

# ACCESS TO CREDIT OF FARM HOUSEHOLDS IN HAI DUONG PROVINCE, VIETNAM

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*Paper presented at the third International Scientific Symposium "Agrosym Jahorina 2012"  
from 15-17<sup>th</sup> November 2012, Bosnia and Herzegovina.*

## Abstract

Using data from the household survey in Hai Duong province, this paper aims to examine the current access to credit of farm households, factors affecting credit accessibility from the formal sector and then draw some policy implications. It is found that credit supply of the formal sector did not meet the credit need of farmers. In the farmer's side, dependency ratio, area of crop land, area of fish pond and number of pigs were main factors influencing the credit accessibility. Besides age, educational level of household head and area of fish pond were dominant factors affected loan amounts approved by the banks.

**Key words:** *Vietnam rural credit, Access to credit.*

## Introduction

Hai Duong locates in the Red River Delta region, Vietnam. Its poverty rate considerably reduced from 23% in 2003 to 11% in 2010, but still higher than that of the whole region. Agriculture occupied 64.2% of total labour in 2010. In addition, the agricultural land area has been significantly reduced due to the industrial process, 7.6% in the period 2006-2010 (HDSO, 2010). The local authority has used credit as a powerful tool for poverty reduction and promoting of agricultural production. There exist three major formal lenders providing credit to the rural area in Hai Duong, namely Vietnam Bank for Agricultural Development (VBARD), Vietnam Bank for Social Policies (VBSP) and People Credit Funds (PCFs). The outstanding loans of formal sources increased sharply. In the period 2005-2010, average growth rates of outstanding loans of VBARD, VBSP and PCFs were 24.5%, 33% and 30%, respectively (HDSB, 2010)<sup>3</sup>. These figures indicate considerable achievements in the supply side of the formal credit sector. At the household level, however, the credit accessibility of farm households has been in questions. The purposes of the paper are to analyze the current access to credit, identify the factors affecting the credit accessibility of farm households from the formal credit sector, and finally draw some policy implications for a better credit access of farm households in Hai Duong.

## Material and methods

✓ **Data collection:** The primary data were collected, using a semi-structured questionnaire for household survey. Selection of households was made using both stratified and random selection. Firstly, four districts with some differences in economic characteristics were selected as representative districts of Hai Duong. Secondly, in each district, one representative commune was chosen. Finally, 145 farm households engaged in animal production and participated in the

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<sup>3</sup>Inflation rates in Vietnam were 8.5 % in 2005, 22.1 % in 2008 and 9.2% in 2010 (GSO, 2010).

Sustainable Development of Household Economic project<sup>4</sup> were randomly selected for data collection.

✓ **Group discussion:** It was organized to investigate the strengths and weaknesses of credit supply from formal credit sources based on farmers' assessment.

✓ **Data analysis and classification**

SPSS software was used for data processing using descriptive statistics and analysis of variance (ANOVA). Most of farm households engaged in integrated animal production, including poultry, breeding and fattening pig and fish, and differed in terms of scale. The proportion of annual income from animal production to total household income was selected as a criterion to classify the surveyed farm households into two groups, namely the animal-based group and the non animal-based group. The purpose of this classification is to explore differences in credit accessibility between two groups.

## Results and Discussions

✓ **Farm household's participation in the rural credit market**

As detected from the survey, there was a high demand for credit from farm households in both groups. The animal-based group needed credit to buy feeds, upgrade fish ponds and payback old loans. The farm households in the non animal-based group, who were un-skilled workers, did not find stable off-farm jobs and earned low income from those activities. Therefore, they desired to borrow money for their animal production. Farmers borrowed money from the formal sector or the informal sector. It was also possible for them to borrow from both sources at the same time. 77.2 % of borrowers in the animal-based group obtained credit from the formal sector, while this figure in the non animal-based group was 51.4 %. With respect to each formal credit source, the proportion of borrowers in the non animal-based group obtained credit from VBSP (52.5%) was higher than that of the animal-based group (20.8%). It was found that many borrowers in the non animal-based group were the poor, targeted clients of VBSP, so they borrowed money easily from this source. For VBARD, 60.4% of borrowers in the animal-based group got loan from this source while this figure in the non animal-based group was only (32.5%). This tendency was also similar for PCFs. Two main reasons led to this situation: (i) VBARD and PCFs are commercial banks. The lending interest rates of both banks are determined by the same level of other commercial banks but higher than that of VBSP; (ii) Physical collateral is required for a borrower. However, the non animal-based group, including many of the poor, often lacks the physical collateral. As a result, they had less access to credit of VBARD and PCFs. With regard to the informal sector, both groups borrowed money from this sector. The non animal-based group depended on the informal credit more than the animal-based group. This implies that the credit provided by the formal sector did not fulfil the credit need of farm households. The surveyed data also pointed out that 41 surveyed households did not get any loan in 2010 even they need credit. Some farmers indicated that their families were ranked as the non-poor households in the village. Thus, they were excluded from the VBSP's beneficiaries. Some others also reported that they did not get any loan from VBSP due to limited fund for lending. The remaining farmers did not borrow money from VBARD and PCFs due to various reasons; that are mentioned later on. On average, the number of borrowers from VBARD was the highest. The average amount of loan provided by VBARD was also the highest among the credit sources. The number of borrowers of PCFs was

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<sup>4</sup> The project funded by Walloon region of Belgium. The project main's activity was to transfer some techniques for animal production to farmers, partly contributing to improve on animal production and farm income.

lower than those of VBARD and VBSP but loan amount of PCFs was ranked the second among three formal lenders. VBSP provided small loans.

Table 1: Financing sources of surveyed households in 2010.

Indicator	Total		Animal-based group		Non animal-based group	
	No.	%	No.	%	No.	%
<b>I. Surveyed households</b>	<b>145</b>		<b>58</b>		<b>87</b>	
<b>II. Borrowers</b>						
<b>1. Formal sector</b>	<b>81</b>	<b>62.8</b>	<b>44</b>	<b>77.2</b>	<b>37</b>	<b>51.4</b>
-VBARD	45	48.4	32	60.4	13	32.5
-VBSP	32	34.4	11	20.8	21	52.5
-PCFs	16	17.2	10	18.8	6	15.0
<b>2. Informal sector</b>	<b>48</b>	<b>37.2</b>	<b>13</b>	<b>22.8</b>	<b>35</b>	<b>48.6</b>
-Friend and relatives	33	67.3	7	53.8	26	72.2
-Village moneylender	16	32.7	6	46.2	10	27.8
<b>3. Both sectors</b>	<b>25</b>		<b>11</b>		<b>14</b>	
<b>III. Household without loan</b>	<b>41</b>		<b>12</b>		<b>29</b>	

Source: Household survey, 2011; Total number of borrower of formal sector is lower compared to the total number borrowers from all lenders (VBARD, VBSP, PCFs) because one household can borrow money from different lenders in the same year. It is similar for the total number of borrowers from the informal sector.

For all credit sources, the average loan amount of the animal-based group was considerably higher than that of the non animal-based group. Furthermore, number of borrowers from the formal sector in the animal-based group was also higher than that in the non animal-based group. It partly reflects a higher demand for credit and a better credit accessibility of the animal-based group compared to the other group as both groups need loans to finance for their production and consumption.

Table 2: Average loan amount by credit sources in 2010  
(Unit: Million VND/per household)<sup>5</sup>

	Total		Animal-based group		Non animal-based group		F value
	Mean	Range	Mean	Range	Mean	Range	
<b>I. Formal sector<sup>6</sup></b>							
1. VBARD	28.2	5.0-50	31.9	15-50	18.8	5-30	16.6 <sup>***</sup>
2. VBSP	8.4	4-17.2	8.5	4-17.2	8.3	4.3-8.6	0.01
3. PCFs	25.3	10-35	25.5	20-35	24.5	10-30	0.1
<b>II. Informal sector<sup>7</sup></b>							
1. Friend and relatives	5.6	1-20	10.2	2-20	4.3	1-13	13 <sup>***</sup>
2. Village money lender	10	2.5-25	14.6	10-20	7.3	2.5-25	4.7 <sup>*</sup>

Source: Household survey, 2011

Note: \*\*\*, \*\*, \* significant at 1%, 5% and 10 % level, respectively

### ✓ Factors affecting borrowing amounts of households from the formal sector

In the transaction of credit, there are many factors that simultaneously determine the terms of contracts such as the amount, the interest rate, the purpose, the collateral and the repayment schedule. These are determined by agreement between borrower and lender in the rural market. It was observed that the loan amount received from a credit source is based on both credit demand

<sup>5</sup> In 2010, on average 19100 VND = 1 USD.

<sup>6,7</sup> In 2010, lending interest rates per month were: VBARD: 1.16-1.3%; PCFs: 1.25-1.5%; VBSP: 0.5%-0.8%; informal moneylenders: 3%, estimated; and friend & relatives: 0%, normally. Loan terms were 2 years for VBARD, 1 year for PCFs and 2-3 years for VBSP.

and credit supply. The implication is that the demand and supply curves of credit cannot be identified separately (Duong and Izumida, 2002). Based on the range of loan amount, borrowers were classified in several groups to compare how differences in characteristic of borrowers and its relation with their borrowing amount.

Table 3: Characteristics of household borrowers from the formal sector  
(grouped by range of loan amount )

Indicator	Unit	Range of loan amount (million VND)				F value
		Up to 10 n=20	11-20 n=18	21-30 n=27	31-50 n=16	
Age of household head	Years old	48.2	46.8	48.5	45.0	0.84
Education of household head	School year	6.8	7.3	7.2	7.5	1.6
Family size	Persons	4.7	4.5	4.8	4.3	0.75
Number of workers	Persons	2.3	2.5	2.6	2.4	0.47
Dependency ratio		0.53	0.45	0.41	0.43	1.3**
Area of crop land	1000 m <sup>2</sup>	2.1	3.0	2.3	2.8	2.4*
Area of fish pond	1000 m <sup>2</sup>	1.2	3.1	3.5	4.2	2.3*
Number of poultry	Head	185	198	200	242	1.2
Number of pigs	Head	10	15	17	25	4.2***

Source: Household survey, 2011.

Note: \*\*\*, \*\*, \* significant at 1%, 5% and 10 % level, respectively

It was found that, household heads with high level of education normally had a better skill of production. They also had better understanding of lending procedure of formal credit sources. Therefore, they wish to borrow a large amount of money for the expansion of production. Findings from the survey shown that, there were small differences in family size and number of workers among surveyed households. However, the dependency ratios were quite different among households. The households with higher dependency ratios borrowed lower amounts of money from formal sources than households with lower dependency ratios. It can be explained that they usually need credit for their urgent consumption while the formal sector mainly provide credit for production in the rural area of Vietnam. Households with big fish ponds, high number of poultry and pigs had a high demand for credit for the purchasing of production inputs. They prefer to borrow money from formal credit sources because interest rates were quite lower as compared to those of village money lenders. It was found that farmers did not use their loan from formal sources for crop production. They used their own money to invest in crop production, thus they lacked money for animal production. For this reason, households with large area of crop land were likely to borrow a large amount of money from the formal sector. In the demand side, the positive affecting factors of borrowing amount from the formal sector were educational level of household head, dependency ratio, area of crop land, area of fish pond, number of poultry and pigs. Result of F-test showed that dependency ratio, area of crop land, area of fish pond and number of pigs were statistically significant. It means that they were dominant affecting factors.

#### ✓ **The formal sector's behaviours in responding to credit demand of farm households**

Of total surveyed households, the poor household accounted for about one third. VBSP's credit with subsidized interest rate is aimed at the poor. The fund of VBSP for lending is limited. Most of the non-poor realized that they were excluded from VBSP's beneficiaries. Consequently, they did not propose to borrow money from this source. For this reason, this paper only focused to analyse the behaviour of VBARD and PCFs as commercial banks in responding to credit demand of farm households. Both VBARD and PCFs are formal lenders and provide credit on collateral. In order to obtain credit from banks, households have to submit their loan application form to the

banks. Of 145 surveyed households, 76 households applied for credit to VBARD or PCFs whereas 69 remaining households had demand for credit but did not apply. The reasons leading to this situation were that they were afraid of not being able to repay their loans, afraid of being refused, lack of collateral and high interest rate. Among the households that have applied for loans, 61 were provided loans while 15 were refused. 41 borrowers fully obtained their required loan amount and 20 households were partly provided with their requested loan amount. For those who were not provided with loans, staff of the banks responded that it was due to unavailability of lending funds at the time they applied for borrowing money. The farmers also stated that in the last four months of the year they were in needs of credit to invest in animal production. However, it is more difficult to obtain loan from banks. VBARD and PCFs are lending on physical collateral<sup>8</sup>. Currently, the land use certificate<sup>9</sup> is considered as unique physical collateral accepted by VBARD and PCFs. Generally, the farm households who hold large land area and have the land use certificate have better credit accessibility. The housing, production equipments and livestock are not accepted as physical collateral. However, they also partly influenced lending decision of bank's staff because staff of VBARD and PCFs visited the farmers' houses and take a look on assets to estimate value of assets before deciding to provide loan. The farm households that have high value of assets and large scale of livestock may have better capability of loan repayment. Therefore, they are likely to have a better credit accessibility. VBARD and PCFs provided a full required loan amount for the households who proposed a medium loan amount, had a large land area, high value of assets and large scale of poultry and pigs. Despite owning land use certificates, the households applying for higher amounts but having smaller land area, lower value of asset and lower number of pigs and poultry were provided lower loans as required or refused to provide loan. It seems that the higher demand for loan amount of borrowers leads to the more lending limitation from the banks.

Table 4: Indicators reflected the influence of farm household characteristics on lending decisions of VBARD & PCFs.

Indicator	Unit	Approved a full required loan amount (n=41)		Approved part of a required loan amount or Refused to provide a loan (n=35)		F-value
		Mean	S.D	Mean	S.D	
Amount of required loan	Mill. VND	24.5	9.8	58.5	21.5	71 <sup>***</sup>
Amount of approved loan	Mill. VND	24.5	9.8	33.5	7.9	12 <sup>***</sup>
Age of household head	Years old	48.2	7.7	44.5	7.8	4.1 <sup>**</sup>
Education of household head	School year	7.2	1.2	7.8	1.3	5.1 <sup>**</sup>
Family size	Persons	4.5	0.7	4.8	1.3	1.2
Dependency ratio		0.42	0.14	0.45	0.13	0.8
Area of crop land	1000 m <sup>2</sup>	2.7	1.2	2.6	1.2	0.04
Area of fish pond	1000 m <sup>2</sup>	39.3	2.5	30.6	2.2	1.9 <sup>*</sup>
Total value of assets	Mill. VND	132.1	96.6	120.7	73.7	0.3
Number of poultry	Head	226	101	195	87	1.9
Number of pigs	Head	20.9	14.3	17.7	9.3	1.0
Non-farm income	Mill. VND	24.3	16.7	22.6	13.3	0.2

Source: Household survey, 2011.

Note: \*\*\*, \*\*, \* significant at 1%, 5% and 10 % level, respectively.

<sup>8</sup> VBARD does not require physical collateral for loan amount less than 10 million VND (based on Decision 67/1999/QĐ-TTg, credit policy for agriculture and rural development, dated May 30<sup>th</sup>, 1999).

<sup>9</sup> In 1993, the government of Vietnam promulgated the land law with issuance of land use certificate for farmers and the introduction of a new law. Although land still remains the property of the state, under the new law usage rights could legally be transferred, sold, leased, bequeathed and used as collateral for loans. The duration of tenure rights was extended to 20 years for agricultural land and to 50 years for forest land.

In the rural area of Vietnam, information on credit supply is very important for the borrowers to obtain a loan. At the commune level, information on credit usually comes from the staff of mass organizations and PCFs. It was found that the older household heads had a better credit accessibility, compared to the younger because the older household heads had wider and stronger relationships with the staff in commune than the young ones. As a result, they had better ability to gather credit-relevant information. It implies that social relationships also affected credit accessibility of farmers. Furthermore, younger household heads with higher level of education and lower non-farm household income wish to borrow higher amounts of money for the expansion of livestock production. However, they were provided a part of required amount of loan. On the contrary, the household heads with older age and lower level of education had lower demand for credit but they were approved full required loan amounts. It was also found that in response to the strong demand for credit of young farmers, the formal sector limited their desired amount of loan. In summary, age, educational level, social relationship of household heads, land area, number of pigs and poultry were factors influenced the lending decisions of VBARD and PCFs. Result of F-test showed that age, educational level and area of fish pond were key affecting factors.

### **Conclusions**

In Hai Duong, the credit supply of the formal sector did not meet the credit need of famers. Farm households still depend on the informal sector. The farm households in the animal-based group need more loan for their production than the other group. They borrowed larger amount of money from the formal credit sector than the farm households in the non-animal based group. The farm households in the non animal-based group also need credit, but they depend more on the informal lenders. Credit accessibility of farmers affected by both demand side and supply side. With regard to demand side, dependency ratio, area of crop land, area of fish pond and number of pigs are main factors influencing the accessibility of farmers to credits from the formal sector. VBSP mainly provided credit for education expenditure. Therefore, credit provided by VBARD and PCFs were significantly important for animal production. Besides age, education of household head, area of fish pond were main factors affected a loan amount approved by VBARD and PCFs. Social relationship also influenced credit accessibility of farmers. The stronger credit needs of farmers were more limited by VBARD and PCFs. The study indicates that a large demand for credit exists in Hai Duong. Some policy implications for the formal sector to improve credit supply and credit accessibility of farm households consist of (i) For VBARD, information on credit program without collateral requirement should effectively inform to farmers. The lending network between VBARD and mass organizations should be strengthened. In the next years, it is more important for VBARD to implement the Decree No.41/2010/ND-CP effectively (dated on August 12, 2010, which allows VBARD to provide non-collateral loan with a maximum of 50 million VND to farm households). Furthermore, VBARD also needs to improve their role in rural lending and increase the availability of lending fund to meet credit needs of famers; (ii) With transaction offices located in commune, PCFs should have more competitive strategies to increase their outreach to the rural area; (iii) For VBSP, the credit supply for agricultural production should also be expanded.

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