


**FACTORS AFFECTING CREDIT ACCESS OF INDIVIDUAL BUSINESS HOUSEHOLDS IN
HO CHI MINH CITY, VIETNAM**

Thanh Nha Nguyen^A, Cao Tan Huy^B



ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received 31 January 2023</p> <p>Accepted 10 April 2023</p>	<p>Purpose: The study studies the factors affecting access to credit of individual business households in Ho Chi Minh City (HCMC), Vietnam. The authors proposed policy implications based on research results that improve access to credit for individual business households.</p>
<p>Keywords:</p> <p>Access; Credit; Loan; Process; Individual; Business; Households; Vietnam.</p>	<p>Theoretical framework: Access to formal credit can be understood in many ways. This article considers that access to proper credit is the ability of a customer to use the capital of a traditional credit institution based on meeting financial obligations - emphasizing the ability to repay both principal and interest.</p>
	<p>Design/methodology/approach: The authors chose a mixed method to conduct the study. This is a suitable research method to answer the research questions raised. Mixed methods include both qualitative and quantitative methods. However, this combination is the implementation of interlacing, replacing the two approaches to solve each problem, the research design's specific goal. The authors analyzed Data from May 2022 to December 2022 in HCMC based on the EFA and CFA, using the structural equation model analysis (SEM) method with SPSS 20.0 software and Amos.</p>
	<p>Findings: The article's findings showed five factors affecting access to credit of individual business households in HCMC, Vietnam. In particular, the loan procedure factor substantially impacts the five factors affecting credit access.</p>
	<p>Research, Practical & Social implications: The study has provided empirical evidence on the factors affecting formal credit access by a linear structural model and provides evidence that factors such as the loan procedure affect traditional credit affecting access to credit.</p>
	<p>Originality/value: The authors give some policy implications for state management agencies, credit institutions, customers, and mass organizations, such as increasing the role of local Government and increasing the ability to use banks, E-commerce, design new loan products to help individual business households access more formal capital, and at the same time, reduce black credit.</p>
	<p>Doi: https://doi.org/10.26668/businessreview/2023.v8i4.1910</p>

**FATORES QUE AFETAM O ACESSO AO CRÉDITO DE RESIDENCIAIS DE EMPRESAS
INDIVIDUAIS NA CIDADE DE HO CHI MINH, VIETNÃ**

RESUMO

Objetivo: O estudo estuda os fatores que afetam o acesso ao crédito de famílias com negócios individuais na cidade de Ho Chi Minh (HCMC), Vietnã. Os autores propuseram implicações políticas com base em resultados de pesquisas que melhoram o acesso ao crédito para famílias com negócios individuais.

^A Doctor of Philosophy in Banking and Finance. Faculty of Taxation - Customs, University of Finance - Marketing (UFM), Vietnam, E-mail: nhatdg@ufm.edu.vn Orcid: <https://orcid.org/0000-0001-5362-961X>

^B PhD. Center for Foreign Languages and Informatics, University of Finance – Marketing (UFM), Vietnam. E-mail: caohuy@ufm.edu.vn Orcid: <https://orcid.org/0009-0006-5480-5658>

Referencial teórico: O acesso ao crédito formal pode ser entendido de várias formas. Este artigo considera que o acesso ao crédito adequado é a capacidade de um cliente usar o capital de uma instituição de crédito tradicional com base no cumprimento de obrigações financeiras - enfatizando a capacidade de amortizar o principal e os juros.

Desenho/metodologia/abordagem: Os autores escolheram um método misto para conduzir o estudo. Este é um método de pesquisa adequado para responder às questões de pesquisa levantadas. Métodos mistos incluem métodos qualitativos e quantitativos. No entanto, essa combinação é a implementação do entrelaçamento, substituindo as duas abordagens para resolver cada problema, objetivo específico do projeto de pesquisa. Os autores analisaram os dados de maio de 2022 a dezembro de 2022 em HCMC com base na EFA e CFA, usando o método de análise de modelo de equação estrutural (SEM) com o software SPSS 20.0 e Amos.

Descobertas: As conclusões do artigo mostraram cinco fatores que afetam o acesso ao crédito de famílias com negócios individuais em HCMC, Vietnã. Em particular, o fator procedimento de empréstimo impacta substancialmente os cinco fatores que afetam o acesso ao crédito.

Pesquisa, implicações práticas e sociais: O estudo forneceu evidências empíricas sobre os fatores que afetam o acesso ao crédito formal por um modelo estrutural linear e fornece evidências de que fatores como o procedimento de empréstimo afetam o crédito tradicional que afeta o acesso ao crédito.

Originalidade/valor: os autores fornecem algumas implicações políticas para agências de administração do estado, instituições de crédito, clientes e organizações de massa, como aumentar o papel do governo local e aumentar a capacidade de usar bancos, comércio eletrônico, projetar novos produtos de empréstimo para ajudar famílias de negócios individuais acessam mais capital formal e, ao mesmo tempo, reduzem o crédito negro.

Palavras-chave: Acesso, Crédito, Empréstimo, Processo, Pessoa Física, Negócios, Famílias, Vietnã.

FACTORES QUE AFECTAN EL ACCESO AL CRÉDITO DE HOGARES DE EMPRESAS INDIVIDUALES EN LA CIUDAD DE HO CHI MINH, VIETNAM

RESUMEN

Propósito: El estudio analiza los factores que afectan el acceso al crédito de los hogares comerciales individuales en Ciudad Ho Chi Minh (HCMC), Vietnam. Los autores propusieron implicaciones políticas basadas en los resultados de la investigación que mejoran el acceso al crédito para los negocios domésticos individuales.

Marco teórico: El acceso al crédito formal puede entenderse de muchas formas. Este artículo considera que el acceso a un crédito adecuado es la capacidad que tiene un cliente de utilizar el capital de una institución de crédito tradicional con base en el cumplimiento de obligaciones financieras, enfatizando la capacidad de pago tanto de capital como de intereses.

Diseño/metodología/enfoque: Los autores eligieron un método mixto para realizar el estudio. Este es un método de investigación adecuado para responder a las preguntas de investigación planteadas. Los métodos mixtos incluyen métodos tanto cualitativos como cuantitativos. Sin embargo, esta combinación es la implementación de entrelazamiento, reemplazando los dos enfoques para resolver cada problema, el objetivo específico del diseño de investigación. Los autores analizaron los datos de mayo de 2022 a diciembre de 2022 en HCMC según EFA y CFA, utilizando el método de análisis de modelos de ecuaciones estructurales (SEM) con el software SPSS 20.0 y Amos.

Hallazgos: Los hallazgos del artículo mostraron cinco factores que afectan el acceso al crédito de los hogares comerciales individuales en HCMC, Vietnam. En particular, el factor de procedimiento de préstamo impacta sustancialmente los cinco factores que afectan el acceso al crédito.

Implicaciones de investigación, prácticas y sociales: el estudio ha proporcionado evidencia empírica sobre los factores que afectan el acceso al crédito formal mediante un modelo estructural lineal y proporciona evidencia de que factores como el procedimiento de préstamo afectan el crédito tradicional que afecta el acceso al crédito.

Originalidad/valor: los autores brindan algunas implicaciones de política para las agencias de administración estatales, las instituciones de crédito, los clientes y las organizaciones de masas, como aumentar el papel del gobierno local y aumentar la capacidad de usar bancos, comercio electrónico, diseñar nuevos productos de préstamo para ayudar. los hogares empresariales individuales acceden a más capital formal y, al mismo tiempo, reducen el crédito negro.

Palabras clave: Acceso, Crédito, Préstamo, Proceso, Individuo, Empresa, Hogares, Vietnam.

INTRODUCTION

Individual business households worldwide are an indispensable part of the national economy. Individual business households can raise capital from many different channels, depending on the development of financial products and capital markets of each country. Therefore, individual business households can expand their production scale and access credit from credit institutions. In the current conditions, access to formal credit and the role of legal credit institutions are critical in timely providing household capital to supplement business capital, ensuring business processes production, business activities, and services are developed continuously and sustainably.

The fourth wave of the Covid-19 epidemic is causing millions of business households to be severely affected, even without revenue for a long time. Meanwhile, access to support policies of the Government faces many difficulties. In fact, the individual business sector accounts for about 30% of the country's GDP. This area also creates a considerable number of jobs for society. Business households established and operating mainly on their own financial capacity also contribute to mobilizing capital from the people for economic development.

Their most practical support is tax policies, support for accessing bank loans, and reducing administrative procedures. However, with the nature of the small capital scale, the household economy should be vulnerable to market fluctuations. Millions of business households nationwide will face even more difficulties if the epidemic lasts long. The number of business households in the province is quite large, but the growth rate in recent years has been slowing down. In 3 years, the HMC Statistics Department investigated, the number of individual business households in non-agriculture, forestry, and fishery increased by only 3,68 thousand establishments compared to 2022, the growth rate was only 0.43%/year, lower than the previous period's growth rate of 3.72%.

In particular, in the past 3 years, the Covid-19 epidemic has dramatically impacted this economic sector. Individual production and business establishments have the nature of small businesses, which are vulnerable to market fluctuations. The Covid-19 pandemic over the years has swept most facilities and left heavy consequences. Many establishments had to downsize production and cut workers, leading to a growth in the number of employees in this area, with an average growth rate of only 0.97% per year in 2020-2022.

To develop and overcome difficulties, individual business establishments also want to receive more support from the State, especially from local management units. What business establishments that local authorities, including officials in charge, must be more thorough and

grasp the difficulties of production and business units in their areas. Since most establishment owners often lack knowledge of specialized legal regulations, some regulations are not fully understood. Individual business households are an inevitable part of the national economy, making specific contributions to annual economic growth. Therefore, over the past time, the Government and organizations Credit institutions have issued many mechanisms and policies to support individual business households to access official credit sources and develop production and business. Despite receiving much support from the Government and credit institutions, households still face many difficulties accessing formal credit. By analyzing the factors affecting informal credit access of business households today, the article suggests some solutions to help individual business households access to credit more effectively in the future.

THEORETICAL FRAMEWORK

Theories of Credit Access of Individual Business Households (CA)

Households accessing credit from credit institutions often incur high fees because the institutions incur many costs related to network organization, appraisal, and follow-up of customers or loans, as well as risk prevention. Specifically, lending to households, the operational cost for a loan is often high because the size of each loan is usually small (Aderaw & Singh, 2016; Kiplimo et al., 2015). In addition, due to a large number of customers distributed everywhere, lending expansion is often related to developing the lending network and debt collection, which also increases costs. In the credit relationship, households have a relatively high level of risk, so the cost of risk provisions of credit institutions is relatively high compared to other industries. Interest rates to attract family loans are also relatively high because credit institutions are limited by local sources and have to move the capital from different places, increasing capital costs (Lee et al., 2012; Njeru et al., 2016). Also, household production is small, and this characteristic significantly affects the lending organization and the application of lending methods and techniques.

Factors Affecting the Credit Access of Individual Business Households

Collateral: Collateral is a collection of assets intended to demonstrate the payment of future debt obligations of a bank borrower (Ojiako et al., 2014; Sattar, 2012). This case is the property of the individual business household (formed or will be formed from the loan; or the guarantee of a third party). Collateral can mitigate the risks of asymmetric information and moral hazard when making asset-based lending (Muhongayire et al., 2013). The lack of

collateral is one of the significant barriers to formal credit access – especially in rural areas. Empirical studies have demonstrated that collateral increases access to capital from financial institutions. Particular assets act as a means to mitigate the risks of asymmetric information and moral hazard when making asset-based lending (Nouman et al., 2013; Dube et al., 2015). Therefore, the positive relationship between collateral and the household's ability to access loans is essential when the bank considers a household's loan decision. Based on the above analysis, the authors propose hypotheses H1 as follows:

H1: Collateral (Ro) positively impacts the credit access of individual business households in HCMC.

Business household income: The income of an individual business household is understood as the total amount of money earned from the household's business, not including salary if working in other jobs. This study pointed out that one of the conditions for borrowing capital from credit institutions is the borrower's ability to repay (Gbigbi, 2017; Chien & DeVaney, 2001). Therefore, credit institutions consider a household's income as a criterion to determine the loan limit and repayment period. Families with high and stable incomes will be given priority in lending over other households with lower incomes. Households need to develop an effective capital use plan, prove the source of money and lend with appropriate purposes to gain more access to commercial credit sources.

This group of indicators is understood as revenue for micro-enterprises and income for households. These studies have pointed out that one of the conditions for borrowing capital from official credit institutions is the borrower's ability to repay (Amjad & Hasnu, 2007; Al-Obaidi & Almashhadani, 2022). The income scale represents the bank's subjective assessment of the customer's ability to repay loans during the loan period. Based on the above analysis, the authors propose hypothesis H2 as follows:

H2: Business household income (In) positively impacts the credit access of individual business households in HCMC.

Loan interest rate: The loans' interest rate (and interest rate) is the cost charged for the loans to official credit institutions by individual business households. They affect not only lenders' payments but also the firm's capital stock (Abafita et al., 2016; Assifaw & Adeba, 2016). High-interest rates increase business costs, thereby reducing business profits, which hinders the development capacity of enterprises. High-interest rates also affect business cash flows in which borrowers must spend more money to repay loans (Baiyegunhi & Fraser, 2014; Lee, 2006; Okurut & Bategeka, 2006). High-interest rates also increase the risk of insolvency

because borrowers do not take full advantage of the financial capacity of the loan. The loan interest rate scale shows the subjective ability of the borrower to assess the loan interest rate and costs related to accessing commercial bank credit. Based on the above analysis, the authors propose hypothesis H3 as follows:

H3: Loan interest rate (Ir) positively impacts the credit access of individual business households in HCMC.

Loan procedure: Loan procedures are also a factor affecting the credit decision of households. The study shows that lending policies, loan procedures, and service quality strongly influence the borrower's decision to borrow (Malhotra & Singh, 2009; Masaood & Keshav, 2020). Most individual business households are small, medium, and very small in scale, with limited business management and planning skills. Experience recorded on books without detailed accounting and inadequate understanding of conditions for accessing credit (Samson & Obademi, 2018; Kim & DeVaney, 2001). This makes the strict lending procedures required by credit institutions also contribute to preventing access to credit. Based on the above analysis, the authors propose hypothesis H4 as follows:

H4: Loan procedure (Pr) positively impacts the credit access of individual business households in HCMC.

Electronic banking services: Digital Banking is a form that digitizes all traditional banking activities and services. Digital banking services will shorten travel costs, wait time for application approval, and reduce the impact of geographical distance on the ability of micro-enterprises and household businesses to access credit (Yusup et al., 2022; Shahidur, 2005; Anang et al., 2015). The results of in-depth interviews with experts in the field of Finance - Banking show that digital banking services are currently considered an inevitable trend of the era of industrial revolution 4.0. A "new" and current service is considered typical. It increases accessibility for households anytime, anywhere. However, digital banking services are currently being provided mainly for individual customers for corporate customers. They only stop at basic steps such as online payment, mainly via internet banking (Michael et al., 2018; Sebatta et al., 2014). In the coming time, digital banking will be one of the positive factors affecting the ability of business households to access bank capital. Based on the above analysis, the authors propose hypothesis H5 as follows:

H5: Electronic banking services (Bs) positively impact the credit access of individual business households in HCMC.

RESEARCH METHODS

Qualitative research methods: Objectives of qualitative research: To test, screen, and determine the relationship between variables in the original theoretical model, which has been formed based on the academic review. Qualitative research method: In-depth interview because this is the most appropriate way to check the suitability of the proposed research model, build the survey questionnaire, and the reasonable accuracy of the research results.

The authors checked and screened the independent variables in the proposed theoretical model and determined the relationship between the independent and dependent variables. The mentioned models are studied in many parts of the world. However, not all factors are suitable and studied in the Ho Chi Minh City market. Discussions and exchanges will help the authors confirm the factors ideal for the research area and preliminary levels of the influence of those factors on the ability to access formal and informal credit knowledge of individual business households in Ho Chi Minh City. Specifically, the authors have consulted with 15 Ho Chi Minh City business managers. Based on the opinions of 15 knowledgeable managers, during the interview, the managers gave complete comments on the content and the concepts used in the questions to be used in the quantitative survey later. Before the discussion, the authors contacted and sent an official invitation to meet to conduct group discussions to ensure the desired effect (Hair et al., 2021).

Quantitative research methods: Quantitative research collects data from the survey on the target group of households that have used formal credit. The author processes data using SPSS 20.0 and AMOS 20 software to analyze characteristics of individual business households, scale reliability, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), analysis of the linear structural model (SEM), the influence of the moderator on the relationship of the structural model (Hair et al., 2021). The collecting data had from May to December 2022 in HCMC. Sampling method: The authors surveyed 600 individual business households registered in Ho Chi Minh City and used the form of credit provided by licensed credit institutions, including commercial banks, development banks, social policy banks, financial companies, people's credit funds, and microfinance institutions.

After receiving the answers, the author processed the questionnaire, coded the data and entered the data, then analyzed the questionnaire data using SPSS 20.0 software through the following detailed steps:

Step 1: Introduction about demographic characteristics and descriptive statistics of the research sample

An introduction to the demographic characteristics of the survey participants is used to test the regulation of some demographic factors in the structural model relationship. Descriptive statistics are intended to show the essential elements of the data obtained from an empirical study (Hair et al., 2021).

Step 2: Evaluate the reliability and value of the scale through Cronbach's Alpha

Researchers often use Cronbach's Alpha coefficient to assess the reliability of the survey scale. This test excludes variables we think are conceptually measurable but have no relationship with other quantifiable variables. Hair et al. (2021) showed that many studies agree that the reliability of Cronbach's Alpha must be between 0.6 and 1.0 to ensure that the total variables in the same group are significantly correlated between 0.8 and 1.0, the scale is good, from 0.7 to close to 0.8 is usable, and from 0.6 to close to 0.7 is functional in the conceptual case measurement concepts are new or new to respondents in the research context. The larger the Cronbach's Alpha coefficient, the higher the scale's reliability. However, if this coefficient is too large (> 0.95), it shows that many variables in the ranking have no difference (Hair et al., 2021).

Step 3: Exploratory Factor Analysis (EFA)

After evaluating the scale's reliability with Cronbach's Alpha coefficient, the next step is to analyze the EFA discovery factor to assess its value. The KMO coefficient (Kaiser-Meyer-Olkin) is an index used to consider the appropriateness of factor analysis. The value of KMO must reach a value of 0.5 or more ($0.5 \leq \text{KMO} \leq 1$), which is a sufficient condition for factor analysis to be appropriate. If this value is less than 0.5, then factor analysis is likely unsuitable for the research data set (Hair et al., 2016).

Eigenvalue is a commonly used criterion to determine the number of factors in EFA analysis. With this criterion, only factors with Eigenvalue ≥ 1 are kept in the analytical model.

Total Variance Explained $\geq 50\%$ shows that the EFA model is suitable. Factor loading, also known as the factor weight, represents the correlation relationship between the observed variable and the factor. Hair et al. (2021) said that factor loading (factor loading or factor weight) is the criterion to ensure the practical significance of EFA: Factor loading > 0.3 is considered to be the minimum level. Factor loading > 0.4 is significant (Hair et al., 2021).

Step 4: Confirmatory factor analysis (CFA)

After analyzing the EFA exploratory factors, the confirmatory factor analysis (CFA) was analyzed to confirm the black credit scale's univariate, multivariable, convergent, and

discriminant validity. Confirmatory factor analysis CFA is one of the techniques of the SEM linear structural model (Hair et al., 2021).

When measuring the fit of a model to market information, it is common to use the Chi-square coefficient (CMIN), the comparative relevance index (CFI), the Tucker and Lewis index (TLI), RMSEA (Root Mean Square Error Approximation), and Chi-square adjusted to degrees of freedom (CMIN/df). The model is considered suitable for the data when the Chi-square test has a P-value > 0.05 . A value of Chi-square adjusted for degrees of freedom (CMIN/df) ≤ 5 is acceptable, and ≤ 3 is considered good. GFI, CFI, and TLI values ≥ 0.8 and ≥ 0.9 are fine. The model can multiply the values of GFI, TLI, CFI ≥ 0.9 , CMIN/df < 3 , and RMSEA < 0.08 , then the model fits the data (Hair et al., 2021).

Step 5: Analyze the linear structural model (SEM) and test Bootstrap.

After completing the CFA and confirming that the scales in the theoretical research model are evaluated and give relevant results, we come to the analysis of the linear structural model (SEM) to test the theoretical model. proposed research theory. The linear structural model specifies each relationship between the latent variables.

Step 6: Check the influence of factors, analyze and propose policy implications.

EMPIRICAL RESULT

Overview of the Socioeconomic Situation in Ho Chi Minh City

Taken as a whole, the Covid-19 pandemic has caused severe public health consequences, with more than 600 million people infected worldwide and over 6.4 million deaths as of the end of August, 2022. Almost all socioeconomic activities are affected to varying degrees. The world economy will only gradually recover from the end of 2021 when most countries have switched from a "Zero Covid" strategy to a "Safe living with Covid" strategy. The following comments about Vietnam's tax policy to support businesses and businesses affected by the Covid-19 pandemic can be drawn in such a context.

Ho Chi Minh City just released information on the socioeconomic situation in 2022. The agricultural, forestry, and fishery sector increased by 3.74%, the industry and construction sectors increased by 12.92%, the trade and service sector increased by 8.37%, and the product tax minus product subsidies increased by 7.41%. Accordingly, the gross domestic product (GRDP) in 2022 will increase by 9.03% over the same period.

The value added of the nine key service sectors accounted for 58.7% of the GRDP and 91.7% of the service sector. There were 3/9 service industries with a growth rate of 9.03%

higher than last year, including commerce up 10.47%, accommodation and food services up 47.05%, and information and communication increased by 9.13%. Regarding the economic structure in 2022, the agriculture, forestry, and fishery sector accounted for 0.6%; industry and construction accounted for 22.1%; trade and service sector accounted for 64%; product tax minus product subsidies accounted for 13.3%.

From the beginning of the year to December 20, 2022, the city had 44,369 newly registered enterprises with a total registered capital of 472,559 billion VND. Over the same period, business registration certificates increased by 42.3%, and the registered capital decreased by 4.9%.

Total retail sales of consumer goods and services in 2022 were estimated at VND 1,089,446 billion, up 30.5% over the same period. By industry, retail sales of goods in 2022 are estimated at VND 625,520 billion, accounting for 57.4% of the total and increasing by 20.5% over the same period; revenue from accommodation and food services reached VND 84,805 billion, accounting for 7.8% of the total and rising by 27.5%; tourism revenue reached 6,701 billion VND, accounting for 0.6% and increasing 190.8%; other service revenue reached VND 372,420 billion, accounting for 34.4% and rising 34.9% over the same period.

In social fields, in 2022, the city will create jobs for 315,612 people, reaching 105.3% of the year plan, up 3.3% compared to 2021; the number of new jobs created went 141,312 positions, reaching 100.9% of the year plan, up 0.23% compared to 2021. In 2022, 350,000 individual business households in Ho Chi Minh City could not borrow money to recover from the pandemic.

In addition, a component that is severely affected is 350,000 individual and commercial households in Ho Chi Minh City. They contribute much to GDP but cannot borrow money, and the recovery is prolonged. In addition, due to procedural congestion, some areas, such as the construction industry, could not recover. Therefore, it is necessary to quickly review how this policy system is implemented.

According to our survey, many problems of business households today are capital exhaustion, difficulty accessing new capital sources, labor not working/leaving, training skilled human resources, and transferring technology transfer. Issues related to access to capital are the factor that is said to cause the most difficulties. The surprising factor in the survey is that many businesses consider technology transfer a barrier to the Covid-19 period, the severity just after access to capital.

Before the 4th wave of Covid-19, business owners were still relatively optimistic. Specifically, before February 2021, 1% of business households had no plan to change their scale; 42% kept the current ranking; 48% planned to scale; Only 1% planned to downsize their business, and 8% did not clear plans for the future. However, the return of Covid-19 after April 27, 2021, is probably a big turning point for business households. Directive 16 has been applied in many provinces and cities, causing many households to switch from medium business to temporarily suspending business.

Regarding the State's support during the Covid-19 period, the business household wishes to be supported with procedures for tax reduction and access to capital to maintain business.

Looking back at the system of support packages in 2020, business households are relatively "inferior" to enterprises. The lifebuoy of households and individuals is placed in the VND 62,000 billion packages related to social security, but in reality, this support package is not appreciated when it is only disbursed by 22% and for "easy" people. Statistics, such as poor households, beneficiaries of social policies

Accordingly, firstly, many businesses need capital, but absorbing capital is very difficult and cannot be absorbed. Therefore, removing difficulties in absorbing capital is necessary to recover and develop.

Second, it is necessary to stabilize inflation, prices, foreign exchange reserves, and cash flow. By the end of the year, the remaining 4% credit space must be put into places where it needs to be arranged, as stated in Resolution 43 of the National Assembly and Resolution 11 of the Government.

Third, coordinate financial and monetary, accelerate disbursement of public investment, and avoid issuing bonds in the treasury. Currently, Vietnam's financial market, currency, and medium and long-term capital through securities. So far, the primary capital source has been commercial banks for both medium and long-term prosperity. Recently there has been a market crash. How can corporate bonds grow to burden commercial banks?

Analysis of Regression Coefficients in the SEM Model

The authors used a questionnaire to interview in a face-to-face format. The questionnaires were prepared for both formal credit access. The live questionnaire was broadcast to 600 Householders in Ho Chi Minh City. The total number of questionnaires of the study was distributed to 600 votes, and the number of votes collected was 567 valid votes from

August 2022 to October 2022. After screening to remove invalid ballots due to typing the same answer, the remaining votes are 567 individuals.

Table 1: Descriptive statistics on demographics

Gender	Individuals	Percent	Valid percent	Cumulative percent
Male	257	45.3	45.3	45.3
Female	310	54.7	54.7	100.0
Total	567	100.0	100.0	
Age	Householders	Percent	Valid percent	Cumulative percent
From 20 to under 25 years old	47	8.3	8.3	8.3
From 25 to under 35 years old	139	24.5	24.5	32.8
From 35 to under 45 years old	289	51.0	51.0	83.8
From 45 to under 55 years old	67	11.8	11.8	95.6
Over 55 years old	25	4.4	4.4	100.0
Total	567	100.0	100.0	

Source: Prepared by the authors (2022)

Table 1 shows 257 male individuals account for 45.3% and 54.7%, respectively. Besides, the rest are female, with 567 valid votes. This result is consistent with the situation in Ho Chi Minh City. Where most business household heads are household heads. This is consistent with the position in Ho Chi Minh City, where most business households are headed by men because the preliminary decision to spend and earn money in the house is male.

Table 2: Cronbach's Alpha of factors

Code	Factors	Cronbach's Alpha
Co	Collateral	0.963
In	Business household income	0.858
Ir	Loan interest rate	0.959
Pr	Loan procedure	0.956
Bs	Electronic banking services	0.879
CA	Credit access of individual business households (CA)	0.937

Source: Prepared by the authors (2022)

Table 2 shows that the research results show that the household's ability to access formal credit after being assessed through Cronbach's alpha shows promising results. The scale reflects the responses with Cronbach's alpha coefficient = 0.8 (> 0.6 popular acceptance level centrally) and variable correlation coefficients - the sum is > 0.3, so the scale of accessibility official household credit gains credibility.

Table 3: Sample descriptive statistics about dependent factors

Code	Individuals	Minimum	Maximum	Mean	Std. Deviation
CA1	567	1.00	5.00	3.3898	0.96663
CA2	567	1.00	5.00	3.3157	0.97721
CA3	567	1.00	5.00	3.2557	0.99461
Co1	567	1.00	5.00	3.0123	1.00433
Co2	567	1.00	5.00	3.0300	1.00396
Co3	567	1.00	5.00	3.0741	0.97576
Co4	567	1.00	5.00	3.0564	1.00370
In1	567	1.00	5.00	3.3580	0.88601
In2	567	1.00	5.00	3.4850	0.99257
In3	567	1.00	5.00	3.2522	0.99196
In4	567	1.00	5.00	3.3439	0.89949
Ir1	567	1.00	5.00	3.0265	1.00230
Ir2	567	1.00	5.00	3.0529	1.01265
Ir3	567	1.00	5.00	3.1023	0.97138
Ir4	567	1.00	5.00	3.0935	0.98581
Pr1	567	1.00	5.00	3.0106	0.99463
Pr2	567	1.00	5.00	3.0212	1.01032
Pr3	567	1.00	5.00	3.0653	0.98270
Pr4	567	1.00	5.00	3.0176	1.02601
Bs1	567	1.00	5.00	2.3333	0.66460
Bs2	567	1.00	5.00	2.3862	0.62120
Bs3	567	1.00	5.00	2.3774	0.67676
Bs4	567	1.00	5.00	2.4127	0.68994

Source: Prepared by the authors (2022)

Table 4.3 shows that the lowest answer is 1.0, and the highest is 5.0. One of the biggest obstacles surveyed by the surveyed households is that it is not the loan interest rate that is a hindrance but the appraisal time.

Table 4: CFA test results for all scales

Indicators	Value	Standard	Result
CMIN/DF	2.239	< 5.0	Good
GFI	0.938	> 0.8	Good
TLI	0.975	> 0.9	Good
CFI	0.981	> 0.9	Good
RMSEA	0.047	< 0.08	Good
Sig. value	0.00	< 0.05	Good

Source: Prepared by the authors (2022)

Table 4 shows the model goodness of fit indicators such as Chi-square is used to measure the more precise fit of the whole research model with reality. In the model where the Chi-square is as tiny as possible, some authors suggest $1 < \chi^2/df < 3$ (Hair et al., 2016). If the errors are concatenated, the covariance between them decreases and causes the Chi-square to

reduce by a corresponding amount compared to the Chi-square of the original model. Then GFI, TLI, CFI... also be improved.

Table 5: Results for testing structural equation model

The relationship between the factors			Unstandardized Coefficients	Standardized Coefficients	Std. Error	C.R	P-value
CA	<---	Co	0.088	0.100	0.032	2.778	0.005
CA	<---	In	0.198	0.183	0.039	5.137	0.001
CA	<---	Ir	0.546	0.568	0.037	14.630	0.002
CA	<---	Pr	0.164	0.164	0.032	5.120	0.003
CA	<---	Bs	0.249	0.113	0.060	4.172	0.004

Source: Prepared by the authors (2022)

Table 5 shows that the SEM structural analysis results have demonstrated the following factors: Collateral, business household income, loan interest rate, loan procedure, and electronic banking services impact households' access to bank credit. Beta coefficients all satisfy the initial hypothetical relationship at the significance level of 5%.

Table 6: Testing the research model by Bootstrap method

The relationship between the factors			SE	SE-SE	Mean	Bias	SE-Bias	C.R
CA	<---	Co	0.030	0.000	0.089	0.000	0.001	0.0
CA	<---	In	0.042	0.001	0.198	-0.001	0.001	1.0
CA	<---	Ir	0.045	0.001	0.542	-0.004	0.005	0.8
CA	<---	Pr	0.040	0.001	0.157	-0.007	0.006	-1.16
CA	<---	Bs	0.059	0.001	0.237	-0.012	0.008	-1.5

Source: Prepared by the authors (2022)

The value results from evaluating the intention to use the model using Bootstrap. Table 6 shows the test help assess the reliability of the estimates in the evaluation model by testing whether the regression coefficients in the SEM model are well estimated. This study uses the Bootstrap method with repeated observations of N = 20000. The C.R. is in the range from -1.96 to 1.96, the deviation of the coefficients in the model with 20000 observations is tiny, but the model is still significant with a large sample. Therefore, the model estimate is reliable.

Policy implications for loan interest rate (0.568): Research hypothesis H3 suggests that the higher the loan interest rate and associated fees, the lower the household's ability to access formal credit. The research results show that the magnitude of the loan interest rate harms the household's ability to access credit with sig = 0.00 < 0.05 with significance %. Therefore, there is enough basis to confirm hypothesis H3. This result is consistent with the previous study (Samson & Obademi, 2018; Sebatta et al., 2014), which suggested that the higher the loan

interest rate, the lower the household's ability to access formal credit. The research results are explained: The interest rate is the main cost of the loan, and the borrower, here the householder, always expects a lower cost to maximize profits. High-interest rates make households need to spend more to maintain loans, and the revenue and earnings of households will be reduced.

Policy implications for business household income (0.183): Hypothesis H2 is suggested that the magnitude of the household head's monthly income is perceived to positively affect the household's ability to access formal credit. The results of hypothesis testing show that the magnitude of the monthly income of the household head is perceived to have a positive relationship with the household's ability to access credit with the influence coefficient through the standard variable $\text{Sig} = 0.006 < 0.05$. Therefore, there is a basis for accepting H2. This is consistent with the results (Njeru et al., 2016; Gbigbi, 2017). The research results have a base to confirm the positive relationship between the monthly income of the household head and the household's ability to access formal credit. When lending to any customer, credit institutions must consider funding sources to be able to repay the debt and add part of the cost of the loan, such as interest expenses.

Policy implications for loan procedure (0.164): Hypothesis H4 proposes a negative relationship between the complexity of the loan procedure and the household's ability to access formal credit. The results show that the more complicated the loan procedure, the more negative impact on the household's ability to access credit with $\text{sig} = 0.00 < 0.05$. Therefore, there is enough basis to confirm hypothesis H4. This result is consistent with the previous study (Masood & Keshav, 2020; Anang et al., 2015). The study results can be explained as follows. Papers, vouchers, plan sheets, certificates, and some other formalities are becoming a barrier for households when many household heads do not know what kind of procedures they need to prepare, causing This results in repeated travel, which consumes a lot of time, effort and cost, and adds to the negative impact of geographical distance on credit access. Moreover, at some credit institutions, the processing process and procedures are still slow even though the household head has fully and accurately presented the sets of documents to apply for credit, affecting the timeliness of the capital source. This also contributes to the increase of black credit with quick procedures and quick disbursement, a burning problem that the Government focuses on finding solutions to repel.

Policy implications for electronic banking services (0.133): Hypothesis H5 proposes a positive relationship between E-banking service quality and households' access to formal credit. The test results show that the quality of e-banking services positively influences the credit

accessibility of households with the coefficient of influence with $\text{Sig} = 0.00 < 0.05$. Therefore, there is enough basis to confirm H5. The results are consistent with previous research (Aderaw & Singh, 2016; Amjad & Hasnu, 2007), showing that the increased quality of e-banking services improves households' ability to access formal credit. Consumers are household heads when e-banking services meet people's demand for payment, credit granting, etc., with high speed and a variety of benefits, reducing the cost of travel, and loan approval as well as a variety of other charges and procedures, thereby reducing the negative impact of geographical distance or loan procedures on credit.

Policy implications for collateral (0.100): Research hypothesis 1 (H1) concludes that the magnitude of collateral value has a positive relationship to the credit accessibility of households in Ho Chi Minh City. The test results show that the perceived collateral positively influences the legal credit accessibility of the household with the influence coefficient through the common variable of the household head characteristics with $\text{Sig.} = 0.000 < 0.05$. Therefore, there are grounds to accept hypothesis H1. Thus, the larger the size of the collateral, the greater the household's ability to access formal credit. This result is consistent with the study (Assifaw & Adeba, 2016; Yusup et al., 2022). The explanation for the quantitative research results of this study is as follows: In Ho Chi Minh City, due to the impact of the high inflation rate, the preferred collateral assets of banks can be mentioned as follows: land and assets attached to the land, certificates of deposit, etc. are all assets of great value, high convertibility into cash and less depreciated over time.

CONCLUSION

Want to improve access to credit of households. Credit institutions play a huge role in the economy's capital flow. This is a credit channel for credit institutions, ensuring and safe for households when in need of credit capital. Although small but aggregated loans account for a high proportion of the economy, credit institutions must actively act, innovate, improve service quality, and support management agencies in removing problems in accessing this credit. Research results show that some regulations on collateral, loan procedures, etc., have been and are obstacles to households' access to credit.

Geographical distance, interest rates, and the uneven development of e-banking services are obstacles to accessing credits for business households. In addition, banks in Ho Chi Minh City still face many difficulties when appraising loan applications of household heads due to many unclear regulations, and banks have not clearly identified risk groups that may be

encountered, causing apprehension in granting credit to some groups of households. To solve these problems, the governing body, the State Bank, needs comprehensive policies, transparent regulations, and policies to promote and support credit institutions in Ho Chi Minh City.

Business households can expand their production scale and access credit from informal sources such as borrowing from relatives and friends. Official sources such as loans from credit institutions. The differentiation in financial products of credit institutions represents the strategy and characteristics of each region to meet the different needs of many subjects. In the current conditions, access to formal credit and the role of legal credit institutions are essential in timely providing household capital to supplement business capital, ensuring business processes, production, business activities, and services are developed continuously and sustainably

Limitations of the research and suggestions for further study: Firstly, the topic of developing credit access for individual business households in two directions is formal credit, but it does not study semi-formal credit. Therefore, if research is produced in the direction of the credit approach in all three orders: formal, semi-formal, and informal, it will cover all issues. Secondly, many individual business households that the author studied operate in Ho Chi Minh City and enjoy many incentives from the State to access loans. At the same time, after the Covid-19 pandemic, individual business households also benefit from loans from the bank for social policies or some incentives from commercial banks, essential people's credit funds department. This contributes to the development of formal credit. Although mentioned in the survey, the study did not develop this issue. Therefore, in the coming time, it is possible to determine access to preferential credit or credit after the financial crisis or the crisis caused by the epidemic.

ACKNOWLEDGMENTS

The University of Finance - Marketing (UFM), Vietnam, supported the study.

REFERENCES

- Abafita, J., Atkinson, J., & Kim, C. S. (2016). Smallholder commercialization in Ethiopia: Market orientation and participation. *International Food Research Journal*, 23(4), 1797-1807.
- Aderaw, G., & Singh, M. (2016). Development of financial sector in Ethiopia: A literature review. *Journal of Economics and Sustainable Development*, 7(7), 9-20.
- Al-Obaidi, M. B. M., & Almashhadani, A. N. (2022). Assessment of the financial sustainability of external debt in Iraq: an econometric analysis. *International Journal of Professional*

Business Review, 7(5), 1-24.

Amjad, S., & Hasnu, S. (2007). Smallholders' access to rural credit: Evidence from Pakistan. *The Lahore Journal of Economics*, 12(2), 1-25.

Anang, B., Sipiläinen, T., Bäckman, S., & Kola, J. (2015). Factors influencing smallholder farmers' access to agricultural microcredit in Northern Ghana. *Africa Journal of Agricultural Research*, 10(24), 2460-2469.

Assifaw, L., & Adeba, G. (2016). Analysis of factors affecting smallholder farmers' access to formal credit in Jibat district, West Showa Zone, Ethiopia. *International Journal of African and Asian Studies*, 25(1), 43-53.

Baiyegunhi, L. S., & Fraser, G. G. (2014). Smallholder farmers' access to credit in the anethole district municipality, Eastern Cape province, South Africa. *Journal of Agriculture and Rural Development in the Tropics and Subtropics*, 115(2), 79-89.

Chien, Y. W., & DeVaney, S. (2001). The Effects of credit attitude and socioeconomic factors on credit card and installment debt. *The Journal of Consumer Affairs*, 35(1), 162-179.

Dube, L., Mariga, T., & Mrema, M. (2015). Determinants of access to formal credit by smallholder tobacco farmers in Makoni district, Zimbabwe. *Greener Journal of Agricultural Sciences*, 5(1), 034-042.

Gbigbi, T. M. (2017). Are there roadblocks to accessing micro-credit from selected microfinance banks in delta state, Nigeria? Implications for small-scale farmers' sustainability. *Journal of Food Industry*, 1(1), 1-16.

Hair, J., Anderson, R., Tatham, R., & Black, W. (2021). *Multivariate Data Analysis with Readings*, U.S.: Prentice-Hall: Upper Saddle River, NJ, USA.

Kim, H., & DeVaney, S. (2001). The determinants of outstanding balances among credit card revolvers. *Financial Counseling and Planning*, 12(2), 10-12.

Kiplimo, J. C., Ngenoh, E., Koech, W., & Bett, J. K. (2015). Determinants of access to credit financial services by smallholder farmers in Kenya. *Journal of Development and Agricultural Economics*, 7(9), 303-313.

Lee, J. (2006). Family firm performance: Further evidence. *Family Business Review*, 19(2), 103-114.

Lee, Park, Y. K., Chung, N., & Blakeney, A. (2012). A unified perspective on the factors influencing usage intention toward mobile financial services. *Journal of Business Research*, 65(11), 1590-1599.

Malhotra, P., & Singh, B. (2009). The impact of internet banking on bank performance and risk: The Indian experience. *Eurasian Journal of Business Economics*, 2(4), 43-62.

Masaood, M., & Keshav, L. (2020). Factors affecting farmers' access to formal and informal credit: Evidence from rural Afghanistan. *Journal of Sustainability*, 12(1268), 1-16.

Michael, A., Giroh, Y. D., Polycarp, M., & Ashindo, Z. E. (2018). Analysis of rural farm

- households' access to formal agricultural credit in Yola south local government area, Adamawa State, Nigeria. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 66(4), 947-954.
- Muhongayire, W., Hitayezub, P., Mbatiac, O. L., & Wangiad, S. M. (2013). Determinants of farmers' participation in formal credit markets in rural Rwanda. *Journal of Agricultural Science*, 4(2), 87-94.
- Njeru, T. N., Mano, Y., & Otsuka, K. (2016). Role of access to credit in rice production in Sub-Saharan Africa: The case of Mwea irrigation scheme in Kenya. *Journal of African Economies*, 25(2), 300-321.
- Nouman, M., Siddiqi, M. F., Asim, S. M., & Hussain, Z. (2013). Impact of socioeconomic characteristics of farmers on access to agricultural credit. *Sarhad Journal Agriculture*, 29(3), 469-475.
- Ojiako, I. A., Idowu, A. O., & Ogbuk wa, B. C. (2014). Determinants of loan repayment behavior of smallholder cooperative farmers in Yewa North local government area of Ogun state, Nigeria: An application of Tobit model. *Journal of Economics and Sustainable Development*, 5(16), 144-153.
- Okurut, F. N., & Bategeka, L. (2006). The impact of microfinance on the welfare of the poor in Uganda. *Journal of Social and Economic Policy*, 3(1), 59-74.
- Samson, A., & Obademi, O. (2018). The determinants and impact of access to agricultural credit on productivity by farmers in Nigeria; Evidence from Oyo state, Nigeria. *Advances in Social Sciences Research Journal*, 5(3), 252-265.
- Sattar, T. (2012). Sociological analysis of constraining factors of development in the agriculture sector of Pakistan. *Journal of Economics and Sustainable Development*, 3(8), 8-24.
- Sebatta, C., Wamulume, M., & Mwansakilwa, C. (2014). Determinants of smallholder farmers' access to agricultural finance in Zambia. *Journal of Agricultural Science*, 6(11), 63-73.
- Shahidur. R. K. (2005). Microfinance and poverty: Evidence using panel data from Bangladesh. *The World Bank Economic Review*, 19(2), 263-286.
- Yusup, D. K., Sobana, D. H., & Yulandri, E. (2022). The development model of mini bank and business clinics laboratory at PTKIN. *International Journal of Professional Business Review*, 7(4), 1-16.