. T. (2017). Comparative Analysis of Innovation between Vietnam's Microfinance System and International Benchmarks. *Vietnam Social Sciences*, 6, 10-21.
- Bylander, M. (2014). Borrowing Across Borders: Migration and Microcredit in Rural Cambodia. *Development and Change*, 45(2), 284-307.
- Bylander, M., Res, P., Jacoby, L., Bradley, P., & Pérez, A. B. (2018). Over-indebtedness and Microcredit in Cambodia: Moving beyond Borrower-centric Frames. *Development Policy Review*.
- Carruthers, B. G., & Kim, J-C. (2011). The Sociology of Finance. Annual Review of Sociology, 37, 239-259.
- Caserta, M., Monteleone, S., & Reito, F. (2018). The Trade-off Between Profitability and Outreach in Microfinance. *Economic Modelling*, 72, 31-41.

CGAP. (2003). Microfinance Consensus Guidelines: Definitions of Selected Financial

Terms, Ratios and Adjustments for Microfinance. The World Bank.

- CGAP. (2014). Advancing Financial Inclusion to Improve the Lives of the Poor. http://www.cgap.org/sites/default/files/Other-CGAP-2014-Annual-Report-Dec-2014_1.pdf.
- CGAP. (2014). Serving Smallholders Farmers: Recent Developments in Digital Finance. https://www.cgap.org/sites/default/files/Focus-Note-Serving-Smallholder-Farmers-Jun-2014.pdf.
- CGAP & World Bank. 2010. *Financial Access 2010*. Washington, D.C.: CGAP and the World Bank. <u>http://www.cgap.org/gm/document-</u> 1.9.47743/FA_2010_Financial_Access_2010_Rev.pdf.
- Chang, T. C., & Chiu, Y. H. (2006). Affecting Factors on Risk-adjusted Efficiency in Taiwan's Banking Industry. *Contemporary Economic Policy*, 24(4), 634-648.
- Chaves, R. A., & Gonzalez-Vega, C. (1996). The Design of Successful Rural Financial Intermediaries: Evidence from Indonesia. *World Development*, 24(1), 65-78.
- Chowdhury, A. M. R., & Bhuiya, A. (2004). The Wider Impact of BRAC Poverty Alleviation Programme in Bangladesh. *Journal of International Development*, 16, 369-386.
- Coelli, T. J., Rao, D. S. P., O'Donnell, C. J., & Battese, G. E. (2005). An Introduction to Efficiency and Productivity Analysis. Springer Science & Business Media.
- Convergences. (2018). *Microfinance Barometer 2018: Microfinance and Profitabilities*. <u>http://www.convergences.org/wp-</u>

content/uploads/2018/09/BMF_2018_EN_VFINALE.pdf.

Copestake, J. (2007). Mainstreaming Microfinance: Social Performance Management or Mission Drift. *World Development*, 35, 1721-1738.

Copestake, J. (2007). Mission Drift - Understand it. Avoid it. ESR Review, 9(2), 20-25.

- Crawford, A., Skully, M. T., & Tripe, D. W. (2014). Are Profitable Microfinance Programs less Efficient at Reaching the Poor? A Case Study in Cambodia. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1968280.
- Cull, R., Demirgüç-Kunt, A., & Morduch, J. (2009). Microfinance Meets the Market. Journal of Economic Perspectives, 23(1), 167-192.
- Cull, R., Demirgüç-Kunt, A., & Morduch, J. (2018). The Microfinance Business Model: Enduring Subsidy and Modest Profit. *The World Bank Economic Review*, 32(2), 221-244.
- Cull, R., & Morduch, J. (2007). Financial Performance and Outreach: A Global Analysis of Leading Microbanks. *The Economic Journal*, 117(517), 107-133.
- de Oliveira Crevelari, H. E. (2017). A Different Perspective on the Debate Between Nonprofit and For-Profit Microfinance Organizations. Theses & Dissertations, Utah State University.
- Delis, M. D., & Papanikolaou, N. I. (2009). Determinants of Bank Efficiency: Evidence from a Semi-parametric Methodology. *Managerial Finance*, 35(3), 260-275.
- Donaghue, K. (2004). Microfinance in the Asia Pacific. Asian Pacific Economic Literature, 18(1), 41-61.
- Dowla, A. (2006). In Credit We Trust: Building Social Capital by Grameen Bank in Bangladesh. *Journal of Socio-Economics*, 35(1), 102-122.
- Downey, K., & Conroy, S.J. (2012). *Microfinance: The Impact of Nonprofit and For-Profit Status on Financial Performance and Outreach*. <u>https://pdfs.semanticscholar.org/76e5/96ae19755b5123308b3c8bee34189a5fae42.p</u> <u>df?_ga=2.183809762.595193998.1592635471-998135020.1592635471</u>.

- Emrouznejad, A., & Yang, G. L. (2018). A Survey and Analysis of the First 40 Years of Scholarly Literature in DEA: 1978-2016. *Socio-Economic Planning Sciences*, 61, 4-8.
- Fethi, M. D., & Pasiouras, F. (2010). Assessing Bank Efficiency and Performance with Operational Research and Artificial Intelligence Techniques: A Survey. *European Journal of Operational Research*, 204(2), 189-198.
- Fisher, T., Sriram, M. S., & Harper, M. (2002). *Beyond Micro-credit*. Vistaar publications, Ahmedabad.
- Fotabong, L. A. (2011). Comparing Microfinance Models: MC2 Model versus other Microfinance Model. <u>https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2007874.</u>
- Fotabong, L. A. (2012). The Microfinance Market of Cameroon Analyzing Trends and Current Development. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2007912.
- Fujimoto, A., & Rillo, A. D. (2014). From Microfinance to Mobile Banking: Making Financial Inclusion Work in the Philippines. In: *Financial Inclusion in Asia: Country Surveys*. Asian Development Bank Institute.
- Fuller, R. J., & Crawford, R. H. (2011). Impact of Past and Future Residential Housing Development Patterns on Energy Demand and Related Emissions. *Journal of Housing and the Built Environment*, 26(2), 165-183.
- Gaiha, R., & Nandhi, M. A. (2008). Microfinance, Self-help Groups and Empowerment in Maharashtra. In R. Jha (Ed.), *The Indian Economy Sixty Years after Independence*, Palgrave Macmillan, 179-199.
- Gallardo, J. (2002). A Framework for Regulating Microfinance Institutions: The Experience in Ghana and the Philippines. *World Bank Policy Research Working Paper*, No. 2755.

General Statistics Office (GSO). (1998). Vietnam Living Standard Survey 1997-1998.

Statistics Publishing House, Hanoi, Vietnam.

- General Statistics Office (GSO). (2004). *Vietnam Household Living Standard Survey 2004*. Statistics Publishing House, Hanoi, Vietnam.
- General Statistics Office (GSO). (2006). Vietnam Household Living Standard Survey 2006.Statistics Publishing House, Hanoi, Vietnam.
- General Statistics Office (GSO). (2008). Vietnam Household Living Standard Survey 2008.Statistics Publishing House, Hanoi, Vietnam.
- Goldenberg, M. J. (2003). Feminists Doing Ethics. Teaching Philosophy, 26(1), 114-117.
- Gonzalez, A. (2010). Is Microfinance Growing Too Fast?. MIX Data Brief, No. 5.
- Granath, K., & Kling, K. (2018). Investigating the Relation Between Microcredit and Female Entrepreneurship in Lao PDR. Master's Thesis in Economics, Department of Management and Engineering, Linköping University, Sweden.
- Gutiérrez-Nieto, B., & Serrano-Cinca, C. (2007). Factors Explaining the Rating of Microfinance Institutions. *Nonprofit and Voluntary Sector Quarterly*, 36(3), 439-464.
- Gutiérrez-Nieto, B., Serrano-Cinca, C., & Molinero, C. M. (2007). Microfinance Institutions and Efficiency. *Omega*, 35(2), 131-142.
- Guitiérrez-Nieto, B., Serrano-Cinca, C., & Molinero, C. M. (2008). A DEA Approach to Microfinance Institutions Efficiency. In centre for European research in microfinance seminars, Brussels.
- Gutiérrez-Nieto, B., Serrano-Cinca, C., & Molinero, C. M. (2009). Social Efficiency in Microfinance Institutions. *Journal of the Operational Research Society*, 60(1), 104-119.

- Habaradas, R. B., & Umali, M. A. (2013). The Microfinance Industry in the Philippines: Striving for Financial Inclusion in the Midst of Growth. *CBRD Working Paper*, No. 2013-05.
- Haq, M., Hoque, M., & Pathan, S. (2008). Regulation of Microfinance Institutions in Asia:
 A Comparative Analysis. *International Review of Business Research Papers*, 4(4), 421-450.
- Haq, M., Skully, M., & Pathan, S. (2010). Efficiency of Microfinance Institutions: A Data Envelopment Analysis. Asia-Pacific Financial Markets, 17(1), 63-97.
- Harmincova, Z., & Janda, K. (2014). Microfinance around the World Regional SWOT Analysis. MPRA Paper, No. 58171.
- Hartarska, V. (2005). Governance and Performance of Microfinance Institutions in Central and Eastern Europe and the Newly Independent States. *World Development*, 33(10), 1627-1643.
- Hartarska, V., Shen, X., & Mersland, R. (2013). Scale Economies and Input Price Elasticities in Microfinance Institutions. *Journal of Banking & Finance*, 37(1), 118-131.
- Hassan, K. M., & Sanchez, B. (2009). Efficiency Analysis of Microfinance Institutions in Developing Countries. *Networks Financial Institute Working Paper*, No. 2009-WP-12.
- Hatch, J. (2004). Expanding Microcredit Services to Young Adults: Research Findings,
 Rationale, Blind Spots, and Recommendations. In *Trickle Up Program's Microenterprise for the World's Poorest Symposium, Metropolitan College, New*York City (Vol. 8).
- Helm, D. R. (2006). Ownership, Utility Regulation and Financial Structures: An Emerging Model.

http://www.dieterhelm.co.uk/assets/secure/documents/OwnershipUtilityReg-FinancialStructures.pdf.

- Heng, S. (2015). Assessing Outreach and Sustainability of Microfinance Institutions in Cambodia. Doctoral Dissertation, Ohio University.
- Hermes, N., & Lensink, R. (2011). Microfinance: Its Impact, Outreach, and Sustainability. World Development, 39(6), 875-881.
- Hoff, A. (2007). Second Stage DEA: Comparison of Approaches for Modelling the DEA Score. European Journal of Operational Research, 181(1), 425-435.
- Hollis, A., & Sweetman, A. (1998). Microcredit in Prefamine Ireland. Explorations in Economic History, 35(4), 347-380.
- Hollis, A., & Sweetman, A. (1998). Microcredit: What can We Learn from the Past?. *World Development*, *26*(10), 1875-1891.
- Hollis, A., & Sweetman, A. (2004). Microfinance and Famine: the Irish Loan Funds During the Great Famine. World Development, 32(9), 1509-1523.
- Hribernik, M., & Kierzenkowski, R. (2013). Assessing the Efficiency of Welfare Spending in Slovenia with Data Envelopment Analysis. OECD Economics Department Working Papers, No. 1058.
- Hulme, D., & Mosley, P. (1996). Finance against Poverty. Volume 1, Routledge, London.
- Hung, D. V. (1998). Study Case: People's Credit Funds in Vietnam. Report Presented to Development International Desjardins, Quebec, Canada.
- Huntington, S. (1968). *Political Order in Changing Societies*. New Haven, CT: Yale University Press.
- Ibrahim, Y., Ahmed, I., & Minai, M. S. (2018). The Influence of Institutional Characteristics on Financial Performance of Microfinance Institutions in the OIC Countries. *Economics and Sociology*, 11(2), 19-35.

- Islam, K. M., Bäckman, S., & Sumelius, J. (2011). Technical, Economic and Allocative Efficiency of Microfinance Borrowers and Non-Borrowers: Evidence from Peasant Farming in Bangladesh. *European Journal of Social Sciences*, 18(3), 361-377.
- Jayamaha, A. (2012). Efficiency of Small Financial Institutions in Sri Lanka using Data Envelopment Analysis. *Journal of Emerging Trends in Economics and Management Sciences*, 3(5), 565-573.
- Jurik, N. C. (2005). Bootstrap Dreams: U.S. Microenterprise Development in an Era of Welfare Reform. Cornell University Press.
- Karlan, D. S., & Goldberg, N. (2007). Impact Evaluation for Microfinance. Poverty Reduction and Economic Management. Thematic Group on Poverty Analysis, Monitoring and Impact Evaluation. The World Bank.
- Kayastha, R. (2013). Institutional Governance in Microfinance Institutions. *Yokohama journal of social sciences*, *17*(6), 67-76.
- Khamar, M. (2017). Global Outreach & Financial Performance Benchmark Report, 2015.MIX.Washington,DC.

https://www.themix.org/s/global_benchmark_report_fy2015_0.pdf.

- Khamar, M. (2019). Global Outreach & Financial Performance Benchmark Report, 2017-2018. MIX. Washington, DC. <u>https://www.themix.org/s/MIX-Market_Global-Outreach-Financial-Benchmark-Report_2017-2018.pdf</u>.
- Kinde, B. A. (2012). Financial Sustainability of Microfinance Institutions (MFIs) in Ethiopia. *European Journal of Business and Management*, 4(15), 1-10.
- Kipesha, E. F. (2012). Efficiency of Microfinance Institutions in East Africa: A Data Envelopment Analysis. *European Journal of Business and Management*, 4(17), 77-88.

- Kipesha, E. F. (2013). Performance of Microfinance Institutions in Tanzania: Integrating Financial and Non-financial Metrics. *European Journal of Business and Management*, 5(4), 94-105.
- La Torre, M., & Vento, G. (2008). Banks in the Microfinance Market. In *Frontiers of Banks in a Global Economy* (pp. 131-148). Palgrave Macmillan, London.
- Lalitha, N. (1998). Micro Finance: Rural NGOs and Banks Networking. *Social Welfare*, 45, 13-17.
- Lapenu, C., & Pierret, D. (2006). *Handbook for the Analysis of the Governance of Microfinance Institutions*. International Fund for Agricultural Development.
- Larson, D. (2001). Developing a Post-Conflict Micro-finance Industry: The Case of Cambodia. Bethesda, Maryland: Development Alternatives Inc.
- Lebovics, M., Hermes, N., & Hudon, M. (2015). Are Financial and Social Efficiency Mutually Exclusive? A Case Study of Vietnamese Microfinance Institutions. *Annals* of Public and Cooperative Economics, 87(1), 55-77.
- Ledgerwood, J. (1998). *Microfinance Handbook: An Institutional and Financial Perspective*. The World Bank.
- Ledgerwood, J., Earne, J., & Nelson, C. (Eds.). (2013). *The New Microfinance Handbook: A Financial Market System Perspective*. The World Bank.
- Ledgerwood, J., & White, V. (2006). *Transforming Microfinance Institutions: Providing Full Financial Services to the Poor*. The World Bank.
- Leon. J. V. (2001). Decentralized Efficient Organizations of Microfinance: The Case of the Peruvian Municipal Banks. *Working Paper Series*, Wittenberg University, Ohio.
- Llanto, G. M. (2015). Financial Inclusion, Education, and Regulation in the Philippines. Asian Development Bank Institute (ADBI) Working Paper, No. 541.

- Llanto, G. M., & Rosellon, M. A. D. (2017). What Determines Financial Inclusion in the Philippines? Evidence from a National Baseline Survey. *Philippine Institute for Development Studies (PIDS) Discussion Paper Series*, No. 2017-38.
- Long, I. (2009). Perceptions of Microfinance in Cameroon: A Case Study of UNICS, Yaoundé. *ISP Collection*, 729.
- Louis, P., Sert, A., & Baesens, B. (2013). Financial Efficiency and Social Impact of Microfinance Institutions Using Self-Organizing Maps. World Development, 46, 197-210.
- Malhotra, A. K. (2018). Return on Assets as a Measure of Financial Sustainability of Microfinance Institutions in India. *Journal of Indian Business Research*.
- Manu, A. A., Asbroek, A. T., Soremekun, S., Gyan, T., Weobong, B., Tawiah-Agyemang, C., Danso, S., Amenga-Etego, S., Owusu-Agyei, S., Hill, Z., & Kirkwood, B. R. (2014). Evaluating the Implementation of Community Volunteer Assessment and Referral of Sick Babies: Lessons Learned from the Ghana Newhints Home Visits Cluster Randomized Controlled Trial. *Health Policy Plan*, 29 (suppl_2).
- Mazumder, M., Said, J., Bhuiyan, A., Uddin, M., & Rashid, M. (2016). The Accountability of Microfinance Institutions (MFIs) on the Reach out of the Poor in the South East Asian Region. *Journal of Scientific Research and Development*, *3*(3), 132-138.
- McCarty, A. (2001). *Microfinance in Vietnam: A Survey of Schemes and Issues*. Hanoi, Vietnam: Department for International Development (DFID) and the State Bank of Vietnam (SBVN).
- Mersland, R. (2008). *Performance and Governance in Microfinance Institutions*. Agder University, Kristiansand, Norway.
- Mersland, R., & Strøm, R. Ø. (2010). Microfinance Mission Drift. World Development, 38(1), 28-36.

- Mersland, R., & Strom, R. O. (2014). Microfinance Institutions: Financial and Social Performance. London, UK: Palgrave Macmillan.
- MicroSave. (2014). Responsible Microfinance Practices by Microfinance Institutions in India. Small Industries Development Bank of India (SIDBI).
- MicroSave. (2015). *Governance Practices among Microfinance Institutions in India*. Small Industries Development Bank of India (SIDBI).
- Micu, N. (2013). State of the Art of Microfinance: A Narrative. Lo más novedoso en microfinanzas: Una descripción). Manila: Pino y ME Foundation.
- Ministry of Planning and Investment (MPI), Lao PDR. (2012). *Microfinance in the Lao PDR*. https://www.giz.de/de/downloads/giz2012-en-microfinace-lao-pdr.pdf.
- Mittelman, J. H. (2010). Crisis and Global Governance: Money, Discourses, and Institutions. *Globalizations*, 7(1-2), 157-172.
- Mittelman, R. (2010). *Microfinance and Poverty Alleviation: An Opportunity for Organizational Behavior Research*. Sprott School of Business, Carleton University.
- Mokhtar, H. S. A., Al Habshi, S., & Abdullah, N. (2006). A Conceptual Framework for and Survey of Banking Efficiency Study. *Unitar e-Journal*, 2(2), 1-19.
- Morduch, J. (1999). The Microfinance Promise. *Journal of Economic Literature*, 37(4), 1569-1614.
- Morduch, J. (2000). The Microfinance Schism. World Development, 28(4), 617-629.
- Nair, A. (2005). Sustainability of Microfinance Self Help Groups in India: Would Federating Help. World Bank Policy Research Working Paper, No. 3516.
- Natarajan, K. (2004). Can Group Lending Overcome Adverse Selection Problems?. *Centre* for Financial and Management Studies, SOAS, Working Paper.
- Ngehnevu, C. B., & Nembo, F. Z. (2010). *The Impact of Microfinance Institutions (MFIs) in the Development of Small and Medium Size Businesses (SMEs) in Cameroon. A*

Case Study of CamCCUL. Swedish University of Agricultural Sciences, Faculty of Natural Resources and Agricultural Sciences, Department of Economics.

- Nghiem, H., Coelli, T., & Rao, P. (2006). The Efficiency of Microfinance in Vietnam: Evidence from NGO Schemes in the North and the Central Regions. *International Journal of Environmental, Cultural, Economic and Social Sustainability*, 2(5), 71-78.
- Nghiem, H. S. (2004). Efficiency and Effectiveness of Microfinance in Vietnam: Evidence from NGO Schemes in North and Central Regions. CEPA, School of Economics, UQ, Australia.
- Nguyen, B. T., & Vogel, R. (2011). Rural and Microfinance in the Lower Mekong Region: Policies, Institutions, and Market Outcomes. Asian Development Bank.
- Nguyen, K. A. (2014). *Microfinance in Vietnam: The Real Situation and Policy Recommendations*. Vietnam Microfinance Working Group (VMFWG).
- Nguyen, K. A. (2016). *Microfinance in Vietnam: Lessons Learnt from Transformation*. Vietnam Microfinance Working Group (VMFWG).
- Nguyen, K. A., & Le, T. T. (2013). *The Sustainability of Microfinance Institutions in Vietnam: Circumstances and Implications*. Transport Publish House (TPH).
- Nguyen, K. A., Ngo, V. T., Le, T. T., & Nguyen, T. T. M. (2011). *Microfinance Versus Poverty Reduction in Vietnam-diagnostic Test and Comparison*. Statistics Publishing House, Hanoi, Vietnam.
- Nguyen, N. B. Q., & Tsai, J. (2014). The Role of Microfinance for Developing Agricultural Economy and Designing a Sustainable Microfinance System in Vietnam. *Journal of Global Business Management*, 10(2), 45-56.
- Nguyen, T. A. (2004). Notes from Preliminary Review on Microfinance for Poverty Reduction in Vietnam. Ford Foundation, Hanoi, Vietnam.

- Nyamsogoro, G. D. (2010). Financial Sustainability of Rural Microfinance Institutions (MFIs) in Tanzania. Doctoral Dissertation, University of Greenwich.
- OECD. (2008). Introduction Handbook for Undertaking Regulatory Impact Analysis (RIA). Version 1.0 Octorber 2008. The Organization for Economic Cooperation and Development.
- Okio, C. (2005). Non Credit Financial Services and Micro Credit in Nigeria. A Textbook, 2nd edition, Bolubestway Press limited, Nigeria, 131-142.
- Olivares-Polanco, F. (2005). Commercializing Microfinance and Deepening Outreach? Empirical Evidence from Latin America. *Journal of Microfinance*, 7(2), 47-69.
- Otero, M. (1999). Bringing Development Back, into Microfinance. Journal of Microfinance/ESR Review, 1(1), 8-19.
- Pal, D. (2010). Measuring Technical Efficiency of Microfinance Institutions in India. *Indian Journal of Agricultural Economics*, 65(4), 639-657.
- Paxton, J. (2007). Technical Efficiency in a Semi-formal Financial Sector: The Case of Mexico. Oxford Bulletin of Economics and Statistics, 69(1), 57-74.
- Prochaska, K., & Seibel, H. (2009). *Microfinance in Lao PDR*, 2009. GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH.
- Putzeys, R. (2002). Microfinance in Vietnam: Three Case Studies. Master thesis, Faculty of the Political and Social Sciences, University of Ghent, Belgium.
- Qaiser, I., & Sohail, N. (2013). Determinants of the Efficiency of Microfinance Borrowers and Non-borrowers: Evidence from Pakistan. *European Journal of Business and Management*, 5(18), 167-173.
- Qayyum, A., & Ahmad, M. (2008). Efficiency and Sustainability of Microfinance. Munich Personal RePEc Archive Paper, No. 11674.

- Quach, M. H. (2005). Access to Finance and Poverty Reduction: An Application to Rural Vietnam. PhD Thesis. The University of Birmingham. England.
- Reed, L. R. (2011). State of the Microcredit Summit Campaign Report 2011. Microcredit Summit Campaign. Washington, D.C.
- Reichert, P. (2016). A Meta-analysis Examining the Nature of Trade-offs in Microfinance. *Working Papers CEB*, 16.
- Resti, A. (1997). Evaluating the Cost-efficiency of the Italian Banking System: What can be Learned from the Joint Application of Parametric and Non-parametric Techniques. *Journal of Banking and Finance*, 21(2), 221-250.
- Reynolds, D., & Thompson, G. M. (2002), Multi-unit Restaurant-productivity Assessment: A Test of Data-Envelopment Analysis. *The Center for Hospitality Research at Cornell University Report*, Ithaca, NY: Cornell University.
- Rillo, A. D. (2014). Overview of Financial Inclusion in Asia. In: *Financial Inclusion in Asia: Country Surveys*. Asian Development Bank Institute.
- Risal, N. (2018). Microfinance Position and Indebtedness: Empirical Evidence from Microfinance Institutions in Nepa. *Pravaha*, 24(1), 120-136.
- Rosenberg, N. (1994). *Exploring the Black Box: Technology, Economics, and History*. Cambridge University Press.
- Ruggiero, J. (2000). Measuring Technical Efficiency. European Journal of Operational Research, 121(1), 138-150.
- Sachs, J. (2008). The End of Poverty: Economic Possibilities for Our Time. *European* Journal of Dental Education, 12(s1), 17-21.
- Sayvaya, I. (2012). Does Microfinance Reduce Poverty in Lao PDR? Case study of Village Development Funds (VDFs) at Sukuma District Champassak Province, Lao PDR. *Mekong Institute Research Working Paper*, No. 4/2012.

- Schmidt, K. (1997). Of Maps and Scripts: The Status of Formal Constructs in Cooperative Work. ACM Conference on Supporting Group Work (GROUP'97), Phoenix, Arizona, 138-147.
- Schmidt, R. H., Seibel, H. D., & Thomes, P. (2016). From Microfinance to Inclusive Finance: Why Local Banking Works. John Wiley & Sons.
- Schreiner, M. (2000). Ways Donors can Help the Evolution of Sustainable Microfinance Organizations/comment les bailleurs de fonds peuvent-ils aider l'évolution soutenue des organisations de microfinance?. *Savings and Development*, *24*(4), 423-437.
- Sedzro, K., & Keita, M. (2009). Assessing The Efficiency of the Efficiency of Microfinance Institutions Using Data Envelopment Analysis. *Journal of International Finance and Economics*, 9(2), 54-68.
- Seibel, H. D., & Rohmann, B. J. (2012). *Microfinance in the Lao PDR*. Bank of the Lao PDR, NERI and GIZ.
- Sengupta, R., & Aubuchon, C. P. (2008). The Microfinance Revolution: An Overview. *Review-Federal Reserve Bank of Saint Louis*, 90(1), 9-30.
- Serge, D. (2008). Reaching the Hard to Reach: Comparative Study of Member-owned Financial Institutions in Remote Rural Areas. Antigonish, Nova Scotia, Canada: COADY International Institution.
- Servin, R., Lensink, R., & Van den Berg, M. (2012). Ownership and Technical Efficiency of Microfinance Institutions: Empirical Evidence from Latin America. *Journal of Banking & Finance*, 36(7), 2136-2144.
- Sharma, S., & Gupta, S. (2010). Malmquist Productivity and Efficiency Analysis for Indian Banking Industry. *International Journal on Business Excellence*, 3(1), 65-76.

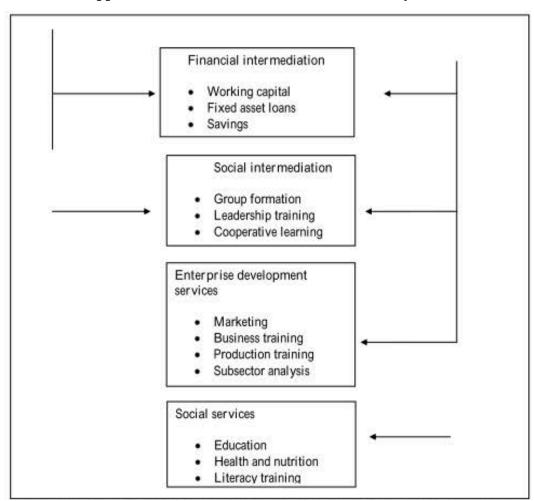
- Shinozaki, S., Rizzi, A., Bansal, H., & Kumari, T. (2017). Microfinance Client Protection in Asia and the Pacific: Lessons from ADB-Smart Campaign Training Programs. Asian Development Bank (ADB) Briefs.
- Singh, S., Goyal, S. K., & Sharma, S. K. (2013). Technical Efficiency and its Determinants in Microfinance Institutions in India: A Firm Level Analysis. *Journal of Innovation Economics & Management*, 1, 15-31.
- Sinha, S. (1998). Microcredit: Introduction and Review. IDS Bulletin, 29(4), 1-9.
- Socialist Republic of Vietnam. (2002). *Comprehensive Poverty Reduction and Growth Strategy - Planning Report*. The Government of the Socialist Republic of Vietnam.
- Sourigna, M., Zhu, S., & Ali, S. A. (2018). Challenges and Implementation of Financial Institutions Development Policy in Laos on 2016-2020. *International Business Research*, 11(1), 115-123.
- Srivastava, P. (2005). Scaling-up Access to Finance for India's Rural Poor. World Bank Policy Research Working Paper, No. 3646, South Asia Region, Finance and Private Sector Development Unit, Washington, D.C.
- Srivastava, T. (2010). Microfinance: A Comparative Analysis of Varying Contexts, Current Needs, and Future Prospects between Developing and Developed Countries.
 Doctoral dissertation, Bowling Green State University.
- Ssekiziyivu, B., Mwesigwa, R., Bananuka, J., & Namusobya, Z. (2018). Corporate Governance Practices in Microfinance Institutions: Evidence from Uganda. *Cogent Business & Management*, 5(1), 1-19.
- Stiglitz, J. E. (1990). Peer Monitoring and Credit Markets. The World Bank Economic Review, 4(3), 351-366.
- Sugianto & Robinson, M. S. (1998). Sustainable Microfinance as Developed by the Bank Rakyat Indonesia. Bank Rakyat Indonesia, Jakarta.

- Symbiotics. (2016). *Symbiotics 2016 MIV Survey: Market Data and Peer Group Analysis* (10th Edition). Geneva: Symbiotics.
- Tahir, I. M., & Tahrim, S. N. C. (2013). Efficiency Analysis of Microfinance Institutions in ASEAN: A DEA Approach. Business Management Dynamics, 3(4), 13-23.
- Tavanti, M. (2013). Before Microfinance: The Social Value of Microsavings in Vincentian Poverty Reduction. *Journal of Business Ethics*, 112(4), 697-706.
- Thapa, G. (2007). Sustainability and Governance of Microfinance Institutions: Recent Experiences and some Lessons for Southeast Asia. Asian Journal of Agriculture and Development, 4(1), 17-37.
- The Economist Intelligence Unit (EIU). (2015). *Global Microscope 2015: The Enabling Environment for Financial Inclusion*. Sponsored by MIF/IDB, CAF, Accion and the Metlife Foundation. EIU, New York, NY.
- The Economist Intelligence Unit (EIU). (2016). *Global Microscope 2016: The Enabling Environment for Financial Inclusion*. Sponsored by MIF/IDB, Accion and the Metlife Foundation. EIU, New York, NY.
- Townsend, R. M. (2011). *Financial Systems in Developing Countries: Growth Inequality and Policy Evaluation*. London: Oxford University Press.
- Von Stauffenberg, D. (2003). *Definitions of Selected Financial Terms, Ratios, and Adjustments for Microfinance*. (No. 34264, p. 1). The World Bank.
- Widiarto, I., & Emrouznejad, A. (2015). Social and Financial Efficiency of Islamic Microfinance Institutions: A Data Envelopment Analysis Application. Socio-Economic Planning Sciences, 50, 1-17.
- Wijesiri, M., Viganò, L., & Meoli, M. (2015). Efficiency of Microfinance Institutions in Sri Lanka: A Two-stage Double Bootstrap DEA Approach. *Economic Modelling*, 47, 74-83.

- Wijesiri, M., Yaron, J., & Meoli, M. (2017). Assessing the Financial and Outreach Efficiency of Microfinance Institutions: Do Age and Size Matter?. *Journal of Multinational Financial Management*, 40, 63-76.
- Woller, G. (2007). Trade-offs between Social & Financial Performance. *ESR Review*, 9(2), 14-19.
- Woller, G. M., Dunford, C., & Woodworth, W. (1999). Where to Microfinance. International Journal of Economic Development, 1(1), 29-64.
- Wooldridge, J. M. (2002). *Econometric Analysis of Cross Section and Panel Data*. The MIT Press.
- World Bank. (2007). Vietnam: Developing a Comprehensive Strategy to Expand Access (for the Poor) to Microfinance Services. Promoting Outreach, Efficiency and Sustainability Volume I: The Microfinance Landscape in Vietnam. DFC S. A. The World Bank.
- World Bank. (2014). *Global Financial Development Report 2014 Financial Inclusion*. The World Bank.
- World Bank. (2014). *International Finance Corporation Responsible Finance in Vietnam*. The World Bank.
- World Bank. (2018). The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution. The World Bank.
- World Bank. (2018). UFA2020 Overview: Universal Financial Access by 2020. The World Bank. <u>http://www.worldbank.org/en/topic/financialinclusion/brief/achieving-</u> universal-financial-access-by-2020.
- Worthington, A. (2000). Cost Efficiency in Australian Non-bank Financial Institutions: A Non-parametric Approach. Accounting & Finance, 40(1), 75-98.

- Wrenn,E.(2005).Microfinance:LiteratureReview.http://www.dochas.ie/Shared/Files/2/MicroFinance_literature_review.pdf.
- Wry, T., & Zhao, E. Y. (2018). Taking Trade-offs Seriously: Examining the Contextually Contingent Relationship Between Social Outreach Intensity and Financial Sustainability in Global Microfinance. *Organization Science*, 29(3), 507-528.
- Yaron, J. (2006). State-owned Development Finance Institutions (SDFI): The Political Economy and Performance Assessment. *Savings and Development*, *30*(1), 39-78.
- Yaron, J., Manos, R., & Gueyie, J. (Eds.). (2013). Promoting Microfinance: Challenges and Innovations in Developing Countries and Countries in Transition. Springer.
- Yawe, B. (2010). Hospital Performance Evaluation in Uganda: A Super-efficiency Data Envelope Analysis Model. Zambia Social Science Journal, 1(1), 79-105.
- Yoshino, N. & Morgan, P. J. (2017). Financial Inclusion, Regulation, and Education: Asian Perspectives. Asian Development Bank Institute (ADBI).
- Yunus, M. (2007). Banker to the Poor: Micro-lending and the Battle Against World Poverty. New York. Public Affair.
- Zeller, M., & Meyer, R. L. (Eds.). (2002). The Triangle of Microfinance: Financial Sustainability, Outreach, and Impact. International Food Policy Research Institute: Washington, D. C.
- Zhou, A. (2015). A Comparison of Microfinance Regulation and Social Protectionism in Argentina and Cambodia. University of Pennsylvania.

APPENDICES



Appendix 1: Services and Products Provided by MFIs

Source: Ledgerwood, 1999, p.65

MFI	2004	2006	2008
VBSP	8.2	8.0	8.3
VBARD	10.3	11.1	13.5
Other banks	9.1	11.3	13.2
Employment support fund	13.6	9.9	6.0
PCFs	9.8	12.4	13.4
Sociopolitical organizations	9.6	7.2	8.1
Money lenders	34.7	43.2	38.5
Friends and Relatives	16.8	29.8	27.5
Others	10.7	17.9	9.9

Appendix 2: Annual Interest Rates Applied by Financial Providers in Vietnam (% per Year)

Source: VHLSS in 2004, 2006, 2008

Appendix 3

For Institutions

QUESTIONNAIRE

I am a Ph.D. student at the Graduate School of Global Studies, Doshisha University, Japan. I set up this questionnaire for my research project on microfinance activities in Vietnam. This work is an important part of data collection and the implementation of relevant issues in my research.

I appreciate your cooperation in helping me fill out this questionnaire. It will take you about 5-10 minutes.

1.	What is your age?		
	Less than 20 years	21-35 years	\square More than 35 years
2.	What is the name of the o	rganization you a	are working for?
	Vietnam Bank for Agri	culture and Rural	Development (VBARD)
	Vietnam Bank for Soci	al Policies (VBSP)
	Women's Union (WU)	Farmers' Un	nion (FU)
	Other:		
3.	What is your current pos	ition?	
	Employee	Manager	Elected officials
	Bank partner	onor	Other:

- 4. How many members/staffs does your institution have?
- 5. Does at least one of your members/staffs have the following qualifications?

(choose one or more)

. . .

Category	Yes	No	I do not know
Formal financial qualification			
Formal legal qualification			
Long experience in banking (>10 years)			
Long experience in business (> 10 years)			
Substantial experience in microfinance (>7 years)			
Considerable experience in market research (> 5 years)			
Experience in social performance measurement and management (> 2 years)			

- **6.** How many times did your institution have official meetings in the past year? ... times
- 7. How many members on average attended each meeting (physically or by phone) within the last fiscal year?

...members

8. Does your institution have the following departments? (choose one or more)

-			
Department	Yes	No	I do not know
Executive Department			
Risk Department			
Audit Department			
HR Department			
Remuneration Department			
Ethics Department			
Social performance Department			
Funding Department			
Transformation Department			
Other:			

9. Does your organization have a group or person dedicated to risk management and internal audit function?

\square	Yes,
-----------	------

A Risk manager [A Risk team An internal Auditor
An internal team [Other:

No10. In the past year, did your institution change policies concerning:

(choose one or more)

Content	Yes	No
Institutional transformation		
Senior executive succession		
Senior executive compensation or incentives		
Product range		
Product distribution network		
Source of capital		
Client protection		
Internal controls		
Regulatory compliance		
Reputation		

11. What constraints and/or critical problems do you foresee may be caused by the governance plan and what are your suggestions to minimize said constraints?

12. Any additional comment you may have:

.....

.....

Thank you very much for your time and cooperation!

Appendix 4

For Institutions

INTERVIEW QUESTIONS

I am a Ph.D. student at the Graduate School of Global Studies, Doshisha University, Japan. I set up these questions for my research project on microfinance activities in Vietnam. This work is an important part of data collection and the implementation of relevant issues in my research.

I appreciate your cooperation in helping me answer the question. It will take you about 10-15 minutes.

- 1. Is there any difference when lending to women?
- 2. How is about the collateral for microloans? Is it required?
- 3. What is the main lending method? Individual or group lending?
- 4. What is the standard lending rate? Do you intend to increase/decrease it?
- 5. Besides credit, do you offer any other products?
- 6. How can your institutions inform the target clients know about your products and services?
- 7. Do you have programs to train or educate clients, i.e., on how they can invest the loans?
- 8. Where does your fund come from? Do you have the plan to increase resource mobilization?
- 9. How many offices do you have? Do you have the plan to open more to increase your outreach?
- 10. How many staffs joining in the credit activities?
- 11. Do you require qualifications/knowledge/experience in the field of microfinance from your staffs?
- 12. Who made the final decision on the loan?
- 13. What are your opinions on the regulatory environment and government supports for the microfinance sector?

Thank you very much for your time and cooperation!

Appendix 5

For Borrowers of Microfinance Institutions

QUESTIONNAIRE

I am a Ph.D. student at the Graduate School of Global Studies, Doshisha University, Japan. I set up this questionnaire for my research project on microfinance activities in Vietnam. This work is an important part of data collection and the implementation of relevant issues in my research.

I appreciate your cooperation in helping me fill out this questionnaire. It will take you about 5-10 minutes.

	A – DEMOGRAPHIC CH	ARACTERISTIC	 2			
1.	What is your age?		.0			
1.	Less than 20 years	21 - 35 years		More than 35 years		
2.	What is your education lev					
	□ No	Preschool edu	ication	Primary school		
	Junior high school	High school	<i>vuu</i> ion			
	Other:					
3.	How many members of you	ır family?				
	$\square < 2$ $\square 2 - 5$	$\square > 5$				
4.	What is your current occu					
	Small business	Farmer	□Ha	ulage		
		☐ Fishing		her:		
5.						
	$\square < 1$ million Vietnamese d		_	VND - 3 million VND		
	3 million VND - 5 million					
	$\square > 10$ million VND					
	B – LOAN CHARACTER	ISTICS and ITS I	RESULTS			
6.	Where did your initial capit	ital come from?				
	Personal savings	Relatives, frie	ends	Commercial banks		
	MFIs	Moneylenders	S	Other:		
7.	What do you borrow mone	ey for?				
	Start-up Bu	siness extension	🗌 Tuitio	on fee		
	Rent Da	ily Consumption	Other			
8.	How much did you borrow	?				
	\Box 2 - 5 million VND] 5 million `	VND - 10 million VND		
	10 million VND - 20 mill	lion VND] > 20 million	on VND		
9.	The scorecard below relate	es to your opinio	ns on your	loan from MFIs. Please		
	circle the score reflecting y	our point of view	or rating.			
	A score of "1" means you are	very dissatisfied/d	lisappointea	l with this feature of MFIs'		
	credit service.					

Catagoriu	Disagree				
Category			Agree		
Interest rates are acceptable	1	2	3	4	5
Loan procedure is simple	1	2	3	4	5
Repayment method is simple	1	2	3	4	5
Support from staffs is helpful	1	2	3	4	5

A score of "5" means you are delighted with this feature of MFIs' credit service.

10. The scorecard below relates to the benefits you gain after using a loan from MFIs. Please circle the score reflecting your point of view or rating.

A score of "1" means you absolutely did not achieve this benefit.

Content		Disagree				
			Agree			
Be able to participate in educational activities for individuals and family	1	2	3	4	5	
Better financial status for individual/family	1	2	3	4	5	
Increasing the role of women in the family	1	2	3	4	5	
Be able to join more healthcare services	1	2	3	4	5	
Increasing living conditions	1	2	3	4	5	
Increasing savings	1	2	3	4	5	

A score of "5" means that you have or are achieving this benefit well.

Thank you very much for your time and cooperation!