THE IMPACT OF MICROFINANCE
ON INCOMES OF POOR HOUSEHOLDS IN VIETNAM

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ABSTRACT

Research about the impact of microfinance on incomes of poor households in Vietnam, using the quantitative research methods, linear regression model, STATA 12 software applications, with cross data gathered from the Vietnam Household Living Standard Survey 2012 (VHLSS 2012). Results of regression analysis showed that factors affecting the income of poor households include: age, household size, dependency ratio, total assets, micro credit, and regions. The study also shows that the impact of microfinance on incomes of poor households are each different. Through the findings, policy recommendations support is proposed to further enhance the operations of microfinance, to help poor households have access to loans to invest in production and business activities, thereby improved earnings.

Keywords: microfinance, poor, Vietnam.

TÓM TẮT

Tác động của tài chính vi mô đến thu nhập của hộ nghèo ở Việt Nam

*Đề tài nghiên cứu về **Tác động của tài chính vi mô đến thu nhập của hộ nghèo ở Việt Nam,** sử dụng phương pháp nghiên cứu định lượng, mô hình hồi quy tuyến tính logarit, ứng dụng phần mềm STATA 12, với dữ liệu chéo được thu thập từ bộ dữ liệu Điều tra mức sống hộ gia đình Việt Nam 2012 (VHLSS 2012). Kết quả phân tích hồi quy cho thấy các yếu tố ảnh hưởng đến thu nhập của hộ nghèo gồm: Độ tuổi, qui mô hộ, tỷ lệ phụ thuộc, tổng tài sản, tín dụng vi mô và khu vực. Nghiên cứu cũng cho thấy tác động của TCVM đến thu nhập của từng nhóm hộ nghèo là khác nhau. Qua kết quả tìm được, những khuyến nghị chính sách hỗ trợ được đề xuất để nâng cao hơn nữa hoạt động của TCVM, nhằm giúp hộ nghèo có điều kiện tiếp cận nguồn vốn vay đầu tư vào hoạt động sản xuất kinh doanh, qua đó cải thiện thu nhập.*

Từ khóa: tài chính vi mô, hộ nghèo, Việt Nam.

1. Introduction

In Vietnam, hunger and poverty are still a matter of urgent poverty alleviation and poverty reduction. The income of the poor is always paid attention by the Party and the State as a goal throughout the socio-economic development process. of the country. Poverty refers not only to

people whose income or consumption is below a certain threshold but also to the mechanisms, policies, social welfare and other issues of the people. So addressing poverty not only improves the living conditions of the poor but also contributes to the country's economic, political, social and environmental growth.

According to the Ministry of Labor, Invalids and Social Affairs, in 2013, the result of the survey of the poor, near poor households in 2012, nationwide, the poverty rate of Vietnam is 9,6% which include 2.149.110 households and near poor households is 6,57% include 1.469.727 households. The survey results show that the rate of poor and near-poor households in Vietnam is quite high.

According to Mai Tri (2011), estimates of some international organizations in most developing countries, about 20 - 25% of the population have access to formal financial institutions, the rest about 75% of the population Inaccessible. Microfinance institutions have contributed to the provision of financial services to poor or very poor clients, helping them to improve their incomes for a better life. Poverty reduction, livelihoods support for vulnerable people to increase income, narrow the gap between rich and poor, is the goal of microfinance. As such, microfinance institutions play a very important role in poverty reduction, creating sustainable jobs that increase income for the poor. Microfinance institutions give the poor with financial resources to help them grow and create value for themselves, their families and society.

Microfinance has a positive impact on poor households, but the impact on the income of poor households is still a matter of public interest. Starting from the above situation, the topic: "The impact of microfinance on the income of poor households in Vietnam" was selected for the study. The main objective is to assess the impact of microfinance on the income of poor households, thereby proposing and recommending some solutions to the development of microfinance institutions and improving the income of poor households in Vietnam.

2. Literature review

According to the World Bank, the average person is less than $ 1 per person per day in the 1990s and is now less than $ 2 Day/ person.

The General Statistics Office (GSO) (2010) defines "household income as the total amount and value of monetary items after deduction of the production costs received by household and household members in the most recent period. It's usually 1 year". Household income includes: income from wages, salary; Income from agriculture, forestry and fishery (after deducting production costs and taxes); Income from non-agricultural, forestry and fishery production (after deducting production costs and taxes); Other incomes are included in the income such as income, gifts, bonuses, savings and so on. Revenues not included in income include savings, debt collection, asset sale, debt financing, advances and transfers. Capital received by joint ventures, joint venture in production and business... In this study, household income is based on the concept of household income of the

General Statistics Office 2010.

The formula for calculating per capita income according to the General Statistics Office of Vietnam:

Average income per person per month = Total income per household / (Total number of household x 12 months).

One person per month per month reflects the level of income and income structure of the population, in order to assess living standards, the rich and the poor, and the poverty rate. Books aimed at poverty reduction, raising the standard of living of people.

Bennett and Cuevas (1996),

microfinance is the provision of a broad range of financial services such as deposits, savings accounts, payments, insurance, money transfers to the poor or low income households. For individual business or small business.

The economics of microfinance: the repayment value of small loans has a useful curve shape. The poorer the lucrative business profits are earning more per unit of capital than the better off and are willing to pay higher interest on loans from banks (Vo Khac Thuong and Tran Van Hoang, 2013).
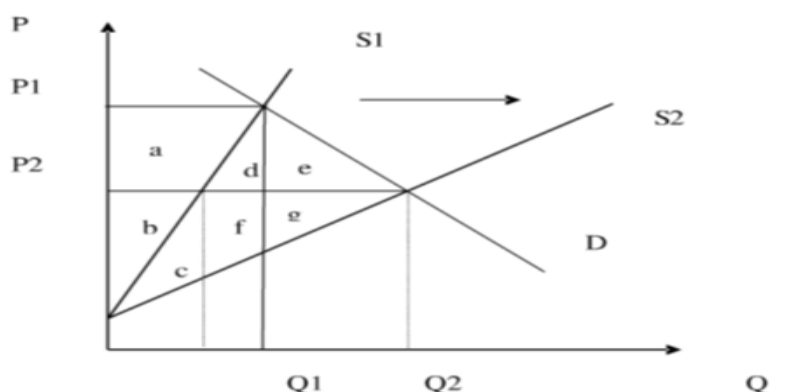

**Figure 1: The theory of the benefit of microfinance for production
(Microfinance Industry Report Vietnam in 2010)**

Thanks to the source of microfinance, production increased from Q1 to Q2, producer surplus changed from (a + b) to (b + c + f + g). If a> (c + f + g), the producer does not benefit and vice versa. Increased consumer surplus (a + d + e). Thus, microfinance has had an impact on the process of creating more surplus value through production growth, thereby increasing the accumulation of investment and consumption by the household.

The asymmetric information theory

between a lender and a borrower: Asymmetric information is the state in a one-sided transaction that is complete and better informed than the other. The two behaviors that are often mentioned in financial activity are the adverse selection (option) of the lender and moral hazard (the moral hazard) of the borrower due to asymmetric information. Reverse selection is the result of asymmetric information before a transaction occurs. Moral dependence is the result of asymmetric

information after the transaction has occurred in 2007.

Economic development theory: Funding for the poor is very important. Lack of investment leads to low productivity, which leads to low household incomes. Low income leads to low savings. Low savings are the cause of the lack of investment capital and low income, which is a vicious cycle of poverty (Nguyen Trong Hoai, 2007).

Sustainable livelihood theory: One of the powerful features of microfinance is a means of addressing poverty, placing financial resources directly in the hands of the poor, providing the necessary financial capital at the right level. To make the poor more efficient use of human capital and social capital they own (Le Kien Cuong, 2013).

Hulme and Mosley (1996, Nichols 2004), studied the effects of microfinance on the the poor and conducted research in 13 microfinance institutions in seven countries. Evidence suggests that the impact of a loan on the income of the poor is different, the poor in the middle and the poor are most likely to benefit more than the "core" poor. Customers above the poverty line are willing to take risks and invest in technology to increase income generation. While people in the "core" of poverty often borrow to cover the cost of living, tend to invest small, fragmented, rarely invest in new technology. Income from loans of the poor (1988 - 1992) increased on average in different groups, from 10-12% in Indonesia, about 30% in Bangladesh and India for poor households participating in the microfinance program.

Nichols (2004) studied the effects of microfinance on the lives of the rural poor in China. This study uses a field-based survey method in poor districts with micro-credit programs that have been in operation for seven years. Research shows that participating in the program has a positive impact on the lives of borrowers, especially in terms of economic security, people feel confident in themselves and improve their financial management by themselves. Research shows that borrowers' income is more than three times higher than those without a microfinance program and that the borrowers are the poorest, the rate of income growth is faster than those with microfinance program people.

Research by Nguyen Trong Hoai et al. (2005) collected data from 640 farm households in Ninh Thuan and 619 farmer households in Binh Phuoc as the main source of data for the project. The data is analyzed based on the econometric model, with logistic regression. The dependent variable is the average per capita expenditure, the variables explaining are employment, ethnic minorities, cultivated land area, borrowed capital are statistically significant variables to explain the effect about poverty of farmer households. When other factors remain unchanged, the poverty probability of a household of 30% in Ninh Thuan shows that if this household receives official credit, the household poverty probability is reduced to 20.7%; In Binh Phuoc, it is shown that if the household receives official credit, the household poverty probability is reduced to 29%.

Le Viet Phuong (2012) studies on the impact of microfinance on the ability of

poor households to escape poverty in Binh Chanh District, Ho Chi Minh City. The author surveyed 250 random samples representing poor households participating in microfinance throughout Binh Chanh district. The variables of education, employment, loan amount, training, significant correlation with the poverty rate of 1% significance, and purpose of using loans at a significance level of 5%; The gender of the household head and household size were not statistically significant. The research results show that the two groups of factors that have a positive impact on their ability to escape poverty are the poor household members themselves (education and the number of employed people in the household) and The second factor, the microfinance factor group, also contributes significantly to household poverty (the total amount of borrowed money, the number of

microfinance training participants, the purpose of household use).

3. Research Methodology

The author uses the statistical analysis method, collects data from the reports to analyze the performance of Microfinance institution and analyzes data from VHLSS of the General Statistics Office of Vietnam.

Research subjects in this topic are poor households classified as poor households in the locality. The total number of households surveyed in 2012 is 9.399 households which based on the income and expenditure survey 4.231 households were surveyed in 2010 (including poor and non-poor households), of which 515 poor households (with and without loans). From 515 poor households, the author filtered out 234 poor households with loans and 281 households without loans in 2010.
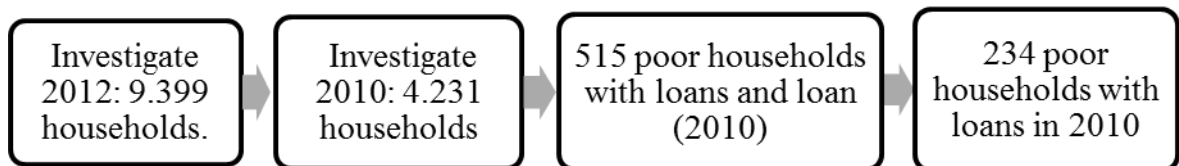

Figure 2: Map of poor households with credit loans in 2010

This study uses STATA 12 (Statistics and data) software, which is one of the most popular data analysis software today. The author uses quantitative methods to assess the impact of microfinance on the income of poor households. Topics using linear logistic regression model, estimating regression model by normal least squares (OLS). According to Gujarati (1993), the least-squares method normally has some compelling statistical properties making it

the most powerful and popular regression analysis method.

Study model:

Ln thu_nhap_bq = β_0 + β_1 age + β_2 gender + β_3 Education level + β_4 Household size + β_5 Dependency ratio + β_6 lnTotal assets + β_7 Poverty level + β_8 The average poverty level + β_9 Loan locations + β_{10} Areas + ϵ

Among them: the average income of

poor households are dependent variables and quantitative variables. This variable is measured by dividing total household income in the year / (number of persons in households x 12 months). Unit: thousand VND/person/month.

Table 1: Summary of variables in the research model

Symbol	Variable Name	Basic choice of variables	Mark Expectation
Y: Dependent variable: Average income. Unit: Thousand VND / person / month			
X_1: age	Variable shows the age of the household head	Le Viet Phuong (2012)	+
X_2: gender	Variable shows the gender of the household head (Men = 1, Women = 0)	Le Viet Phuong (2012)	+
X_3: Education level	Variable shows the education level of the household head	Le Viet Phuong (2012)	+
X_4: Household size	Variable household scale	Nguyen Trong Hoai et al (2005)	-
X_5: Dependence ratio	Variable dependence ratio	Nguyen Trong Hoai (2005)	-
X_6: Total assets	Variable total assets of households	Nguyen Trong Hoai et al (2005)	+
X_7: Poverty level	Poor credit variables, representing the number of poor households' loan		+
X_8: The average poverty level	The average poor credit variable, reflecting the amount of the average poverty loan	Hulme Mosley (1996) and Shame (2004)	+
X_9: Loan locations	Variation is where household loans (Buy official = 1, the official = 0)	Shame (2004)	+
X_{10}: Areas	Variation is inhabited by households (Urban = 1, rural = 0)	Nguyen Trong Hoai (2005)	+

4. Results and Discussions

Table 2: Regression results of the research model

Symbol	Regression coefficients (B)	Standard error	Statistics	(P value)	VIF
X_1: Age	0,0041**	0,0020	1,99	0,048	1,22
X_2: Gender	0,1098	0,0808	1,36	0,176	1,35
X_3: Education level	0,0075	0,0083	0,90	0,368	1,23
X_4: Household size	- 0,0724***	0,0185	-3,91	0,000	1,25
X_5:Dependency ratio	- 0,2351*	0,1202	-1,95	0,052	1,12
X_6: Total assets	0,1421***	0,0380	3,74	0,000	1,45
X_7: Poverty level	0,0000391***	5.42e-06	7,20	0,000	1,60
X_8: The average poverty level	9.21e-06**	3.72e-06	2,48	0,014	1,27
X_9: Loan locations	0,1568	0,1042	1,50	0,134	1,14
X_{10}: Areas	0,2254*	0,1363	1,65	0,100	1,25
Constants	4,9427	0,4357	11,34	0,000	
R^2	0,5313	Prob values >F = 0.000			

Note: Meaning 1% (***), meaning level 5% (**), significance level 10% (*).

Looking at the regression results, we find that there are eight variables that interact in the same direction as average income and two variables have the opposite effect for average income. oil. Seven variables were statistically significant at 1%, 5%, 10%, and three variables were not statistically significant.

Variable age of the household head: Regression results show that the age affects the household's average income with a significance level of 5%. Age has the same relationship with average income, true to original (+) expectation. Often, older people are more experienced, mature and cautious in business than younger people or less adventurous. The regression

coefficient of the age variable is 0,0041. It can be explained that, under the condition that other factors are constant, by the age of one, the household's average income would increase by 0,41%. In Vietnam in general and in rural areas in particular, household heads play an important role, often the main income earner for the household. The majority of the poor are concentrated in the countryside, so the employment is mainly agriculture, which means that the older the farmer, the more experienced he or she is, the more helpful the younger the farmer is, the more productive Higher labor, more income generated. The data show that 130 heads of households aged 41 and older are

employed, with total assets ranging from 105 million (vnđ) to the highest of 2.4 billion (vnđ). This also shows that the higher the age, the greater the ability to accumulate wealth, more investment opportunities, creative ways of doing business to increase income.

Household size has a significant impact on household average income with a significance level of 1%. The household size has a negative correlation with average income, the result is true with the initial sign (-). The regression coefficient of the household scale variable is – 0,0724. It can be understood that, under the condition that other factors remain the same, when the size of the household increases by one person, the average income of the household is reduced by 7,24%. The theory of economic development and research results in the same result, the size of the household increased, the average income of the household decreased. Households with a size of 3 to 4 account for 45,7%, households with 5 persons or more account for 44%, while the remaining households are between 1 and 2 persons is 10,3%. The poor often have a larger household size than the better-off, leading to further poverty as a result of the burden of living expenses.

The dependence ratio has a large impact of the household with a significance level of 10%. Dependence ratio is negatively correlated with average income, marking results with original mark expectation (-). Households with a high dependence ratio of more than 50% (28,8%) are those with few people involved in income generating activities.

Increase less than the increase in household cost. Households with the lowest dependency ratio (from 0% to 25%) account for 30,8% of the households with the highest average income. The regression coefficient of the dependent variable variable is 0,2351.

Total assets have the strongest impact on household income of one percent. The total asset variable is the same as average income, in line with the original (+) expectation. For each individual, every household, whether wealthy or poor, the total asset factor is very important. The regression coefficient of the total asset variable is 0,11421. Meaning, given that other factors are constant, when total assets increase by 1%, the average income of the household will increase by 0,11421%.

This study is consistent with the findings of Hulme and Mosley (1996, cited in Shane 2004). The impact of loans on the income of the poor varies. Objects in "middle" and "upper" poor are likely to help more than the "core" poor. At the same time, Nguyen Kim Anh's research team (2011) also gives the same results; When borrowing from Microfinance institution, not all poor households are able to increase their income.

Poor household credit has a significant impact on poor people of the poor with a significance level of 1%. This variable is true for the initial sign (+) expectation. This indicates that poor household credit creates higher than the poorer household credit. The regression coefficient of the poor household credit variable is 0.000039; It implies, under the condition that other factors remain the same, the credit of poor households is higher than

that of poor households with 0,005%. Microfinance is aimed with customers who are poor, very poor, lent primarily through trust. Loans have a positive impact on improving the incomes of poor households when the capital of poor households can seize opportunities for production, business, investment, and improve machinery and equipment to increase profits. Based on the theory of sustainable and practical livelihoods, it can be concluded that the poor accessing capital needed to run their business will have the opportunity to improve their income and break the cycle. poor. The greater the loan amount, the higher the investment opportunities for production and business from which the source of average income will be more.

The average poor household credit variable has an impact of the household with a significance level of 5%. This variable is true for the first sign (+) expectation. It can concluded that the poor household credit on average generates higher than the poorer household credit. The regression coefficient of the poor household credit variable averaged 9.21e-06; It implies, under the condition that other factors remain the same, the average poor household credit has a higher average income than the poor household credit of 9,21% - 4%.

As such, micro credit has a positive impact on the income of poor and middle-income households, loans that help them improve their living and increase their income. Particularly for the poorest households do not see the effect of micro credit, loans do not increase their income but they even decreased, can explain because the degree is too low so the ability to produce Their business is often weak, lacking in sensitivity, and cannot keep up with the pace of market development. In addition, they often lack management capacity.

Regional variation affects household average income with a significance level of 10%. The regional variable is in the same direction as the average income, in line with the first sign (+) expectation. The regression coefficient of the regional variable is 0,2254. Under conditions where other factors remain the same, urban households will have a higher average income than rural households by 22,54%. This result is also consistent with the theory of inequality in society, urban households (8%) have higher average income than rural households (accounting for 92%). Typically, rural households are predominantly agricultural, with no skills or high levels of skill required, so their average household size is lower than that of urban households due to industry activity and service.

5. Conclusion and reccomendation

The internal factors that have a large impact on the income of poor households are household size, dependency ratio, which are factors that have a negative impact on the poverty status of the poor, making it easy to fall into the vicious cycle.

Microfinance institutions should have their own policy, interest, support and guidance on the poorest households in production planning. Regular training courses, free vocational training, exchange experience to help them remove difficulties and experience to increase

efficiency in the use of loans.

The state and local government should support people in rural areas to use credit sources to increase their income and gradually cut the gap between the rich and the poor in urban and rural areas, thus contributing to social stability.

The results show that households with high dependency ratio are low in average income . Reduce the dependency ratio by creating more suitable employment for those who are able to work in the home to generate more income, to cut the burden of spending on children and the elderly disability) in the family. Local authorities need practical attention and the right people. Through advocacy groups, mobilize poor households, help them have proper awareness of family planning, restrict the birth of a third or higher order to cut the size of households and cut the dependency ratio in them.

External factors that have a large impact on the income of poor households are micro and regional credit, which is a cause that affects the poverty line of the poor. It can be said that the external factors give much to the income of the poor, while the external factors also have a reson effect on the internal factors of the poor. Poor households improve their cognitive level, contributing to increased income. According to the theory of macroeconomics, when poor households are improved, the ability to save for investment also increases, so that poor households can increase productivity and

contribute to national economic development.

The role of the State is very important, especially in building the legal system and financial institutions to create a comprehensive legal framework for microfinance institution to run effectively. The State Bank should have policies to support microfinance institutions to source loans for lending, as output is available at the moment, but inputs (capital mobilization) are still limited. In addition, local authorities should promote propaganda to large numbers of people know and use microfinance services. To set up associations and support groups to support, learn and exchange experiences in production and business. In addition, it is necessary to regularly check the situation of capital use, ensuring that loan capital must be used strictly for production and business purposes.

Income is always a matter of concern for every household, especially for poor households. This problem becomes more and more imperative. The results show that the poverty of the poor is influenced by many factors, in which micro credit plays an important role. Microfinance is not the best option for all poor households to escape from poverty sustainably, but the reality is that the microfinance program offers the opportunity for poor households to get loans to invest in business. Creating income to help them improve their quality of life and cut the burden on society.

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