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No. 58 LE VAN HIEN

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IMPACT OF URBANIZATION, PUBLIC SPENDING, FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH IN SOUTHEAST ASIA

PhD. Nguyen Van Chien*

Abstract: Southeast Asia has an important contribution in terms of geopolitical and economic position in Asia. Governments have increased public spending, in addition to greater urbanization rates and financial development in order to create economic growth in the region. This research was conducted in ASEAN6 countries in the period of 2000 to 2020, the research results confirm that financial development and urbanization rate have no impact on economic growth. However, there exists a positive relationship of foreign direct investment and a negative relationship of government spending on economic growth in ASEAN6.

• Keywords: ASEAN, government spending, finance, growth.

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Tóm tắt: Khu vực Đông Nam Á ngày càng có vị trí quan trọng trong khu vực châu Á về vị trí địa chính trị, kinh tế. Chính phủ các nước gia tăng chi tiêu công, bên cạnh sự cải thiện về tốc độ đô thị hóa cao cùng với sự phát triển của thị trường tài chính nhằm tạo động lực lên tăng trưởng kinh tế trong khu vực. Bài nghiên cứu này thực hiện tại các nước ASEAN6 trong giai đoạn 2000 đến 2020, kết quả khẳng định rằng phát triển tài chính và tỷ lệ đô thị hóa không có tác động lên tăng trưởng kinh tế trong khu vực. Tuy nhiên, tồn tại mối quan hệ tích cực của vốn đầu tư trực tiếp nước ngoài và quan hệ tiêu cực của chi tiêu chính phủ lên tăng trưởng kinh tế trong ASEAN6.

• Từ khóa: ASEAN, chi tiêu công, tài chính, tăng trưởng.

1. Introduction

Southeast Asia is considered as a dynamic economic development region located in Southeast Asia. The geopolitical position of Southeast Asia is bordered by major economic powers such as China, Japan, Korea, and India. In addition, Southeast Asia locates on the international container shipping lines where goods are transported from Asia to Europe, America and the rest of the world. It has greatly

brought huge opportunities in attracting foreign direct investment, developing financial markets, as well as improving economic growth and per capita GDP in the region.

Southeast Asia currently has 11 countries and has different levels of economic development. A group of countries of small economies such as East Timor, Laos, Cambodia, Myanmar and Brunei, in contrast to a group of countries of large economies such as Indonesia, Thailand, Malaysia, Indonesia, Philippines and Vietnam (also known as ASEAN6) contributes largely to the region's economy.

The economic development of ASEAN in general and ASEAN6 in particular is associated with a high rate of urbanization in the region. More specifically, Singapore has urbanized rapidly since the 1950s, with 100% population now defined as urban citizens, while countries such as the Philippines, Indonesia or Vietnam are also in a period of rapid urbanization expansion nowadays. The rapid urbanization process leads to the demand for consumption, markets and investment, as well as the improvement of the expanded financial and banking system (Turok and McGranahan, 2019). According to the State Bank of Vietnam (2020), the financial system in the region is undergoing a strong

* Thu Dau Mot University, Binh Duong; email: chiennv@tdmu.edu.vn

digital transformation to adapt and overcome the challenges of the 4.0 technology revolution. Therefore, countries are making joint efforts to build an efficient and sustainable ASEAN banking system, with a focus on: (1) promoting financial inclusion; (2) banking integration and network information security; (3) payment connectivity and sustainable financial development, with the ultimate goal of economic growth in the region.

Therefore, it is urgent to carry out this study with its objective of assessing the impact of urbanization, financial development and public spending on economic growth in ASEAN countries. The study was carried out in the main countries in the region such as Indonesia, Thailand, Malaysia, Indonesia, the Philippines and Vietnam from 2000 to 2020, the research results support the recommendations for decision for policymakers, researchers reassess development goals in Southeast Asia.

In addition to the introduction, the rest of the study has four parts. Section 2 of the study discusses previous studies. Sections 3 and 4 of the study discuss data sources, research methods and research results. Finally, the conclusion of the study is presented in Section 5.

2. Literature review

A majority of economies are always increasing public spendings to meet economic development, especially building urban development programs and upgrading infrastructure for industrialization and modernization of the country. The financial sector, typically the commercial banking system plays an important role in providing capital to the economy in order to create resources for businesses in production and business activities.

According to Lewis (1955), a developing economy has two parallel economic sectors, namely: the traditional economic sector associated with agricultural production and the modern economic sector associated with industrial production. In developing countries, the urbanization rate is still low, therefore the process of urbanization has provided an opportunity to shift labor from rural areas to cities. It is evident that workers are able to find higher-quality jobs and thus increase labor productivity as well as increase economic development. Economic

growth can come from many different causes and has been done through previous studies, such as the speed of urbanization as in the study of Nguyen Minh Ha and Nguyen Dang Le (2020); financial development as in Pradhan et al. (2017), Hao et al (2018), Wu et al (2020), Rahman et al (2020) or public spending and growth as research by Rahman et al (2020), Onifade et al (2020).

According to Nguyen Minh Ha and Nguyen Dang Le (2020), there is a positive impact of urbanization on economic growth when the urbanization rate is less than 69.99%, conversely when the urbanization rate is higher than 69.99%, there exists a negative relationship. It confirms that urbanization has both positive and negative effects on growth. For financial development, there exists an impact between financial development and growth, as in the study of Hao et al. (2018), the author argued that financial development has a negative impact on growth in China. Meanwhile, there exists a long-term relationship between financial development and growth in China, Japan and India from 1960 to 2016 and these countries need to continue to improve financial markets in order to support economic growth in the long run (Wu et al., 2020). In that context, when the banking system creates many advantages for people to easily access services and products, the financial market has a lot of room for development and growth (Pradhan et al., 2017).

Some previous studies also found a negative effect of public spending on economic growth, as in Rahman et al. (2020) study conducted in Pakistan, a developing country in South Asia. Similar to the study of Onifade et al. (2020) also said that Nigeria needs to improve the quality of public expenditures, especially public investments in infrastructure need to be more efficient to create benefits for socioeconomic development.

Another possibility, Nguyen Minh Kieu et al. (2016) studied in 8 ASEAN countries, including Vietnam, and suggests that there exists a negative effect of financial development on growth, but there is a strong relationship between FDI and growth. Expanding research to evaluate the interaction between financial development and FDI, Nguyen Minh Kieu et al. (2016) argued

that financial development does not change the impact of FDI on growth. Another study in Vietnam, Nguyen Danh Khoi (2021) indicated that Quang Nam is a locality that has been assessed to have many successes in attracting FDI in recent years and is an important source of additional capital contributing to the process of local economic development. In previous studies, studies evaluating the relationship between FDI and growth in the local area are limited, so the authors conducted the research to evaluate the relationship between FDI and growth in Quang Nam and can offer appropriate solutions for other localities in the country. Through the research, the authors confirmed the positive impact of foreign direct investment on economic growth in Quang Nam province. In addition, the rate of urbanization has the effect of attracting foreign direct investment, thereby indirectly promoting economic growth.

3. Data sources and research methodology

3.1. Data sources

For this study, data on urbanization, financial development and economic growth were obtained from the World Bank, and also from the General Statistics Office of each country in the Southeast region. The study uses data from 1990 to the end of 2020.

3.2. Research methodology

Based on previous studies, in this study, the author uses to assess the relationship of urbanization, public spending, financial development to economic growth based on multivariate regression on balanced panel data. Suggested in previous research by Nguyen Minh Ha and Nguyen Dang Le (2020), Nguyen Minh Kieu et al. (2016), Wu et al (2020), Rahman et al (2020), Onifade et al (2020) the proposed regression equation is as follows:

$$GDP_{it} = b_0 + b_1 FD_{it} + b_2 URBAN_{it} + b_3 FDI_{it} + \beta_4 GOV_{it} + u_{it}$$

Where:

GDP_{it} , is the parameter representing the economic growth of country i at year t , measured by the economic growth rate (%),

FD_{it} , is a parameter representing the development of the financial market of country

i at year t , measured by the broad money supply (M2/GDP),

$URBAN_{it}$, representing for the urbanization rate of country i at year t ,

FDI_{it} , representing for foreign direct investment (realized capital) compared to the GDP of country i at year t ,

GOV_{it} , is a representative parameter for government expenditure, expressed as % of GDP of country i at year t .

4. Research results

4.1. Descriptive statistics

The statistical statistics results are described in Table 1 at ASEAN6 countries, including Vietnam, Malaysia, Thailand, Indonesia, Singapore and the Philippines. The overall sample has 120 observations, the research period is from 2000 to the end of 2020, there are 5 variables used in the model, including economic growth -GDP, financial development -FD, public expenditure -GOV, urbanization rate -URBAN and foreign direct investment -FDI.

Table 1. Descriptive statistics

Variable	Mean	Std. Dev	Min	Max
GDP	4.77	3.09	-9.57	14.52
FD	95.69	36.75	36.00	164.86
URBAN	56.51	23.19	24.37	100
GOV	10.68	2.91	5.46	17.69
FDI	5.69	7.10	-2.75	32.16

Source: Analyzed by authors

The ASEAN6 countries are the main growth engines in Southeast Asia and contribute largely to the region's economy. In fact, the economic growth rate of the ASEAN6 countries reached an average of 4.77% during the period of the research, but it is evident that it exists the country with a high growth rate of 14.52% or very low growth rate of -9.57%. It shows that the economic growth of ASEAN6 countries has a high fluctuation. Regarding financial development, ASEAN6 countries' financial market is significantly improved, the money supply has expanded to be approximately 95.69% of GDP. However, ASEAN6 countries' financial development is uneven, some countries have a high level of financial development like

Singapore, but some countries have a low level of financial development like the Philippines. As for the rate of urbanization, Singapore has an urbanization rate of 100%, but countries like Vietnam and the Philippines have a low level of urbanization.

Table 2. Correlation matrix

Variable	GDP	FD	GOV	URBAN	FDI
GDP	1.0000				
FD	-0.1528 (0.0916)	1.0000			
GOV	-0.3724 (0.0000)	0.3393* (0.0001)	1.0000		
URBAN	-0.1152 (0.1989)	0.3908* (0.0000)	0.1543 (0.0845)	1.0000	
FDI	0.1021 (0.2669)	0.3815 (0.0000)	-0.1311 (0.1535)	0.7195 (0.0000)	1.0000

Source: Analyzed by authors

Correlation analysis aims to eliminate the possibility of multicollinearity in the research model, if the correlation coefficient is less than 0.8, multicollinearity will be eliminated. The results of Table 2 show that, the largest correlation coefficient occurs between the pair of variables URBAN and FDI, and is less than 0.8, so the research model is satisfied without the possibility of multicollinearity. In addition, the results of Table 3 also show that the variance inflation factor (VIF) is less than 10.

Table 3. Variance inflation factor

Variable	VIF	1/VIF
FDI	2.61	0.383275
URBAN	2.37	0.421644
FD	1.41	0.709496
GOV	1.37	0.731044
Mean VIF	1.94	

Source: Analyzed by authors

4. Research results

For the panel data, it is common to encounter defects such as heteroskedasticity and autocorrelation. To solve the model's defects, the study should use the FGLS analysis method (feasible generalized least squares). In addition, the study carried out the robustness test through the panel corrected standard error method (PCSE), the estimated results are presented in Tables 4 and 5 as follows:

Table 4. Estimation results-FGLS

No.	Variable	Coefficient	S.E	t-statistic	Pvalue
1	FD	-0.0029	0.0061	-0.48	0.631
2	URBAN	-0.0203	0.0125	-1.62	0.105
3	GOV	-0.1961**	0.0778	-2.52	0.012
4	FDI	0.0755*	0.0430	1.75	0.080
5	_cons	8.3061	0.8349	9.95	0.000
6	Number of observations: 120 Number of groups: 20 Wald chi2(3) = 18.42 Prob > chi2 = 0.0010 Log likelihood = -257.4012				

Note: *, ** correspond to the significance level of 10%, 5%

Source: Analyzed by authors

Table 5. Estimation results -PCSE

No.	Variable	Coefficient	S.E	t-statistic	Pvalue
1	FD	-0.0029	0.0072	-0.41	0.681
2	URBAN	-0.0203*	0.0114	-1.78	0.074
3	GOV	-0.1961**	0.0853	-2.30	0.021
4	FDI	0.0755*	0.0468	1.61	0.097
5	_cons	8.3061	0.7615	10.91	0.000
6	Number of observations: 120 Number of groups: 20 Wald chi2(3) = 18.04 Prob > chi2 = 0.0012				

Note: *, ** correspond to the significance level of 10%, 5%.

Source: Analyzed by authors

Table 4 and Table 5 show that the results of the model are reliable, the Prob value > chi2 = 0.0010 - 0.0012 and less than 0.05. The results confirm that financial development and urbanization rates have no impact on economic growth in ASEAN6 countries. It confirms that the development of the financial system has not brought economic growth in Southeast Asian countries. Moreover, the rate of urbanization in Southeast Asia increases sharply in the period 2000 to 2020, therefore people's living standards are likely to improve and lead to an increase in consumer demand, and a larger market, but the benefits of urbanization have not yet brought growth to the region.

Public spending has a negative effect on economic growth. Specifically, a 1% increase in public spending in gross domestic product will reduce GDP by 0.1961% and this reduction is relatively large. It confirms that public spending has a negative impact on economic growth in Southeast Asia. This phenomenon can be explained that when public spending increases, it

will raise interest rates in the market and reduce private investment, causing investment crowding in Southeast Asian countries. In addition, except for Singapore which is rated as the world's leading transparent country, other countries in the region have low institutional quality, potentially inefficient public spending, and high ICOR, it leads to low overall efficiency. The case of Southeast Asian countries similar to Nigeria in the study of Onifade et al. (2020) public spending has a negative impact on Nigeria's economic growth. To maintain growth, Nigeria must improve the quality of public spending, and the efficiency of capital use in order to create momentum of economic growth.

Foreign direct investment has a positive effect on economic growth. Specifically, increasing this capital by 1% will increase economic growth by 0.0755%. However, this empirical evidence is relatively weak and is only satisfactory at the 10% significance level. This can explain that countries like Vietnam, Singapore or Malaysia are considered to be relatively successful in attracting foreign direct investment flows, creating many jobs and improving the productivity of domestic companies and economic growth. However, Indonesia and the Philippines did not really succeed in attracting these international capital flows, but these countries still maintained high growth. Therefore, FDI inflows are not the main driver of economic growth in Indonesia and the Philippines. This finding is also supported by Nguyen Danh Khoi (2021) in Vietnam, Nguyen Minh Kieu et al. (2016) studied in 8 ASEAN countries including Vietnam, and especially all authors indicated the international flows have greatly contributed in enhancing economic growth. Therefore, developing countries need to improve more administrative procedures to facilitate the investment environment in attracting foreign direct investment capital flows for economic development.

5. Conclusions

The strong urbanization process has created a lot of potential in the development of financial markets in particular and economic development in general in Southeast Asia. The study assesses the impact of urbanization, financial development and public spending on economic growth in 6 ASEAN countries that are the main economic pillars in the region in the period 2000

to 2020, the research results show that financial development and urbanization rates have no effect on economic growth. In addition, public spending has a negative impact on economic growth in ASEAN6 countries which means that the potential for crowding out of investment and/or the quality of public investment in the region is low. Finally, the study also finds evidence of a positive impact of foreign direct investment on economic growth in ASEAN6.

The study has a number of policy implications, ASEAN6 countries continue to improve the quality of public spending by: enhancing the quality of public investment through improving accountability and increasing transparency in investment. Second, ASEAN6 countries continue to improve the investment environment to create favorable conditions for foreign investors to expand their business in ASEAN6 countries, thereby helping countries have additional capital sources for investment, job creation as well as ultimately sustainable economic growth.

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THE APPLICATION OF E-COMMERCE IN VIETNAM FREIGHT FORWARDING MARKET

PhD. Nguyen Thi Khanh Chi*

Abstract: *The purpose of the research is to analyze and evaluate the efficiency of e-commerce application in the market of freight forwarding in Vietnam. On that basis, this study proposed solutions to develop e-commerce and logistics services of businesses, thereby developing Vietnam's logistics in retailing industry. The method of research in the thesis are various research methods like systematization, synthesis, analysis, comparison and contrast are used. To ensure the stability and consistency of the research system, the author endeavors to use available data in the manner of maintaining independence and objectivity in the research. This paper also makes suggestions and recommendations.*

• **Keywords:** *e-commerce application, logistics, retailing, freight forwarding market.*

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Tóm tắt: Mục đích nghiên cứu của đề tài là phân tích, đánh giá hiệu quả ứng dụng thương mại điện tử trên thị trường giao nhận hàng hóa tại Việt Nam. Trên cơ sở đó, đề xuất các giải pháp nhằm phát triển thương mại điện tử và dịch vụ logistics của các doanh nghiệp, từ đó phát triển logistics của Việt Nam trong ngành bán lẻ. Để đảm bảo tính ổn định và nhất quán của hệ thống nghiên cứu, tác giả cố gắng sử dụng dữ liệu có sẵn theo cách duy trì tính độc lập và khách quan trong nghiên cứu. Bài viết này cũng đưa ra các đề xuất và khuyến nghị.

• Từ khóa: ứng dụng thương mại điện tử, logistics, bán lẻ, thị trường giao nhận hàng hóa.

1. Introduction

E-commerce has become an important sector with the immense effect on the economic growth of each country nowadays. The development of e-commerce not only facilitates the operation of businesses but also creates the new value and meets the new demand of businesses and consumers. Thus, all countries on the world pay attention to promote the development of e-commerce which can be both the tool and

the environment for the social and economic development. In Vietnam, e-commerce appeared in 2000s and is growing fast to one of the top countries in the region. The demand for online shopping and home delivery has been booming in recent years, creating an opportunity for delivery businesses to thrive. The stages of searching tangible products, signing contracts and payments can be operated online but the stage of delivering from suppliers to end consumers still needs to be done offline. To cut down on delivery time and simplify delivery processes, e-commerce has been applied by logistics businesses to their chain operations. Besides focusing on modernizing their management and equipment, logistics businesses actively cooperate with e-commerce businesses acknowledging that e-commerce will account for a greater proportion of their operations. The rapid development of e-commerce has boosted the demand of goods delivery both in respect of quantity and quality. Currently the application of e-commerce for providing delivery services among Vietnam enterprises however is still limited and it can be said that logistics has not caught up with the development of e-commerce.

* Lecturer at Foreign Trade University, Vietnam; 91 Chua Lang, Hanoi, Vietnam; email: chintk@ftu.edu.vn

In addition, there is still a great opportunity for logistics businesses to develop for the fact that two decisions of the Government on improving the competitiveness of the logistics industry are about to take effect. Specifically, the Government's Decision No. 200 QD-TTg dated on February 14, 2017, on the action plan to improve the competitiveness of logistics enterprises in Vietnam by 2025, has been taking positive steps. It focuses on creating favorable conditions for Vietnam logistics enterprises to develop with the support of information technology, training human resources, reducing costs for businesses. This decision is expected to help Vietnam logistics enterprises in general, and e-logistics enterprises in particular to improve their competitiveness in the future. Notably, the Prime Minister signed Decree 163/ND-CP regulating the operations of logistics businesses. The Decree, effective from February 20, 2018, is expected to facilitate foreign businesses to participate in developing e-logistics in Vietnam. Specifically, the Decree states that, if meeting the prescribed conditions, foreign enterprises are allowed to set up enterprises or contribute capital to operate in some areas such as cargo transport service under maritime transport service (except for inland transport); container loading and unloading service under maritime transport support services; cargo transport services under inland waterway transport services; cargo transport services under rail transport services; freight services belonging to road transport services. Today, all standard transactions are transferred to electronic transactions and technology applications. Logistics for e-commerce is also on the rise. However, this industry in Vietnam is still very young. Most companies have just switched from traditional logistics to e-commerce logistics (Zhu, Kara & Zhu, 2019). On that basis, the topic "The application of e-commerce in Vietnam freight forwarding market", is in the urgent need of being researched and implemented.

2. Situation of e-commerce application in Vietnam freight forwarding market

The growing e-commerce activities have led to a large frequency of delivery across the provinces, thus giving birth to logistics services specifically for e-commerce activities in Vietnam. E-commerce in Vietnam is expected to grow at a good rate thanks to the popularity of technology services and broadband internet. In addition, cashless payment technologies, along with the growing trend of cross-border sales, have had a positive impact on Vietnam's e-commerce industry. The development of e-commerce and logistics leads to the development of e-logistics and requires better operation. The volume of transactions via online channels has increased rapidly resulting in the increasing demand for logistics and in fact the demand for logistics services surpasses its supply's capacity. According to the GHN (2019), their orders have been increased on average 45% in the periods 2015 - 2020 and can reach to 530 million orders in 2020. Meanwhile, the market size grows 78% on average in this period with the value of delivery services estimated to be 472 million USD in 2020. In 2017, there were more than 50 companies providing e-logistics services in Vietnam. Along with Lazada, customers have become familiar with some e-logistics brands like: GHN, Grab Express, Speedlink...

In addition to the service of last route delivery, e-logistics businesses also set up various locations of collecting goods, helping buyers and sellers receive or send goods at any location near their addresses. In particular, GHN has set the target of increasing the number of locations to 1500 nationwide, making it easier for both buyers and sellers to access to these locations with the purpose of improving the delivery services (GHN, 2019). Due to the boom of e-logistics, retail and e-commerce businesses need to restructure their logistics systems, to meet the multi-channel customer experience requirements. On the other hand, the

characteristics of multichannel systems are that retailers rarely invest in distribution centers, they entrust to professional distribution companies and thus increase their competitiveness in the market. This shows that the logistics service industry must develop in the direction of serving multi-channel retail, not purely for a certain type of trade. As the level of competition increases, in order to take advantage of and solve increasingly complex service requirements, e-commerce businesses must work closely with logistics service providers to improve the express system, delivery, warehousing, payment especially delivery. The need to form logistics enterprises specializing in providing efficient delivery solutions is increasingly urgent. Under these conditions, large e-commerce companies are building their ecosystems, of which logistics is an important pillar. Typically, LEL Express - the forwarding company under Lazada Group invested in the second automatic cargo classification system with an area of nearly 1 ha, located at Hateco Logistics Center, Sai Dong B Industrial Park, Long Bien, Hanoi. The system in Hanoi with a capacity of up to 10,000 products/hour is expected to meet the volume of goods in Hanoi in the next 2 years (Tapchitaichinh, 2019). Besides, the orders completing centers are growing stronger in Vietnam with many successful businesses such as Viettel Post, Vietnam Post, etc. At the same time, a number of young Vietnamese businesses have started investing in order fulfillment centers in the last 5 years, of which Giaohangnhanh, Giaohangtietkiem are typical and successful representatives. Thanks to the flexible network of transaction points and transportation, active activities in urban areas, these businesses can deliver and take goods within 6 hours (Tapchitaichinh, 2019).

The rapid development of the internet and e-commerce in recent years has had a significant impact on the goods delivery market in Vietnam. Typically, the expansion of some logistics companies when combined

with e-commerce. Logistics companies with e-commerce applications are in the three main groups. The first group includes large domestic enterprises such as VNPost, Viettel Post... The second group is foreign logistics enterprises such as DHL, FedEx, and TNT... The rest are new names that have appeared in the past few years, such as Scommerce, Ninja Van, Giaohangtietkiem... Therefore, the author chooses to list 3 typical forwarding companies belonging to 3 main groups currently applying the following e-commerce:

Scommerce

Scommerce was founded in 2012 with the original name of Giaohangnhanh (GHN) aim to provide delivery services for the commercial market Vietnam electronics. In 2017, GHN changed its name to Scommerce (Service For Commerce) including integrated logistics solutions, managing various fields for Vietnam's trade, including GHN Express as a logistics platform for e-commerce, AhaMove provided Providing instant delivery services, GHN Logistics provides long-distance forwarding solutions (trucks, air transport), warehouse management and Gido, providing cross-border delivery services. Scommerce currently has about 100 thousand customers. E-commerce services generate 80% of the revenue for the company of 10,000 employees. "The total number of Scommerce shipped goods this year is expected to be 100 million packages. It can be said that every Vietnamese citizen will receive an order of Scommerce delivered to home, Scommerce will charge 20% of the value of each order (Luong Duy Hoai - CEO of Scommerce company, 2019). Managing nearly 500 trucks covering 70% of the district level in Vietnam, Scommerce's vehicle management application displays information about each driver, on which axis, where to go, how much package, and three cameras. Show on each vehicle. All data are synchronized to relevant locations in the company.

Viettel post

Viettel Post has a delivery network in 713/713 districts across the country and a staff of about 4,000 people. Viettel Post is the market leader thanks to the advantage of infrastructure and a network of post offices. Since 2014, Viettel Post has invested heavily in warehousing, forwarding team, monitoring the journey... to anticipate the development of e-commerce (Viettel post, 2019). Viettel Post's service, called "Express Delivery Express" is a delivery service with the shortest transit time in all forms of delivery today. This service aims to optimize the time to send and receive mail within 24 hours. Express delivery service of the day is suitable for those who are in need of express delivery of goods and documents to the receiving address on the day of sending. According to the Viettel post (2019), currently, Viettel Post provides domestic courier services for all types, letters and goods such as consumer goods, industrial goods, electronics, and civil goods in 63 provinces and cities of Vietnam. throughout the country without making dimensions and weights. Currently, the company has 2 express delivery service packages of the day included:

- Express delivery on the inner city: With this express delivery package, your parcel will be delivered to your recipient in just 2 - 3 hours in the inner districts of Hanoi, Ho Chi Minh, Danang and can last up to 7 - 8 hours for provinces with difficult geographical conditions.

- Express delivery within an inter-provincial day: With this service package, your item will be delivered to the recipient within 24 to 26 hours depending on geographical distance and weather conditions.

DHL Express

DHL Express is a globally renowned logistics company. With the number of orders shipped in the e-commerce sector has increased from 10% in 2013 to more than 20% in 2016 of the total international orders (DHL Express, 2016). DHL

Express is one of the pioneers in applying the advancements of e-logistics in forwarding and managing the entire supply chain. According to the DHL Express (2017): In early October 2017, UPS Vietnam announced that it will increase service in 10 provinces in the Central and Southern region and improve the transport time for import and export goods in Asia from 2 days to 1 days, and goods imported from Europe from 3 days to 2 days. The DHL survey "The Logistics Transport Evolution: The Road Ahead" found out that the impact of e-commerce on markets, in general, and ground transportation in particular, varies by region. For example, when comparing the impact of e-commerce over the next one to two years versus three to five years, U.S. respondents expect the impact to slightly decrease, from 63% to 60% while, in Europe, Middle East & Africa, Asia Pacific and Latin America, that same impact number increases from 65% to 69%. Here the research showed that throughout Europe, the United States and Asia, more and more mega-urban centers are deploying congestion pricing and tolls on vehicles entering urban areas during peak business times - or, in some cases, at any time. Environmental concerns about transportation's significant carbon footprint will grow as an issue and a potential constraint in delivering goods into these highly populated urban areas. Today, 76% of respondents stated legislation around mandatory carbon reporting is having a big impact on their transportation decision making. Broader societal factors were also highlighted as presenting associated challenges, with 61% of companies referencing the increase in urbanization as a factor that will significantly impact their future business. Technology and its ability to help manage this complex environment are increasingly seen as a standard requirement of 3PLs: more than two thirds (67%) of companies believe that big data analytics and artificial intelligence (AI) are services that are essential for 3PLs to offer their shipper customers.

3. Opportunities and challenges for forwarding companies in Vietnam

Opportunities

Currently, Vietnam is assessed to have many opportunities to promote the development of Logistics services. Specifically, the system of road transport infrastructure, airports, seaports, warehouses, trade infrastructure, logistics centers is constantly expanding with a large scale. Along with that, the accompanying services have been promptly meeting the very diverse requirements of the market. Customs clearance procedures for exports products have also improved significantly.

According to the Vietnam Logistics Report (2017), the customs clearance time for exporting products is 105 hours, and importing products are 132 hours. Vietnam has been also ranked 39/160 countries in logistics performance index and 3rd in ASEAN, after Singapore and Thailand. These factors have enabled businesses to develop, reduce costs, improve competitiveness, and boost exports; forming comprehensive, diversified and increasingly intensive logistics supply chains, making an important contribution to the economic structure. The Government has paid attention to the improvement of laws in recent years. The reality of deeper and deeper international economic integration of Vietnam, especially the implementation of next - generation Free Trade Agreements (FTAs), requires appropriate regulations, creating favorable conditions for logistics service sector develops, promotes domestic investment and international cooperation.

The Prime Minister issued Decision No. 200/ QD-TTg dated February 14, 2017, that approving the Action Plan to improve competitiveness and development of Vietnam's logistics service industry until 2025. In particular, set out 06 goals, 60 specific tasks with many comprehensive solutions, in order to help the industry overcome difficulties and

challenges, reach the advanced level of the region and the world, meeting the country economic developing requirements. On December 30, 2017, the Government issued Decree No. 163/2017/ND-CP providing regulations on logistics service business (effective from February 20, 2018), replacing Decree No. 140/2007/ND-CP dated September 5, 2007, detailing the Commercial Law regarding logistics service business conditions and limits of liability for traders providing logistics services. On July 6, 2018, the Prime Minister signed Decision No. 27/2018/QD-TTg promulgating the Vietnam Economic Sector System and this is the first time Vietnam has own logistics industry code (Code 52292: Logistics). On July 18, 2018, the Prime Minister signed the Directive No. 21/CT-TTg on promoting the implementation of solutions to reduce logistics costs, effectively connect transport infrastructure.

The Government has clearly shown its commitment to supporting and creating a favorable environment, to improve the competitiveness and develop logistics services in Vietnam. The promulgation of this Decree comprehensively covers logistics services, internalizes the international commitments on logistics as set out in the Action Plan to improve competitiveness and develop logistics services by 2025. This is a new step in institutional reforms related to logistics services as well as specific regulations on investment and development of logistics services in Vietnam.

Challenge

Logistics industry in general, logistics enterprises in particular of Vietnam still face many challenges and barriers:

Firstly, weak and asynchronous transport infrastructure, especially there is not a multi - method transport corridor, while the demand for high-quality transit of goods between those methods is growing. The challenge is the huge gap between demand and capital investment

for transport today. The big problem is how to mobilize private participation in infrastructure development and service delivery to ensure transport, in the context that the budget and Official Development Assistance can only account for a small proportion. Vietnam needs to consider mobilizing private capital, commercial loans, project loans, including PPP public investment. Transport expert of the World Bank (WB) - Jung Euth Oh (2017), has shown that 80% of Vietnam's airports operate with a capacity of less than 5%, of which 8% of airports are losing as well as many large ports were invested but work with a capacity of less than 2%.

Secondly, institutions and policies with the logistics industry are unclear, asynchronous, inadequate, and have not created favorable conditions to support the fledgling logistics industry. In many places, unofficial business expenses are still high, essential information systems are not effective. Meanwhile, the competition with foreign service providers is increasingly fierce. Regarding the supply of logistics human resources from society, until now, there are only a few universities across the country that specialize in logistics training combined with transport.

The third challenge comes from international integration. According to the Vietnam Logistics Report (2019), the Industrial Revolution 4.0 is starting to change the whole perspective of warehousing and distribution services around the world. Logistics companies in the world are rapidly improving technology to catch up with this trend and improving profitability through the use of modern and automated tools. In the context that Vietnam has been participating in many free trade agreements with major powers and economic sectors in the world, the pressure on the logistics service industry over time will increase. In particular, the two agreements: The Comprehensive and Progressive Agreement for Trans - Pacific Partnership (CPTPP) and the Vietnam - EU Free

Trade Agreement (EVFTA) cover most of the economically strong countries. With EVFTA alone, Vietnam commits to open the market for air transport services, road transport, railway transport, maritime transport, inland waterway transport and a number of services to support every mode of transportation. This will open up opportunities for business and protection of logistics and investment service providers of the European Union (EU) when entering the potential market of Vietnam. The EU is again the region with the world's leading enterprises in this field, which creates tremendous pressure on domestic logistics services.

4. Conclusion and implications

The application of e-commerce in Logistic 3PL requires a team of IT professionals, constantly capturing emerging information technology achievements to serve e-commerce and can design software that can meet the needs of the digital economy. On the other hand, every participant in freight forwarding market with e-commerce applications must be able to use computers, be able to exchange information fluently on the network, have necessary knowledge about commerce and law. If they work in the foreign trade market, they also need to understand international laws and foreign languages. Therefore, IT experts must be trained and universal e-commerce knowledge must be provided not only to enterprises and state management officials but also to everyone. At the same time, it is necessary to propagate about the benefits of e-commerce to gradually change the habits and psychology of consumers from just getting used to shopping directly at supermarkets and marketplaces to online shopping.

E-commerce has many positive effects but it is also susceptible to hackers spreading viruses, attacking websites, distributing emails, spam messages, stealing money from ATM cards, etc. On the other hand, bad transactions can also be done via the Internet such as drugs, smuggling, selling fake goods. Therefore,

there should be a mechanism to control these violations. Specifically, it is necessary to require e-commerce transaction markets to improve the process of product quality control, take measures to prevent and punish enterprises selling fake products. For forwarders and e-commerce exchanges, it is necessary to enhance network security, confidentiality, and safety of electronic payment information. If have a solid and stable technology foundation, it will be easier for users to access to e-commerce, then the barrier for e-commerce will be narrowed.

One of the requirements of delivery, especially e-commerce delivery, is punctuality, just in time. Therefore, to improve this during operation, for delayed delivery, businesses need to find the specific causes of the problem, then take measures to improve the delivery process, re-check the human resources in the allocation activity, exchange the requirements placed with the shipping companies to ensure the delivery always has a clear schedule, calculated in advance of risks arising so that deliveries are on time. Regarding delivery costs, businesses need to find the cause of the complaint and goods returning to reduce the costs incurred at this stage. For example, the lack of synchronization between the information published on the website and the actual goods delivered, the quality of goods does not meet the requirements of the buyer or it may be an error in the product itself. In order to overcome this and towards long-term development in the future, delivery businesses or sales need to be honest in online promotion, need to pay attention to checking goods before packaging and delivering to customers.

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BAD DEBT OF BANKS AND RECOMMENDATIONS FOR SOVLING

MSc. Nguyen Viet Hung

Abstract: *Bad debt (or non-performing loan) is one of the issues attracting great interest of researchers today. Especially, researchers have focused on finding out the causes and effects of bad debt on the stability of the banking system and the economy. According to Louzis et al (2012), bad debt is considered a warning sign for financial crisis in the future if not being promptly monitored and handled. It is extremely necessary to find out the causes as well as analyze the impacts of bad debt on the economy and is an urgent issue to plan to prevent economic crises in the future. The paper analyzes the causes, the impacts of bad debt on entities in the economy and the situation of bad debt in Viet Nam in the period 2011-2020, thereby proposing solutions to help Vietnamese commercial banks limit their bad debts in particular and Viet Nam's banking industry develop more sustainably in general.*

• Keywords: *bad debt, non-performing loan, commercial banks.*

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Tóm tắt: *Nợ xấu (hay nợ khó đòi) là một trong những vấn đề thu hút sự quan tâm lớn của các nhà nghiên cứu hiện nay. Đặc biệt, các nhà nghiên cứu đã tập trung tìm ra nguyên nhân và ảnh hưởng của nợ xấu đến sự ổn định của hệ thống ngân hàng và nền kinh tế. Theo Louzis và cộng sự (2012), nợ xấu được coi là dấu hiệu cảnh báo khủng hoảng tài chính trong tương lai nếu không được quan tâm và xử lý kịp thời, việc tìm ra nguyên nhân cũng như phân tích tác động của nợ xấu đến nền kinh tế là vô cùng cần thiết. Bài viết phân tích nguyên nhân, tác động của nợ xấu đối với các chủ thể trong nền kinh tế và thực trạng nợ xấu ở Việt Nam giai đoạn 2011-2020, từ đó đề xuất các giải pháp giúp các ngân hàng thương mại Việt Nam xóa được nợ xấu nói riêng và ngành ngân hàng Việt Nam nói chung phát triển bền vững hơn.*

• Từ khóa: *nợ khó đòi, nợ xấu, ngân hàng thương mại.*

1. Introduction

Bad debt (Non-Performing Loan) greatly affects the existence and development of the commercial banking system as well as the development of the Vietnamese economy. In the recent years, especially in the context of COVID-19 pandemic, the situation of bad debt is increasing, causing great harm to the national

economy in general and the banking and financial system in particular, specially directly affecting businesses.

This fact poses a requirement for the State Bank of Viet Nam (SBV) and commercial banks to quickly come up with solutions to deal with bad debts. In fact, bad debt is not only a problem that needs to be solved by the commercial banking system, but it also requires a joint effort of the business community, especially the general direction from the SBV and the Vietnamese Government.

By researching the situation of bad debt in Viet Nam in the period 2011-2020, the author proposes solutions to help Vietnamese commercial banks limit their bad debts in particular and Viet Nam's banking industry develop more sustainably in general.

2. Theoretical framework

2.1. Bad debt and its classification

In the process of granting credit to customers, there are many factors making commercial bank's loans unsecured, which adversely affects the credit quality of the commercial banks. Therefore, it is necessary to have a measure to assess what are bad debts or uncollectible accounts.

According to the global credit institutions, a debt is considered bad debt when the interest and/

or principal are overdue for more than 90 days, or the unpaid interests of 90 days or more have been entered in principal, refinanced or late paid as agreed; or payments that are less than 90 days past due but there are solid reasons to doubt that they will be paid in full.

In Viet Nam, according to Circular No. 11/2021/QĐ-NHNN dated July 30th, 2021 of the SBV, debts are currently classified into five groups based on their risk status: standard debt, debt needing special attention, subprime debt, doubtful debt, and potentially irrecoverable debt. However, debts in group 3 (subprime debt), group 4 (doubtful debt) and group 5 (potentially irrecoverable debt) are regarded bad debts. Specifically, the Article 10, Circular No. 11/2021/QĐ-NHNN stipulates that debts that are overdue for interest or principal for more than 90 days to more than 360 days (ie from group 3 to group 5) are considered bad debts. Basing on customers' debt repayment, the commercial banks account loans into appropriate debt groups as follows:

* Group 1 (standard debt) includes: Debts that are due and assessed as being able to fully recover both principal and interest on time; Debts that are overdue for less than 10 days and assessed as being able to fully recover overdue principal and interest and fully recover the principal and remaining interest on time.

* Group 2 (Debts needing special attention) includes: Debts that are overdue for less than 90 days; Debts adjusted by repayment term for the first time are still due.

* Group 3 (Subprime debt) includes: Debts that are overdue from 91 to 180 days; Debts extended for the first time are still due; Debts exempted or reduced in interest due to customers' inability to fully pay interest as agreed; Debts in the period of recovery according to conclusions of inspection and examination agencies; Debts must be recovered based on the early debt collection decisions (because customers violating agreements) that have not been recovered within less than 30 days since the date of recovery decision issuance has been reported.

* Group 4 (Doubtful debt) includes: Debts that are overdue from 181 days to 360 days; First-time rescheduled debt is overdue for up to 90 days according to the first rescheduled repayment

term; Debts rescheduled for the second time are still due; Debts to be recovered according to conclusions of inspection and examination agencies but not yet recovered within 60 days after the time limit for recovery; Debts that must be recovered under early debt recovery decisions of credit institutions or foreign bank branches (due to customers breaching agreements) that have not been recovered within a period of from 30 days to 60 days since the date of the decision to withdraw has been reported.

* Group 5 (potentially irrecoverable debt) includes: Debts overdue for more than 360 days; First-time rescheduled debt is overdue for 91 days or more according to the first rescheduled repayment term; The second rescheduled debt is overdue according to the second rescheduled repayment term; Debts rescheduled for the third time or more; Debts to be recovered according to conclusions of inspection and examination agencies but not yet recovered more than 60 days after the time limit for recovery; Debts that must be recovered under early debt recovery decisions of credit institutions or foreign bank branches (due to customers breaching agreements) that have not been recovered within over 60 days since the date of the decision to withdraw is reported; Debts of credit institutions are under special control or foreign bank branches are frozen in capital and assets.

In general, no matter which group they are classified into, bad debts are a form of financial loss for commercial banks. Banks have to spend a lot of time and expense to handle these debts, especially bad debts can be harmful to their performance.

2.2. Effects of bad debt

In the market economy, the increase of bad debt is one of the inevitable things. However, if bad debt arises a lot and is not controlled, it will create a "blood clot" in the blood vessels of the economy, seriously affecting the Viet Nam's economic development. There are some effects of bad debt as below:

2.2.1. For commercial banks

The failure to recover debts (principal and/or interest and fees) causes the loss of commercial bank's capital, while these banks still have to pay interest in their performance, causing their profits

to decline. If the profit does not reach the target, the banks must use its own capital to compensate for the loss which may affect their operational scale. On the other hand, the high rate of overdue debt makes the reputation and confidence in the financial strength of banks degraded, leading to a decrease in the bank's ability to mobilize capital. More seriously, it can lead to risks of liquidity and the brink of bankruptcy and threatening the stability of the entire banking system.

2.2.2. For customers

For borrowers who are not able to repay the principal and/or interest to the bank, they have almost no chance to access the bank's loans and even other sources due to the loss of their reputation. Other borrowers' opportunities to access bank loans are also more limited when credit risks force commercial banks to either tighten lending or even downsize their operations.

2.2.3. For economy

The banking system has a close relationship with the economy because it is a channel to attract and provide capital/loans for organizations, businesses and individuals in the economy. Therefore, credit risk has a direct effect on the economy. At a low level, the longer the bad debt lasts, the greater the tangible and intangible cost is used to resolve bad debt.

In terms of tangible view, the mortgaged assets at banks will be increasingly worn out, damaged, and their value will gradually decrease. Meanwhile, if bad debts are quickly handled, these assets will be put to use quickly, creating value and surplus value for the economy. In terms of intangible view, as the process of bad debt settlement is prolonged, it will be difficult for Viet Nam to maintain the current credit rating. This has a negative impact on the investment environment. On the other hand, credit risk makes customers' opportunities to access capital to expand production and business activities or consumption limited, adversely affecting the growth ability of the economy.

At a higher level, when banks fall into a difficult situation leading to bankruptcy, the domino effect is very likely to occur in the whole banking system, causing a crisis for the entire economy, negatively affecting the social life and national development. The rapid increase of bad

debt is one of the main causes of the crisis in the banking system.

2.3. Causes of bad debts

Firstly, most commercial banks pursue the business goal of fast credit growth to achieve their profit plans while their risk management capacity in loans is still limited and slowly improved. In addition, recent years, a large amount of credit capital and many commercial banks have focused on investing in risky fields, such as real estate. When the real estate market freezes and real estate prices falls deeply, they will cause a rapid increase in bad debt.

Secondly, the provision of credit capital to businesses for their working capital or project investment is also one of the reasons for the increase in the bad debt ratio. The fact that commercial banks are under pressure to meet business targets in credit granting, with the lack of strict management and governance in the credit capital use by enterprises, has caused effectiveness of loans. Therefore, it leads to the bank's insolvency.

Thirdly, in some periods, economic policies, specially macro-economic policies lacks stability, affecting the production and business and the solvency of customers. The system of mechanisms and policies on asset handling is inadequate, so that affects the handling of assets and liabilities of commercial banks.

Fourthly, the capital market has not yet developed commensurately, so the banking system still plays the role of a channel funding for investment and development. Therefore, the main risk of the financial system is the risk of the banking system. At the same time, because Viet Nam's growth model for many years still depends on in-breadth investment and use of loans, the bad debt of the economy is mainly bad debt of the banking system.

Fifthly, the moral of some banking staff has declined mean while the professional capacity of the staff has not kept pace with the development of the banking industry. There are many negative aspects in the credit process such as appraisal, approval and monitoring of loans.

Sixthly, non-performing loan increased because banking inspection and supervision for a long time had not been highly effective in

detecting, preventing and promptly handling violations and risks in granting credit activities of commercial banks, especially violations of credit regulations and excessive investment in a high-risk areas.

3. Situation of bad debt of commercial banks in Viet Nam

Bad debt is a normal problem in banks, because credit activities are always risky. During their operation, credit institutions always incur bad debts. From the analysis of the causes of bad debt, the increase in bad debt does not mean that the banking system is the cause because the arising of bad debts is usually caused by the borrower's inability to repay the debt. To measure the bad debt of commercial banks, people use the bad debt ratio. It is calculated by the bad debt balance/total loan balance. According to regulations of the SBV, bad debts include outstanding loans of groups 3,4,5. If a commercial bank has a large bad debt ratio, it shows that the credit quality of the bank is not good, and the credit risk is high because customers cannot repay the loan. According to regulations of the SBV, commercial banks with bad debt ratio $\leq 3\%$ are considered to have good credit quality. Following are the bad debt ratios of 20 typical commercial banks in Viet Nam (NCB, NamABank, HDBank, Eximbank, VPBank, SCB, VIB, OCB, SHB, MSB, MB, Techcombank, Sacombank, LPB, ABB, ACB, BIDV, VCB, Vietinbank, Agribank):

Table 1. Non-Performing Loanratio of Viet Nam's commercial banks for the period 2011-2020 (%)

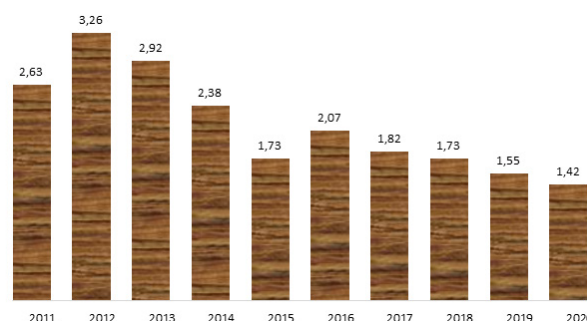
Year	Number	Minimum	Maximum	Mean	Std. Deviation
2011	20	0.56	7.25	2.63	1.68358
2012	20	1.32	8.80	3.26	1.98084
2013	20	0.82	6.06	2.92	1.27288
2014	20	0.49	5.15	2.38	1.14241
2015	20	0.34	3.41	1.73	0.69112
2016	20	0.68	6.81	2.07	1.31744
2017	20	0.46	4.59	1.82	0.93817
2018	20	0.54	3.20	1.73	0.65578
2019	20	0.38	2.95	1.55	0.58745
2020	20	0.50	3.00	1.42	0.63467

Source: Statistics from SPSS26.0

The statistics in Table 1 show that commercial banks in Viet Nam have focused on credit risk management, so the bad debt ratio has also been

controlled. In the period 2011-2020, the average bad debt ratio of all banks was $< 3\%$, except in 2012 which was 3.26%. Especially, in 2019, 2020 despite being affected by the COVID-19 pandemic, the credit risk and debt collection is done well by all banks, so the bad debt ratio is below or equal to 3%. This will be seen more clearly in the chart below:

Figure 1. Average bad debt ratio of commercial banks in the period 2011-2020 (%)



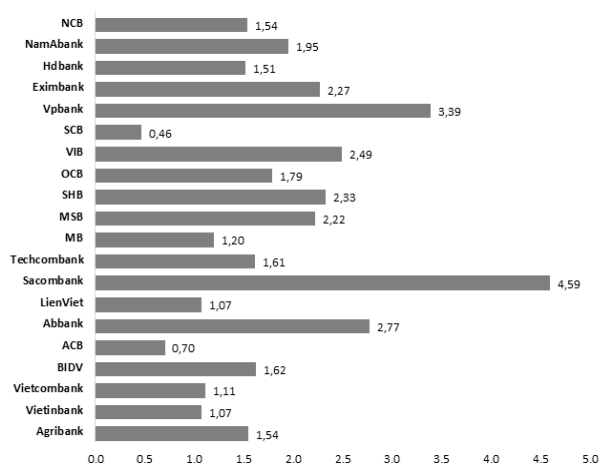
Source: Synthesized by author

The Figure 1 shows that in the period 2011-2020, the average bad debt ratio of Vietnamese commercial banks fluctuated, at a low level and ranged from 1.42% - 3.26%. 2012 was the year with the highest average bad debt ratio of banks at 3.26%, followed by 2011 with a bad debt ratio of 2.63%. In 2011, Sacombank was the bank with the lowest bad debt ratio of 0.56% and SCB with the highest ratio of 7.25%. In 2012, Eximbank got the best credit quality with the lowest bad debt ratio of 1.32%, while SHB was the bank with the highest bad debt ratio of 8.8%.

For a long time (2006-2010), the Vietnamese Government has implemented a loose monetary policy. Credit was the main source of investment to develop the economy and mainly invested in the real estate market that impaired credit quality and led to high inflation. In addition, the impact of the global recession has caused businesses that have not had consumable goods and negatively affected their production and business activities, leading to enterprises stopping production or going bankrupt. On the other hand, the real estate market is quiet and frozen, which also leads to a high rate of real estate bad debt and of banks. Commercial banks in Viet Nam have well implemented measures of credit risk management,

so the bad debt ratio and capital loss rate are controlled. In 2020, despite being affected by the COVID-19 pandemic, the bad debt ratio of commercial banks is quite well controlled, all < 3%. Specifically:

Figure 2. Non-performing loan ratio of Vietnamese commercial banks in 2020 (%)



Source: Synthesized by author from financial statements of commercial banks

The bad debt ratio of commercial banks in 2020 is different among banks. Techcombank was the bank with the lowest bad debt ratio of 0.50% and VPbank is the bank with the highest bad debt ratio of 3%. Commercial banks in 2020 all have bad rates < 3%. The bad debt ratio of banks in 2020 is at a low level below regulations. It means that Vietnamese commercial banks have performed well in loan management. Despite being a difficult year for Viet Nam's economy due to the impact of the COVID-19 pandemic, in 2020, credit risk management has been well implemented from credit appraisal to inspection, supervision and loan recovery.

5. Solutions for managing bad debt in commercial banks

The Government's moves in recent times have shown that the handling of bad debt is a top priority in the plan to reform and restructure the banking industry. Bad debt in the commercial banking system has become a national problem, so it is not only the tasks of commercial banks, but also the State. However, the arising of bad debt comes from the operation and management of the commercial banks themselves, the solution

to prevent and handle bad debts in the most effective way and to minimize the lowest possible impact for the national economy, should come from commercial banks.

Firstly, it is necessary to rebuild and re-manage the process of credit granting at commercial banks. Accordingly, it is necessary to standardize and synchronize, and at the same time strictly supervise the implementation of the credit granting process, regardless of the size of the commercial banks. This is the root and fundamental cause to reduce the ratio of bad debt, potentially irrecoverable debt. In fact, commercial banks have initially increased their management in risk, but achieved modest results.

Secondly, there must be sanctions and measures to control credit risks during the operation of commercial banks. There have been many cases of bad debt arising from customers who are considered as "big", "VIP", "traditional", "loyal", "potential" customer of commercial banks. As granting credit to this type of customers, commercial banks can by pass measures to ensure credit safety to quickly serve customers.

Thirdly, the pressure on reaching business targets also causes commercial banks to loosen their management to capital use of customers, leading to high bad debt ratio. Therefore, in order to ensure the safety of the credit capital system, the SBV needs to take drastic actions to control the annual credit growth of commercial banks to control the fast growth of these banks.

Fourthly, commercial banks continue to strictly implement Circular No. 01/2020/TT-NHNN of the SBV on supporting people and businesses affected by the COVID-19 pandemic by taking the following measures: (i) Support debt restructuring for customers; (ii) Reduce lending interest rates for existing outstanding loans; (iii) Implement programs and credit packages for preferential loans, helping the Government in regulating the macroeconomic balance, stabilizing the money market, interest rates and exchange rates.

Fifthly, the SBV needs to control bad debts for the real estate sector by restricting lending to

businesses that are non-specialized in real estate investment and business and limit investment capital for real estate projects. In addition, businesses are encouraged to use many different sources of capital such as issuing stocks and bonds, and mobilizing capital contributions from private investors.

Sixthly, in the complicated context of COVID-19 pandemic, the bad debt ratio of the Vietnamese banking system will increase day by day. To speed up the handling of bad debt in general and to implement the Decision on approving VAMC's development strategy to 2025, with orientation to 2030 in particular, VAMC needs to complete the establishment and put into operation the debt exchange floor in the 2021-2025 period. Beside that, VAMC needs to propose to state agencies to complete the legal corridor on developing the debt trading market, issuing debt valuation standards to create legal basis for implementing as soon as the exchange floor comes into operation.

Seventhly, the Vietnamese Government and ministries, sectors need to study and build a legal corridor for the securitization of bad debts according to the following methods:

- *Method 1*: If enterprises with a good history of business administration are facing difficulties in repaying the principal or because their on going investment projects have not been put into operation, commercial banks should consider to transfer a part of the principal debt in to medium-term bonds. This is to support liquidity and help businesses survive and develop.

- *Method 2*: Converting overdue debt and bad debt into shares. At the same time, changing the creditors of banks into major shareholders to hold the majority of shares if their businesses are likely to survive and develop after restructuring. This is a fairly common method in the world. For Viet Nam, there have been many successful cases, not only helping enterprises from the risk of bankruptcy but also preserving the capital of banks. In addition, in order for the securitization process to be successful, as a co-creditor, commercial banks need to actively show their social responsibility and coordinate with

businesses to handle bad debts. At the same time, commercial banks should use their subsidiaries such as debt management companies, securities companies or fund management companies to actively participate in the securitization process.

Eighthly, the State needs to exempt value-added taxes, corporate income tax, etc. for debt trading activities to promote the formation and development of the debt market. The exemption of taxes on debt trading activities will reduce the loss of bad debts, promote private investors to participate in the debt market. At the same time, it will not cost the state budget. The state needs to exempt corporate income tax for issuance of corporate bond. This helps reduce deposit interest rates and helps the commercial banking system to mobilize long-term capital instead of short-term as well as promote the securitization of debts. In addition, the State should also reduce 50% of value added tax in economic sectors such as construction, production of building materials, real estate business, ship repair, and shipping that are facing difficulties to help these enterprises reduce the burden of tax costs, and contribute to reducing bad debts for banks.

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PERFORMANCE AUDIT OF CREDIT RISK MANAGEMENT ACTIVITIES IN VIETNAMESE COMMERCIAL BANKS CONDUCTED BY INTERNAL AUDIT

MA. Tran Phuong Thuy*

Abstract: Commercial banks are financial institutions, with strong financial leverage, and own high-risk financial assets such as loans and derivatives. Therefore, banking business is always controlled by the strict management of the law, the central bank policies of each country and the commercial banks themselves need to strengthen risk management of their activities in general and credit activities in particular. Risk management activities in commercial banks are carried out directly by the first and second line of defense: the first one is the departments and branches of the bank that directly perform transactions and activities in the banking business; The second one is the risk management, inspection and compliance control department directly under the General Director of commercial banks. As the last line of defense in the model of three lines of defense for risk management activities, the Internal Audit of commercial banks assesses the adequacy, efficiency and effectiveness of risk management activities in general and credit risk management in particular. For Vietnamese commercial banks, this content has not been properly interested by Internal Audit. The article would like to mention "Performance audit credit risk management activities in Vietnamese commercial banks by internal audit".

• Keywords: performance audit, risk management, internal audit.

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Tóm tắt: Ngân hàng thương mại là tổ chức tài chính, có đòn bẩy tài chính mạnh và sở hữu các tài sản tài chính rủi ro cao như các khoản cho vay và các tài sản phái sinh. Vì vậy, hoạt động kinh doanh ngân hàng luôn được kiểm soát bởi sự quản lý chặt chẽ của pháp luật, chính sách ngân hàng trung ương của mỗi quốc gia và bản thân các ngân hàng thương mại cần tăng cường quản lý rủi ro đối với hoạt động của mình nói chung và hoạt động tín dụng nói riêng. Hoạt động quản lý rủi ro trong ngân hàng thương mại được thực hiện trực tiếp bởi tuyến phòng thủ thứ nhất và thứ hai: tuyến thứ nhất là các sở, ban, ngành của ngân hàng trực tiếp thực hiện các giao dịch, hoạt động kinh doanh ngân hàng; Thứ hai là bộ phận quản lý rủi ro, thanh tra và kiểm soát tuân thủ trực thuộc Tổng giám đốc các ngân hàng thương mại. Là tuyến phòng thủ cuối cùng trong mô hình 3 tuyến phòng thủ đối với hoạt động quản lý rủi ro, Kiểm toán nội bộ ngân hàng thương mại đánh giá tính đầy đủ, hiệu lực và hiệu quả của hoạt động quản lý rủi ro nói chung và quản lý rủi ro tín dụng nói riêng. Đối với các ngân hàng thương mại Việt Nam, nội dung này vẫn chưa được cơ quan KTNB quan tâm đúng mức. Bài báo xin đề cập đến "Kiểm toán hiệu quả hoạt động quản lý rủi ro tín dụng tại các ngân hàng thương mại Việt Nam bằng kiểm toán nội bộ".

• Từ khóa: kiểm toán hiệu quả, quản lý rủi ro, kiểm toán nội bộ.

1. Overview of the audit of credit risk management activities in commercial banks conducted by Internal Audit

Performance audit is a type of audit that brings added value to an organization. When operational audit is performed in commercial banks with credit risk management activities, internal audit will independently evaluate the adequacy and effectiveness of policies, procedures and processes in credit risk management from the design, operate and maintain in practice.

The objectives of performance audit in credit risk management activities should be determined in association with the contents and processes of credit risk management based on the guidelines of Basel II and of the Institute of Internal Auditors (IIA) during the audit. According to the guidance of the Financial Services Guidance Committee of the IIA (2016) and the requirements of Basel II on credit risk management, it is required that the internal auditors need to collect knowledgeable information about the business processes and areas of the bank partners and activities of commercial banks that give rise to credit risks and clearly describe credit risks (concentration, from the counterparty side,

* Faculty of Accounting and Auditing - Banking Academy

information, documents, operational risks); Identify functional parts related to credit risks and risk management activities; Assessing audit risks as a basis for audit planning. On that basis, internal audit needs to develop and agree with the audited entity on criteria used in the audit.

When performing risk management audits, internal auditors need to implement a comprehensive credit risk audit program by focusing on assessing the first line of defense (bank branch directors, credit department heads, credit department members) from approving, disbursing and monitoring loans according to the appropriate risk appetite, strategic goals of the bank and the second line of defense (including credit risk management committees under the General Department of Finance manager). Internal audit collects evidence to answer the question: To achieve greater efficiency in the decision-making process, can commercial banks allocate responsibilities in the credit committee's risk management based on material risk exposures on the first line of defense? Internal Audit needs to evaluate the process of monitoring and measuring credit risk: Evaluation of the effectiveness of credit risk measurement and monitoring programs should include criteria such as quality of guaranteed assets, unpaid interest rate, economic changes, grading agencies which can all affect a borrower's worthiness. Therefore, institutions need a well-designed risk rating system to monitor credit risk in different investment portfolios through the credit rating system.

During the completion phase, the Internal Auditors follow the guidance of Standard 2400 - IIA on Communication of Results and Standard 2410 - Criteria for Communicating after Audit Completion "Opinion at the collaborative level can be a rating, conclusions or other descriptions of the results". Recommendations should be aligned with the objectives set forth in the audit planning phase.

2. Actual performance audit of credit risk management activities in Vietnamese commercial banks conducted by Internal Audit

Circular 13/2018/TT-NHNN requires Vietnamese commercial banks to develop and implement risk management assessment on the following aspects in Clause 2, Article 23 of the Circular: (i) Built in accordance with the business strategy business, control culture, human resources, IT conditions and management information system of commercial banks; (ii) Risk situations, violations

of risk management must be reported promptly and fully to the Board of Directors, Board of Members, Supervisory Board, parent bank; have a handling mechanism for risk management violations. In Clause 1, Article 71 of Circular 13, the Internal Audit is required to do the following activities with risk management: (i) Independently inspect and evaluate compliance with internal mechanisms, policies and regulations on supervision of senior management, internal control, risk management and internal assessment of the adequate capital level of the Board of Directors, Board of Members, General Director (Director), individuals, departments, including the identification of existence, limitations and causes; (ii) Independently review and evaluate the suitability and compliance with the laws of mechanisms, policies and internal regulations on senior management supervision, internal control, risk management and internal assessment of the level of management sufficient capital, including identification of existence, limitations and causes; (iii) Proposals and recommendations to competent authorities and relevant departments to handle shortcomings and limitations.

Most of Vietnam's commercial banks have now built and are continuing to complete the risk management framework according to the requirements of Circular 13/2018/TT-NHNN. Internal Audit of Vietnamese commercial banks has paid attention to the assessment content of risk management and risk management framework. According to the summary report of the Supervisory Board of Vietnamese commercial banks (publicly published on the banks' websites from the General Meeting of Shareholders) on the strategic shift in audit content and related issues to the internal audit conducted by the Internal Audit in the period 2014-2020, from traditional compliance audit to performance evaluation audit, and process system audit, including credit risk management activities, but still few. Specifically: MSB evaluates the effectiveness of risk management activities (in 2015-2017); VIB evaluates the effectiveness of risk management activities (in 2016-2018); Vietcombank audits the risk management framework, audited the quantitative risk measurement model (2017-present), performed audits on risk management and assessment data, reviewed the minimum capital adequacy ratio, audit the default probability model of the small and medium-sized customer segment, evaluate the system and data for preparing financial statements (in 2019, 2020); BIDV's internal auditors

audit some risk management contents according to Basel II (2016 - present), audited head office departments on some contents in risk management, assessed operational risk management and issued warnings post-audit risks (in 2019). Thus, in recent years (from 2015 to present), the internal audit of a number of Vietnamese commercial banks has paid attention to assessing the effectiveness of credit risk management associated with bad debt settlement, however, the frequency is not at high level, and the level of performance also varies. Most of the internal auditors of Vietnamese commercial banks use Circular 13/2018/TT-NHNN to conduct audits and assessments on credit risk management, some Vietnamese commercial banks internal audit assesses credit risk management according to Basel II (BIDV, Vietcombank) but not yet fully audited the contents, but only focused on: Evaluation of credit risk management policies and procedures, calculating RWA, capital according to regulations of the management agency (Circular 41); Asset management, with customer groups and asset classes; Checking the classification of debts and making provisions; Check the process and personnel in debt collection; Check if the methodology and process for credit line establishment are established and documented; Review the credit line structure to assess the adequacy of the limit system; Check the timeliness and completeness of credit risk management reports to the Board of Directors and management and related departments to ensure timely decision making; Review the credit risk reporting system. When auditing information data risk, Internal Audit performs inspection of the following contents: checking data sources, data processing code, creating new data processing code and comparing with existing data to see whether there is any difference.

The survey results show that the content of evaluating the effectiveness and efficiency of risk management activities/Risk management framework for credit activities (18.48% of internal auditors of Vietnamese commercial banks are of interest). However, the internal auditors focus on examining and evaluating the appropriateness and adequacy in building internal mechanisms, policies and regulations in credit risk management of commercial banks in comparison with current regulations and objectives, plan in credit risk management (risk appetite). Vietnamese commercial banks have built an audit process for credit risk management activities, but the criteria established to evaluate the adequacy, effectiveness

and effectiveness of credit risk management activities are unclear.

The State Audit has audited Vietnamese commercial banks in the matter of handling bad debts according to Resolution No. 42/2017/QH14 with the approved audit outline No. 590/QD-KTNN dated March 29, 2019 on the implementation of the audit, accounting at 2 state-owned commercial banks (Vietinbank, BIDV) and 18 joint stock commercial banks. The results of the State Audit according to the Summary of audit results for the 2018 accounting year at No. 44/BC-KTNN dated May 11, 2020) show that the bad debt settlement is still slow (quantity, the ratio of bad debt settlement records, the ratio of bad debt recovered/Total bad debt excluding provisioned portion) is very small and faces many difficulties. Thereby showing that the internal audit of Vietnamese commercial banks has not been fully implemented to provide solutions to support bank administrators in minimizing bad debts as well as in the collection and handling of bad debts of the bank.

Thus, the effective audit of credit risk management activities has been interested by the internal auditors of Vietnamese commercial banks, but is in the first basic steps of reviewing the process, and is associated with bad debt settlement. However, the number of internal audits participated is low. Therefore, it is necessary to complete this audit content in Vietnamese commercial banks to meet Basel II requirements.

3. Improving solution Audit of risk management activities in Vietnamese commercial banks conducted by Internal Audit

When performing the operational audit with credit risk management, the internal audit of Vietnamese commercial banks needs to identify the objectives associated with the organizational structure, regulatory processes, and information technology related to credit risk management activities. Specifically as:

- Evaluation of the performance of the credit risk management function (the appropriateness of the organizational structure, functions and decentralization for the risk management department and related departments);
- Assess the appropriateness between the risk appetite, changes in the risk appetite, decisions of the credit risk management department with the strategy of the bank administrator;
- Assess the adequacy of the credit risk management system (processes and policies to

identify, measure, evaluate, control, respond to and report on risks in the banks);

- Assess the bank's capital allocation for credit risk;

- Evaluate the effectiveness of the credit risk management reporting process;

- Assessment of measures applied by the banks to reduce risks: Relevancy and updating of collateral value; Relevancy of the internal credit risk rating system; The adequacy of the loan risk provision; Bad debt recovery and handling.

- Assessing the adequacy of credit risk management in the information technology application environment for credit activities.

In the process of planning the performance audit for credit risk management, the head of the internal audit department needs to understand the risk management strategy, capital planning with credit risk and other types of risks in the banking business. To understand credit risk, auditors need to collect the following information:

- Charter, policy, risk appetite statement and information on establishing credit risk management strategies, policies and procedures.

- Policies and procedures related to all stages of the credit process from review to collection (find information through a credit officer).

- Credit risk modeling results.

- Evaluation of the sufficient level of loan risk provision for inefficient loans.

- Reports containing bad debt results for the credit portfolios.

- Allocating capital for credit risk, expenses for credit risk management.

When identifying risks in credit risk management activities, the Internal Audit can choose different approaches:

- Internal Audit can approach the system according to the steps of portfolio management including credit processes from credit approval, disbursement, post-disbursement credit risk monitoring and measurement to selection product depending on volume.

- Internal audit approaches results through examining loan risk provisions by sector, industry group (textile, livestock, construction, seafood processing, banking business...) or risk, risk by size (credit to corporate customers or retail credit).

- Internal audit approach to review underperforming loans (NPLs) may include

examining how branch/unit accounting makes estimations, valuation of portfolios, recoverability debt for provisioning.

In particular, internal audit needs to identify functional departments related to credit risks and risk management activities to coordinate with other departments for information collection during the audit process:

- Departments related to loan formation: misappraisal of collateral, loan plan (appraisal department, loan officer), loan approval without authority (leader of credit department, branch leader/member unit).

- Department related to loan disbursement: disbursed for wrong purpose, wrong object (accounting department, head of branch/member unit, credit specialist in charge of loan).

- Loan control and management department: credit officer, debt collection specialist, accounting department (back office), risk management department.

When built criteria to be used in the performance audit of credit risk management activities, the internal audit needs to adhere to the criteria used to evaluate the performance of the board of directors in risk management. Specifically, with the development of criteria for evaluating the effectiveness of credit risk management, four criteria can be directed: (1) Timeliness, (2) Completeness in risk assessment and management, (3) Appropriate action plans, (4) Issues are referred to a Board of Directors for appropriate resolution.

When matters identified by the Board of Directors meet these four criteria, the Internal Audit will grant confidence to the Board of Directors. Then the internal audit will turn into the assessment of internal control and the actions of management.

During stage performing of performance audit of risk management activities, the internal auditors of Vietnamese commercial banks should pay attention to the issues of risk management:

- Assess whether the supervision level of the second line of defense with the first line of defense is appropriate through checking the processes, functions and duties of the Credit Risk Management Committee.

- Find out about customers of commercial banks (know your customer - KYC): check customer loan documents, combine with relevant staff interviews, review customer credit history, industry sectors

customer's business, reports and post-disbursement control of the bank branches...

- Evaluate the provision of sufficient relevant and updated information on risk assessment to bank administrators by the Risk Management Committee for material risks.

- Internal audit monitors the performance/ effectiveness of the investment portfolio (profit/debt balance; bad debt/debt balance...) against the plan to identify deviations from which to take timely action.

- Check the frequency, report on evaluating the effectiveness of the first line of defense by the risk management department to review credit policies, monitor the investment portfolio

- Internal auditors select samples to test certain aspects of risk to ensure that risk models comply with regulatory expectations.

- Evaluation of the efficiency of credit risk measurement and monitoring programs should include criteria such as the quality of collateral, unpaid interest, economic changes, and rating agencies that may affect them to the borrower's worthiness. Therefore, institutions need a well-designed risk rating system to monitor credit risk in different investment portfolios through the credit rating system.

Evaluation of analytical models in risk management, internal auditors need to pay attention to:

- Determine the correct model and availability of data for risk management.

- Building models and validating them with appropriate specialized functions.

- Internal auditors conduct continuous assessment of the appropriateness of the models used with commercial banks' strategies to ensure that risk management activities continue to fulfill long-term goals, and if the case is not appropriate, the risk management model does the risk management department propose to amend and adjust in a timely manner.

- If, in the case of some commercial banks, the internal auditors of some commercial banks do not yet have the appropriate skill set to audit credit risk models, the head of the internal audit department may request an examination to verify that all policies and procedures are in place and other documentation related to the model is complete and up to date.

- Using remote monitoring software and connecting information of the risk management department, thereby giving warnings about a high

level of risk to the investment portfolio. The Internal Auditor may also take several samples of loans and review the outputs of the models to ensure the results are reasonable.

In the stage of completing and preparing the audit report, the internal audit recommendations of Vietnamese commercial banks should focus on:

- Recommendations may refer to the effectiveness of the control points of the risk management process in combination with possible risks in credit activities.

- Assess the appropriate level of capital allocation for credit activities and the estimated level of provision for credit activities in accordance with risk appetite.

- Specify the expected impact of the recommendations on credit risk management: issues on thriftiness in the use of resources, operational efficiency, completion of credit operations objectives associated with the strategy, the bank's risk appetite;

- Assess the impact of the issue on stakeholders, and the risks to the environment and society to make appropriate recommendations towards sustainable development.

Risk management activities in commercial banks are the backbone activities in banking business. In which credit activities are the main and main activities of Vietnamese commercial banks today. Auditing credit risk management activities should be of interest and investment by Vietnamese commercial banks in both breadth and depth. To do this, it needs the support of the Board of Directors and the General Meeting of Shareholders of Vietnamese commercial banks to bring added values to the credit risk management activities, contributing to improving the quality of credit activities in Vietnamese commercial banks.

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INFORMATION DISCLOSURE ON INTERIM FINANCIAL STATEMENT OF LISTED COMPANY IN VIETNAM

MSc. Pham Phuong Anh*

Abstract: *Interim financial statement plays an increasingly important role for timely and appropriate decision making. This research observed the interim financial statements of 55 listed companies to identify level of disclosure and timeliness of interim financial statement. Then the author proposes some recommendations to improve disclosure quality of listed companies' interim financial statements.*

• Keywords: *interim, financial reporting, financial statement, disclosure.*

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Tóm tắt: Thông tin trên BCTC giữa niên độ ngày càng đóng vai trò quan trọng đối với những người sử dụng thông tin trong việc đưa các quyết định kịp thời, phù hợp. Nghiên cứu này khảo sát BCTC giữa niên độ của 55 công ty niêm yết để xác định mức độ công bố và tính kịp thời của BCTC giữa niên độ. Từ đó, tác giả đề xuất một số kiến nghị nhằm hoàn thiện chất lượng công bố của BCTC giữa niên độ tại các doanh nghiệp niêm yết.

• Từ khóa: giữa niên độ, báo cáo tài chính, công bố thông tin.

1. Importance of information disclosure in interim financial statement (IFS)

Audited annual financial statements are one of the most important information sources used for decision-making. However, as production and business activities have changed sharply, economic overcome unprecedented events, users in need of more updated financial information. Interim financial statements are met that demands. These report continuously update financial performance, financial position and cash flows of the enterprise, quarterly or six months, or even monthly (AL-Shatnawi, 2007). In addition, Lobo and Tung (1997) argue that the interim reports provide users with some information earlier than the annual financial statements, thereby improving the ability to forecast annual earnings.

According to IAS 34, interim financial report is a financial report that contains either a complete or condensed set of financial statements for a financial reporting period shorter than a full financial year (most typically a quarter or half-year). In Vietnam, the interim financial statements include quarterly and semi-annual financial statements. Unlike the annual financial statements, the interim financial statements are not required to be audited, but the semi-annual financial statements of listed companies must be reviewed by auditors. Although it has not been audited and has not received much attention from researchers, interim financial statements provide more timely information in comparison with annual report (Rahman et al. associates, 2007). This author also asserts that interim financial information is useful to investors and creditors in making their investment decisions. At the same time, these reports are considered an important source of information to help investors make investment decisions and monitor the implementation of the set plans and make adjustments in an appropriate time instead of waiting until the fiscal year end to read it on annual report. For public companies, companies whose shares are traded on stock exchanges, the need to use information provided by businesses is even more meaningful to investors and government authorities.

Because interim financial statements tend to attract more attention from traders in the securities market, this study aims to measure the interim financial statements disclosure level to address

* Email: phuonganh1001@gmail.com

its shortcomings. In order to improve usefulness and reliability of interim financial statements, improving the quality of these reports is a matter of concern.

2. Information disclosure in interim financial statements of listed companies in Vietnam

In this research, interim financial statement of 55 companies listed on the Vietnamese stock market in the period from 2018 to the third quarter of 2021 are observed. These are listed companies on the Vietnam Stock Exchange (either on HNX or HOSE) and on the list of 100 largest public companies announced by Forbes Vietnam in 2020. The surveyed companies exclude those operated in the Finance, Banking and Insurance industries because current regulations on the preparation and presentation of financial statements for companies in these industries are not completely consistent with those in the rest industries.

The interim financial statements disclosure and publication of companies listed on the Vietnam stock market are in accordance with Accounting Law, the system of Vietnamese accounting standards (VAS), especially VAS 27, and the Securities Law system and circulars related to guidance on information disclosure on the stock market (such as Circular No. 155/2015/TT-BTC for the period from 2015 to the end of 2020 and Circular No. 96/2020/TT-BTC for the period after January 1, 2021. The author compared the above provisions with the financial statements of 55 survey companies to consider the level of information disclosure on time and the level of information disclosed.

2.1. Timeliness of the interim financial reporting

According to prevail regulations, the consolidated quarterly financial statements should be disclosed in no more than 30 days from the end of the accounting period and no more than 45 days for the reviewed quarterly financial statements. Semi-annual financial statements and the semi-annual consolidated financial statements should be disclosed in no more than 45 days and 60 days, respectively. Disclosure date was based on publication date on the enterprise's website. In case the company's website does not display the publication date, the author used the signing date of the financial statements to record.

Table 1: Timeliness of the interim financial reporting

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Year 2018	53/55 (POW, DKT - 2 days)	55/55	54/55 (MWG - 1 day)	55/55
Year 2019	55/55	55/55	53/55 (HAG - 5 days, PLX 1 days)	55/55
Year 2020	55/55	53/55 (POM - 2, VMD - 2 days)	55/55	55/55
Year 2021	54/55 (VJC 4 days)	50/55 (VJC - 21 days, VCG - 3 days, KBC - 18 days, PVT - 24 days, CII - 16 days)	52/55 (HVN - 26 days, POM - 8 days, SVC no date observed)	

According to Table 1, the majority of surveyed companies disclosed their interim financial statements on time. During the period from 2018 to 2019, the rate of late disclosure of financial statements is very small (7/660 observed samples) and the delay time is only about 1 to 2 days, there is only 1 case of HAG submitted 5 days after deadline for 2019 third quarter's report).

However, the level of compliance decreased considerably in 2021 when the number of enterprises disclosing their reports late and the number of reporting lag days increases. For 2021 semi-annual financial statement, there were 5 companies that disclosed lately for 3 to 24 days. In the third quarter, 3 companies did not meet the deadline are HVN, MWG and POM with a delay of 26, 15 and 8 days, respectively. In addition, SVC does not specify the date of information disclosure on both the corporate website and the entity's financial statements.

The increase in the number of company and reporting lag in 2021 compared to previous years can be explained by the impact of the Covid pandemic when the government implements social distancing and supply chain interruption worldwide. This unexpected influence may prevent some enterprises from collecting and reporting information on the interim financial statements on time.

2.2 Disclosure level in the interim financial statements

Disclosure level of observed items disclosing on interim financial statement is as follows

Table 2: Disclosure level of items on interim financial statement

Items	Rates
Complete set of financial statement	100%
Provide accounting policy, accounting standard that the company applied	100%
Seasonality/ cyclicity	71%
Explanation on seasonality/ cyclicity	6%
Transactions with related parties/ associates	72%
Change in equity	98%
Events after the reporting period	36%
Changes in composition of the entity	80%
Bad debt/ risk management tool	58%
Abnormal changes/ events	5%
Goodwill	36%
Company's structure	79%
Segment report	33%

It could be seen that, 100% of the observed companies provide complete set of financial statement and their applied accounting policy/ accounting standard. Most of the surveyed enterprises public Company's structure, Change in equity and Changes in composition of the entity.

Meanwhile, Abnormal changes/ events and Explanation on seasonality/ cyclicity reveal the least disclosure level. Most of the surveyed enterprises stated the same content "The normal business cycle of an enterprise is 12 months" or classified the production and business cycle based on their business industry without any explanation for the impact of seasonality on production and business activities. The rest have an explanation of seasonality but very vague such as: business results are not affected by seasonality or the business.

At the Vietnam Economic Forum on 5th December 2021, Mr. Dau Anh Tuan, Head of the Legal Department of the Vietnam Chamber of Commerce and Industry (VCCI), said that up to 93.9% of businesses are "totally negative" and "mostly negative" affected by the epidemic COVID 19. However, 38/385 of the interim report during 2020-2021 stated the impact of the COVID 19. These 38 reports are come from 22 entities. In particular, due to the specificity of the industry, HVN and VJC presented quite detailed information about the influence and support policies they received. The remaining twenty businesses mentioned that the impact factor was the COVID-19 epidemic, but did not specify whether businesses were positively or negatively affected, and the quantitative impact was not published

3. Suggestions to improve timeliness and disclosure level of interim financial report

In term of timeliness, non-compliance rate of the surveyed enterprises is quite low but delay reasons should be published, so information users would have better view of the companies. In 2021, there are many late public interim financial statements but few businesses (i.e. VJC) presented the reason for this delay in the Relationship with Shareholders section on the corporate website. As the epidemic is still complicated, the economy and business activities are likely face many unexpected events, regulators may require the companies to disclose the reasons for late disclosure. In addition, the reason for non-compliance needs to be clearly stated so that investors can understand the real reason. Then, the investors could have better evaluation on the company's performance and position

Regarding abnormal changes/events, the enterprise should provide more detailed explanation on impact of these unusual changes such as: abnormal changes have a positive or negative impact on the production and business situation of the enterprise, and expect affected period. With more detail information, users may have properly impact assessment, predicting the future development of the business.

It can be seen that the influence of seasonality on business results of some trade and service industries is very clear, but no enterprise has specifically presented this content. Information on seasonality influence can greatly affect the interim financial statements of enterprises and help information users understand the fluctuations in business results of enterprises among quarters. VAS 27 has specific regulations in explaining the seasonality or cyclicity of business activities in the interim accounting period, but most enterprises still ignore this provision. The author recommends that there should be more specific guidelines along with strong sanctions for enterprises to explain more about this content in the interim financial statements.

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LIENVIET POSTBANK: EXPERIENCES TO IMPROVE BUSINESS PERFORMANCE

MA. Kim Minh Tuan*

Abstract: *LienViet PostBank needs to learn not only the experience of domestic commercial banks but also foreign banks. Those experiences range from growth, expansion of partners, modernization of banking technology to business processes.*

• Keywords: *commercial banking, business operations, process management, information technology...*

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Tóm tắt: Bài viết xin đề cập đến kinh nghiệm hoạt động của các ngân hàng thương mại, Những kinh nghiệm đó bao gồm từ tăng trưởng, mở rộng đối tác, hiện đại hóa công nghệ ngân hàng đến quy trình kinh doanh, để từ đó rút ra những kinh nghiệm quý báu nhằm vào tăng cường hoạt động có hiệu quả hơn đối với NH Lienviet Post Bank (LPB).

• Từ khóa: *ngân hàng thương mại, hoạt động kinh doanh, quy trình quản lý, công nghệ thông tin...*

Sustainable growth by diversifying and modernizing products and services

Lien Viet Post Joint Stock Commercial Bank needs to learn from the experience of Vietnamese commercial banks to grow sustainably by diversifying and modernizing products and services. To do that, LienVietPostBank needs to develop diverse products to suit each customer group. In particular, potential customers in the financial market in Vietnam such as corporations, big joint-stock companies, FDI enterprises. Along with diversifying services, LienVietPostBank needs to improve the quality of non-credit products and services to attract customers. On the basis of diversifying products and services and improving service quality, the Bank will increase the proportion of income

from non-credit activities in total income. Through these activities, LienVietPostBank not only retains existing customers but also attracts new customers to increase income. VCB's experience is the first bank that can handle all bad debts sold to VAMC and is also the pioneer bank to reduce interest rates, accompanies businesses, and supports many products for small and medium enterprises.

Diversifying products is not only suitable for a wide range of customers and different needs but also spreads risks. In addition to maintaining traditional banking products such as deposit receipts, loans, payments, etc., foreign commercial banks also have special products for different customers. For individual customers, the customer group is classified as a group of customers with stable and high incomes. For corporate customers, they are classified by their products, such as industry, business object, and capital size. Experience of Siam Bank - Thailand in providing and developing services according to the multi-function model, diversifying products and services. The main products are provided by Siam have attracted many customers such as financial consulting, financial restructuring support, exchange rate risk management, investment solutions for businesses.

* *Lienviet Post Bank (LPB)*

The experiences of large commercial banks also show that products and services must be deployed based on technology development and information technology application, especially digital banking. In fact, the quality of digital banking services makes it convenient for customers and low transaction costs. Thanks to the application of digital technology and the use of applications to support the manipulation of services and internal operations faster and more accurately. That is a way to improve the labor productivity of commercial banks. In order to deploy to a large number of customers, LienVietPostBank needs to expand its commercial activities on the basis of the existing banking network. VCB's experience, as of December 31, 2017 VCB has 101 branches, 397 transaction offices in the territory of Vietnam, and 2,105 correspondent banks present in 131 countries. Therefore, VCB has always maintained as a commercial bank with a large market share, and business performance indicators are always high.

Commercial banks are aware of the role of technology in the operation of commercial banks. First of all, commercial banks apply digital and information technology platforms. Siam really develops commercial banking technology in Internet banking, Mobile Banking, e-wallet services... Thanks to that, customers can see the convenience in the transaction process. The technology platform also supports employees in their business performance. From customer data management tools to reports, support is fast and accurate. Technology also helps commercial banks advertise and market their products. In addition to advertising in the traditional way like on mass media such as television, newspapers, and at the same time bringing the image of the bank to a wider audience through social networks.

Developing non-credit activities is an important growth direction. Non-credit activities are activities that bring low-risk income for commercial banks. Therefore,

commercial banks always focus on developing non-credit activities. Typical non-credit services are payment services, collection and payment services, and remittance services. Large commercial banks such as VCB, Vietinbank all focus on diversifying services to suit the needs of customers. In payment activities, commercial banks have improved technology so that the payment process can be done quickly, safely, and accurately.

Officers and standardization of transaction processes

Commercial banks want to be improved business efficiency, the first requirement is to improve the quality of human resources and business culture. The human factor determines the quality and performance of every business. High human resources bring business efficiency to commercial banks. Experience from domestic commercial banks shows that LienVietPostBank should invest in developing professional skills and knowledge for employees. Today, online courses provide a method of training and improving knowledge for employees, saving time and money.

Foreign commercial banks always focus on developing knowledge and skills for employees. Bank employees can participate in courses ranging from general skills training to specialized training. From centralized training to online courses, domestic and international training. In addition, commercial banks also provide training by inviting famous experts from different fields to share their experiences and arouse working spirit.

In addition to professional skills, LienViet PostBank needs to pay attention to building a commercial bank's corporate culture. A good working environment not only attracts and retains many capable and highly qualified employees but also increases labor productivity in the workplace. When working in a comfortable and open atmosphere, commercial banks will be motivated, encouraged, and work more effectively.

Through the study of experience from commercial banks, it shows that commercial banks with good service quality are banks with clear, strict but easy business processes for both customers and the banks. The standard transaction process will shorten transaction time for customers. From there, attracting more customers, increasing income, and improving business performance. Experience at VCB has standardized the transaction process with customers, including the business process and the maximum time to perform that transaction. For example, VCB stipulates that the maximum time to perform all deposit/withdrawal operations from a deposit account is 10 minutes. Thanks to this norm, the transaction speed of each customer at the transaction points has saved time and created customer satisfaction.

Expanding partners, creating effective social media

LienVietPostBank needs to find capital, technology, and business from foreign commercial banks and FDI enterprises. Foreign commercial banks usually have a long history of operation, experience in management, and have great capital potential. Vietnamese commercial banks need to have connections to learn and receive capital support from foreign commercial banks. There are many ways to expand partners who are foreign commercial banks. From the exchange of business visits to learn from the sale of shares to foreign commercial banks. VCB sold 15% share capital to Mizuho Bank Limited (MHCB) of Japan nearly 10 years ago. As a result, MHCB has provided VCB with technical services in various aspects of effective business operations. The implementation of Basel 2 at VCB was quick and on the right track. Effective credit risk management is carried out according to international standards. The organizational structure is clearly established both in terms of model and structure of functions, tasks, and activities.

Domestic commercial banks not only learn from the experience of foreign commercial banks but also need to learn from foreign-

invested enterprises. FDI enterprises are a huge number of customers to domestic commercial banks. In addition to using services like other businesses, FDI enterprises also bring experiences and requirements in transactions for domestic commercial banks to change. Foreign-invested enterprises often operate on the basis of international law. Therefore, they also require domestic commercial banks to meet those strict standards. Typical of this experience from VCB, Vietnamese commercial banks have the largest number of FDI customers. To meet the needs of FDI enterprises, VCB established an FDI customer room in the system. VCB has corporate customer development departments from Japan, China, Korea, the EU - the US. VCB is a commercial bank that has signed cooperation agreements with nearly 60 local banks in Japan.

In today's modern society, communication helps to connect businesses and customers. Especially with the explosion of social networks, the connection between banks and customers will become quick and timely if commercial banks make good use of social networks. Communication through social networks will help commercial banks' products and services come closer to customers. Experience shows that using social networks effectively besides traditional advertising channels will help effective marketing. This is also the cheapest and fastest advertising method.

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FACTORS AFFECTING ACCESS TO EXTERNAL FINANCING IN VIETNAM LISTED FIRMS

PhD. Nguyen Thi Hoa Hong*

BA. Nguyen Thai Anh - BA. Nguyen Tran Viet Hoang - BA. Do Nhat Minh

Abstract: *The paper examines factors affecting access to external finance in Vietnam listed firms in the period of 2009-2020. To measure external finance, the log-odd transformation of short-term debt to total debt and difference between a firm's growth rate of total asset and its sustainable growth rate are used. The results from General Least Square regression and Probit regression models show that both macro and micro determinants including Gross Domestic Product (GDP), inflation, collaterals, firm size, firm age, liquidity, leverage, profitability influence Vietnam listed firms' access to external finance. Based on those results, Vietnam listed firms should consider both various determinants carefully in order to get external finance successfully.*

• **Keywords:** *access to external financing, external finance needs, GDP, firm characteristics, inflation, listed firms.*

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Tóm tắt: Bài viết xem xét các yếu tố ảnh hưởng đến khả năng tiếp cận nguồn tài chính bên ngoài của các doanh nghiệp niêm yết tại Việt Nam trong giai đoạn 2009-2020. Để đo lường nguồn tài chính bên ngoài, người ta sử dụng phép biến đổi kỳ lạ của nợ ngắn hạn thành tổng nợ và chênh lệch giữa tốc độ tăng tổng tài sản của một công ty và tốc độ tăng trưởng bền vững của công ty đó. Kết quả từ mô hình hồi quy General Least Square và hồi quy Probit cho thấy cả các yếu tố quyết định vĩ mô và vi mô bao gồm Tổng sản phẩm quốc nội (GDP), lạm phát, tài sản thế chấp, quy mô doanh nghiệp, tuổi công ty, tính thanh khoản, đòn bẩy, khả năng sinh lời đều ảnh hưởng đến khả năng tiếp cận tài chính bên ngoài của các doanh nghiệp niêm yết Việt Nam. Dựa trên những kết quả đó, các doanh nghiệp niêm yết Việt Nam nên xem xét kỹ lưỡng cả hai yếu tố quyết định khác nhau để có được nguồn tài chính bên ngoài thành công.

• **Từ khóa:** tiếp cận nguồn tài chính bên ngoài, nhu cầu tài chính bên ngoài, GDP, đặc điểm của công ty, lạm phát, các công ty niêm yết.

1. Introduction

External financing is vital for the existence and operation of all companies. It can stimulate business growth, rescue a company on verge of bankruptcy or simply, secure the firm stability

in adverse situations. Bearing such significance, external financing has been broadly studied by several researchers, on both macro and micro-economic scale, to identify key factors affecting its composition. Some earliest studies on this matter, such as Kashyap et al (1993) and Oliner & Rudebusch (1995), primarily focused on the macro determinants of external financing, especially the government's monetary policy. The only firm-specific determinant paid attention to is firm size. In the next decade, several papers, most notably by Bougheas et al (2006) addressed many other firm-related factors including financial ratios, firm age, bank-firm relationship, riskiness of the borrowing company. In Vietnam, a number of studies on the topic of getting finance or fund have been carried out; however, they only focus on determinants influencing the accessibility to official loans or bank credit, trade credit for small and medium enterprises (Nguyen et al, 2015). Meanwhile, given the importance of external finance to firms' operation, it is very necessary to recognize factors affecting access to this source of capital. By using the general least square regression and probit regression models on all Vietnam listed firms, research results from this paper may become the basis for businesses in Vietnam to refer to successfully raise external capital.

* *Foreign Trade University, email hongth@ftu.edu.vn*

2. Literature review and hypothesis development

2.1. External finance

External finance refers to the situation in which companies rely on outside funding with an aim to preserve internal sources and achieve growth objectives. There are a range of indicators measuring external finance, yet the choice of appropriate ratios is determined by the nature and extent of studied objects and study purposes. Bougheas et al (2006) suggest that external finance can be measured by using the ratio of short-term debt to total debt and total debt to total liabilities. They argued that those ratios could mitigate the demand-side influences thanks to an increase in the demand of credit, thus having an impact on both numerator and denominator and leaving the ratio relatively unchanged. Later on, Bose et al (2019) also applied this calculating technique to their study of firms' access to external finance in Asian economies. In addition, some researches also mention external financing needs when examining the relationship between external finance and other aspects in business as Chen et al (2010).

2.2. Factors affecting access to external finance

Many previous studies proved that factors affecting access to external finance comprise both macro and micro determinants (Kashyap et al, 1993, Bougheas et al, 2006).

Collateral

Bougheas et al (2006) used the ratio of firm tangible assets to total assets, when conducting empirical research on U.K. manufacturing firms and strongly emphasized the role of collateral in access to external finance, especially from the non-bank sources. Gonzalez et al (2007) also used the same proxy along with the measurement of the interaction between the amount of collateral pledged and the cost of borrowing when investigating the determinants of Spanish firms' access to external finance. It was found that greater collateral availability is associated with greater access to long-term debts, especially from the banks.

Firm size

In line with many previous studies, firm size forms an integral part of factors affecting access to external finance. Gertler & Gilchrist (1994) supported the assertion that there is a strong correlation between size and the form of external finance. Based on the empirical results, Bougheas et al (2006) confirmed that firm size is negatively correlated with access to external financing when inspecting the influence of firm-specific characteristics on access to external financing. According to Atanasova & Wilson (2004), the firm size was found to have some association with the firm's ability to access finance.

Firm age

According to Bougheas et al (2006), firm age is among the firm-specific characteristics that affect its access to external finance. Their empirical study on UK manufacturing firms yielded a confirmation of firm age, as a measurement of firm's track record, influencing firm-bank relationship, which had been suggested by several researchers before (Rajan, 1992; Boot & Thakor, 1997). It was found that firms with track records long enough to be evaluated by banks can offset their weakness on other criteria and therefore, reduce their likelihood of financial constraints. This view was further supported by Gonzalez et al (2007) when firm age was discovered to positively correlate with access to banking financing.

Liquidity

Firm liquidity is proved to be positively correlated with access to external finance or otherwise. Myers & Rajan (1998) proposed that greater firm liquidity is synonymous with its greater ability to fulfill short-term financial obligation, which is apparently appealing to preferred shareholders. More interestingly, Gonzalez et al (2007), when analyzing 60000 Spanish firms, hypothesized that firm liquidity is a direct substitute for external finance and proved through their empirical study that firms with high liquidity tend to have less needs for external financing.

Leverage

Researchers such as Asimakopoulos et al (2009) and Al-Jafari & Samman (2015) discovered that leverage has a negative relationship with firm financial performance and hence its needs of external credits to tackle debts. However, other empirical results have been mixed. Gonzalez et al (2007) upon investigating small firms from Spain found that more leveraged firms have less demands for external financing.

Profitability

The notion that profitable firms tend to have less of external financing needs, especially short-terms credits, has been tested in several researches such as Gonzalez et al (2007) and Bougheas et al (2006). However, in the latter study, the empirical result pointed out that firms with higher profit potential tend to gain easier access to external financing of all sources. This is seemingly correct as great profitability attracts investors and creditors.

Sales growth

The measurement of firm growth could be converged to sales growth, meaning that a company with higher sales growth is more likely to easily find outside fundings. However, the empirical result of the study of the relationship between access to financing and firm growth in Ethiopia conducted by Regasa et al (2020) support the hypothesis that the use of external finance is negatively correlated with firm growth.

GDP growth

In order to capture the general development of the economy, many researchers investigating external finance included macroeconomic data in their study. Gonzalez et al (2007) used the industrial production (IP) index as a macro-economic factor in the study of determinants of access to external finance. Meanwhile, Ayyagari et al (2021) selected the inflation rate and the GDP to represent the group of macro data. Bose et al (2019) also chose GDP as macro-economic factors in the study of firms' access to external finance in Asian economies.

Inflation rate

The inclusion of inflation rate in prior studies to illustrate the macroeconomic effect has always

been a prevalent approach. Ayyagari et al (2021) selected the inflation rate to represent the group of macro data. In the study undertaken by Demirgüç-Kunt & Maksimovic (1998), inflation rate is also incorporated to demonstrate that the fluctuation in prices could have an impact on the ability to obtain long-term financial contracting.

3. Model and research method**3.1. Data**

To determine factors affecting access to external finance in Vietnamlisted firms, initial data sample includes all firms listed on Hanoi Stock Exchange (HNX) and Ho Chi Minh Stock Exchange (HOSE) in Vietnam during 2009-2020. However, in order to be consistent with the research objectives, methods and models below, some exclusive criteria will be applied in the sample selection process: (1) Firms belong to the industry of finance, banking and insurance because of their distinctive characteristics; (2) Firms do not have enough data in the research process and lack full-set data for all periods; (3) Firms whose data are in the 5% and 95% quantiles of dataset's value range for the purpose of removing any outliers. After executing this process, our data set was narrowed down to 2808 observations across 234 firms.

3.2. Model and research method

Based on researches by Bougheas et al (2006), Gonzalez et al (2007) and Chen et al (2010) and the ability to collect actual data in Vietnam, models are built as follows:

$$(1) LOTY_{it} = \alpha + \beta_1 LAGLOTY_t + \beta_2 TANAS_{it} + \beta_3 SIZE_{it} + \beta_4 ROE_{it} + \beta_5 LIQUIDITY_{it} + \beta_6 LEVERAGE_{it} + \beta_7 AGE_{it} + \beta_8 SALESGR_{it} + \beta_9 GDPGR_t + \beta_{10} LAGGDPGR_t + \varepsilon$$

$$(2) EFN_{it} = \alpha + \beta_1 TANAS_{it} + \beta_2 SALESGR_{it} + \beta_3 SIZE_{it} + \beta_4 AGE_{it} + \beta_5 GDPCAP_t + \beta_6 INFLATION_t + \varepsilon$$

In which: i, t represent firm i year t

External finance is measure in two ways as the dependent variables LOTY and EFN in model (1), (2)

In the 1st model, the dependent variable $LOTY_{it}$ is calculated as the log-odd transformation

of the ratio of short-term debt to total debt (SD/TD).

In the 2nd model, the dependent variable EFN_{it} is a binary variable to measure firms' external financing needs. By using the method proposed by Demirgüç-Kunt and Maksimovic (1998) and Chen et al (2010), EFN is calculated as the difference between a firm's growth rate of total asset and its sustainable growth rate, the average of ROE/(1 - ROE) for all investigated periods. If the value of the former exceeds the latter, then the dependent variable takes the value 1, otherwise 0.

All explanatory and independent variables' measurements and their expected signs are summarized in the following table 1:

Table 1: Explanation of independent variables and expected signs

Variables	Explanation	Expectation	
		Model 1	Model 2
LAGLOTY	Firm's dependent variable LOYTY of period $t-1$	+	
TANAS	Tangible assets/Total assets	-	-
SIZE	Natural logarithm of firm's total assets	-	+
LIQUIDITY	Current assets/Current liabilities	-	
LEVERAGE	Total debt/Shareholder equity	-	
AGE	Natural logarithm of firm's age plus one	+	-
ROE	Net profit/Shareholder equity	+	
SALESGR	Annual growth of firm's net profit	+	+
GDPGR	Annual growth of Vietnam's GDP based on data from the World Bank	-	
LAGGDPGR	Annual growth of Vietnam's GDP based on data from the World Bank of the previous period	+	
GDPCAP	GDP per capita		-
INFLATION	GDP deflator		-

Source: Authors' synthesis and expectation

To study factors affecting the access to external finance in Vietnam listed firms during 2009-2020 in two models above, those methods following are employed. For the 1st model, Ordinary Least Square (OLS), Fixed Effect Model (FEM) and Random Effect Model (REM) are used. In order to choose the most suitable model among OLS,

FEM and REM, Breusch-Pagan test between OLS and REM, Hausman test between FEM and REM. For the 2nd model, Probit regression is processed, which is in turn tested with Hosmer-Lemeshow goodness-of-fit test.

4. Result and discussion

4.1. Descriptive Statistics

Table 2 below summarizes descriptive statistics of all variables in all models with 2808 observations:

Table 2: Descriptive statistics

Variables	Number of observations	Mean	Standard deviation	Min	Max
LOTY	2808	1.9743	1.9156	-2.5540	9.2886
LAGLOTY	2808	1.9780	1.9137	-2.5540	9.2886
TANAS	2808	0.2180	0.1943	0.0004	0.8901
SIZE	2808	27.6769	1.3685	23.7875	31.7775
LIQUIDITY	2808	1.8127	1.4444	0.2526	18.1689
LEVERAGE	2808	1.5489	1.4822	0.0507	10.6826
AGE	2808	3.2781	0.5329	1.0986	4.3438
ROE	2808	0.1314	0.1112	-0.6010	0.6524
SALESGR	2808	0.1602	0.6169	-.08600	13.5412
GDPGR	2808	0.0595	0.0110	0.0291	0.0706
LAGGDPGR	2808	0.0618	0.0062	0.0525	0.0708
EFN	2808	0.3202	0.4666	0	1
GDPCAP	2808	7.7857	0.2613	7.1044	7.9323
INFLATION	2808	0.0765	0.0729	-0.0019	0.2267

Source: Authors' calculation on Stata16

Dependent variable LOTY has the mean of 1.9743, which implies a ratio of short-term debt to total debt of about 87.8%, indicating that Vietnamese firms rely heavily on short-term borrowing from external sources. Although 5% greatest and smallest values are omitted from the original data set, wild variation is still observable in the statistics of some variables. LIQUIDITY, LEVERAGE and SALESGR have the gaps between their maximums and minimums of respectively 17.1963, 10.6319 and 13.5121, while their mean values only hover around 0 and 1. In contrast, the distribution of TANAS is relatively even, as its maximum reaches 0.08901 and its minimum 0.0004. Table 2 above shows that all variables are fairly evenly distributed as

minimum and maximum values do not diverge too much away from mean values. The mean value of EFN is 0.3202, which implies that not all investigated firms have external financing needs.

4.2. Correlation matrix

Next, the study tested the correlation between variables to check the existence of multicollinearity.

Table 4: Correlation matrix (model 2)

	EFN	SALESGR	TANAS	GDPCAP	SIZE	AGE	INFLATION
EFN	1.0000						
SALESGR	0.2086	1.0000					
TANAS	-0.1299	-0.0570	1.0000				
GDPCAP	-0.2028	-0.1481	-0.0165	1.0000			
SIZE	0.0575	0.0171	0.0137	0.2216	1.0000		
AGE	-0.1308	-0.1400	0.0357	0.2783	0.0448	1.0000	
INFLATION	0.0762	0.0675	0.0194	-0.7156	-0.1747	-0.2112	1.0000

Source: Authors' calculation on Stata16

Almost all correlations between variables in models (1), (2) are within moderate range, except for the correlation between GDP per capita and inflation. This is of macroeconomic interest and beyond the scope of this research. However, VIF test is continued to carry out to see whether multicollinearity in the model (1), (2) is acceptable.

Table 5: VIF test results in model (1), (2)

Model 1			Model 2		
Variables	VIF	1/VIF	Variables	VIF	1/VIF
LEVERAGE	1.30	0.7674	GDPCAP	2.20	0.4538
LIQUIDITY	1.24	0.8046	INFLATION	2.06	0.4858
LAGLOTY	1.20	0.8320	AGE	1.10	0.9107
TANAS	1.19	0.8404	SIZE	1.06	0.9473
SIZE	1.14	0.8755	SALESGR	1.04	0.9589
LAGGDPGR	1.12	0.8942	TANAS	1.01	0.9943
AGE	1.10	0.9061			
ROE	1.09	0.9184			
GDPGR	1.06	0.9403			
SALESGR	1.06	0.9413			
Mean VIF	1.15		1.41		

Source: Authors' calculation on Stata16

Table 3: Correlation matrix (model 1)

	LOTY	LAGLOTY	TANAS	SIZE	LIQUIDITY	LEVERAGE	AGE	ROE	SALESGR	GDPGR	LAGGDPGR
LOTY	1.000										
LAGLOTY	0.7668	1.0000									
TANAS	-0.3138	-0.2895	1.0000								
SIZE	-0.2645	-0.2485	0.0137	1.0000							
LIQUIDITY	-0.0385	0.0426	-0.1959	-0.1389	1.0000						
LEVERAGE	-0.0870	-0.1000	-0.0690	0.1674	-0.3468	1.0000					
AGE	0.0579	0.0484	0.0357	0.0448	-0.1276	0.1303	1.0000				
ROE	0.0868	0.0968	-0.0628	-0.0147	0.0844	-0.1101	0.0065	1.0000			
SALESGR	0.0118	-0.0122	-0.0570	0.0171	-0.0226	0.0010	-0.1400	0.1636	1.0000		
GDPGR	-0.0405	-0.0161	-0.0065	0.0089	0.0046	-0.2014	-0.0074	0.0690	0.0644	1.0000	
LAGGDPGR	0.0166	-0.0289	-0.0037	0.1648	0.0117	-0.0633	0.1977	-0.1439	-0.0974	-0.0560	1.0000

Source: Authors' calculation on Stata16

All VIF values are below 5, therefore, the models would inconsiderably be affected by multicollinearity.

4.3. Regression analysis

For the 1st model, results from conducting three methods comprising OLS, FEM and REM converged to the use of FEM. However, the accuracy of this model is reduced by the existence of autocorrelation and heteroscedasticity. Therefore, thanks to a strongly balanced data set, GLS regression could be applied to correct these errors, which returned the result as Table 6 below. The index Prob > chi2 below 0.05 means that this GLS model is suitable.

For the 2nd model, results from Probit regression model are also shown in Table 6 below.

Table 6: Regression model results

Model 1		Model 2	
Variables	Coef.	Variables	Coef.
LAGLOTY	0.6156***	SALESGR	0.4789***
TANAS	-1.7583***	TANAS	-0.9209***
SIZE	-0.1696***	GDPCAP	-1.4612***
LIQUIDITY	-0.1856***	SIZE	0.1003***
LEVERAGE	-0.0407***	AGE	-0.1461***
AGE	0.0798***	INFLATION	-2.1856***
ROE	0.3672***	_cons	8.2193***
SALESGR	0.0056		
GDPGR	-1.9312		
LAGGDPGR	14.8548***		
_cons	5.0640***		
Prob > chi2 = 0.0000		Prob > chi2 = 0.0000	
		Pseudo R2 = 0.0935	

***: statistically significant at 1%

Source: Authors' calculation on Stata16

• *Model 1 analysis and discussion*

Regarding micro factors including indicators of firm characteristics, almost all estimated coefficients for independent variables LOTY are considerable and statistically significant, except for the case of SALESGR, a proxy for sales growth. This empirical result denies a relation between sales growth and firms' access to external financing, disproving our expectation stated earlier in this paper that sales growth of a firm has a positive effect on their access this financing source.

The coefficient of LAGLOTY is 0.6156, implying a temporal persistence in firms' external financing. This is consistent with our expectation. It can be explained that it takes time for firms to change their funding structures, therefore, there exists some relation between firms' external financing with its preceding measure.

TANAS -firms' proxy for tangible assets, has a highly negative coefficient. This result agrees with the findings of Gonzalez et al (2007). The rationale is that tangible assets are a potential source for firm's collateral, which is mainly engaged with longer-term borrowings, while our proxy for external financing is concerned with short-term debt. Therefore, the funding structures of firms with more tangible assets have a tendency to shift away from short-term debt.

Firm size has an inverse relationship with external financing. Obviously, a larger base of total assets usually implies a stronger financial position that softens pressure on firms to seek help from external sources, which are costlier and riskier.

According to the regression model, the relationships among firms' measures of liquidity, leverage and external finance are both negative. It can be deduced that more liquid and more leveraged firms have less motivation to pursue short-term external borrowings. Also, it can be found that a higher firm age is proportional with a higher access to external financing. Firms with a long record of activities tend to be more

creditworthy, thus easily availing themselves to sources of financing from outsiders.

ROE is proved to have a positive relationship with the dependent variable LOTY. A firm in a stronger position financially will be less exposed to default risk, therefore, easily access external sources to meet their financing needs, if existing.

About the macroeconomic variables, lagged and contemporaneous GDP growth, the regression results are contrary. While the returned coefficient for contemporaneous GDP growth is negative, that for the preceding period is positive and much larger. The former is the same as what prior literature found, implying that firms in an improving macroeconomic environment are less dependent on external sources of funding. The contrast between the two coefficient might be explainable in the context of Vietnam's sequence of GDP growth index running up to 2020. This sequence is characterized by consecutive fluctuations, with the most extreme being in 2020 due to the COVID-19 pandemic, as the GDP growth rate fell by more than 4% to the all-time depth of 2.906%. Meanwhile, the macroeconomic trend in Spain during the investigated period (1992-2002) by Gonzalez et al. (2007) is almost always improving. Therefore, different patterns can be produced when including the growth rates recorded for 2 consecutive periods. However, the coefficient for GDP growth is non-significant.

• *Model 2 analysis and discussion*

Model 2 also passed the Hosmer-Lemeshow goodness-of-fit test, with a p-value of 67.16% rejecting the null hypothesis that the model fails to fit the dataset (Table 7).

Table 7. Hosmer-Lemeshow test

Number of groups	10
Hosmer-Lemeshow chi2 (8)	5.78
Prob > chi2	0.6716

Source: Authors' calculation on Stata16

All our regressed coefficients are significant and consistence with the findings of Demirgüç-

Kunt and Maksimovic (1998). The two macroeconomic control variables included in prior paper is GDP per capita and inflation, both given negative coefficient. Another control variable which meet our expectations above is age, with a negative relationship with external financing needs.

The finding about sales growth is consistent with the coefficient in the first model, however, this model returned a significant one. This positive relationship between sales growth and external finance needs can be the indicator of improving environment or firms' capability, signaling an opportunity for further investment, which pushes up firms' demand for additional source of financing while having little impact on firm's access to external financing.

Another positive relationship is between firm size and external finance needs. However, this relationship is rather straightforward since total assets plays a role in the calculation of both the dependent and independent variables. As a result, any change in total assets will cause the two variables to move in the same way.

Meanwhile, the relationship between tangible assets with external financial needs are negative. As analyzed above, Vietnamese firms tend to rely on short-term debt, while normally tangible assets are concerned with longer-term debt. This explains why a firm with more tangible assets is less likely to be predicted as having external financing needs. Additionally, it is estimated that the older firms grow, the less need there is.

5. Conclusion

The paper discusses macro and micro factors affecting the access to external finance in Vietnam listed firms during 2009-2020. The results indicate that firms' structure of financing are consistent throughout the period, while most of our accounting variables have negative relationship with firms' access, except for ROE and a non-significant variable sales growth. In addition, greater growth and firm size push up needs for external financing, while the opposite is true for firm age and tangible assets.

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THE RECOVERY OF FEMALE AND MALE LABORS: A CASE FROM VIETNAM

PhD. Pham Văn Nghia* - PhD. Dong Thi Ha** - College student Pham Minh Duc***

Abstract: *The impact of the COVID-19 pandemic has been detrimental to the labor force and the economy around the world. From the onset of the pandemic, the workforce of Vietnam has witnessed a higher unemployment rate, a decline in working hours, and many other issues. It has been proven that the magnitude of the impact is different between the two sexes in favor of male labor. However, it has been spotted that the recovering speed of the two sexes also draws a significant distinction. The trend shows similarity to the recovery rate of the labor forces in terms of gender regarding earlier recessions with data from the US. In looking at the statistics of Vietnam's labor force in 2020, the female laborers witnessed a faster-recovering rate than men; however, the underlying reasons for the similarity are vastly different.*

• Keywords: Vietnam labor force, COVID-19, recovery trend, gender.

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Tóm tắt: Tác động của đại dịch COVID-19 đã gây bất lợi cho lực lượng lao động và nền kinh tế trên toàn thế giới. Kể từ khi đại dịch bùng phát, lực lượng lao động Việt Nam đã chứng kiến tỷ lệ thất nghiệp cao hơn, số giờ làm việc giảm và nhiều vấn đề khác. Người ta đã chứng minh được rằng mức độ tác động của hai giới đối với lao động nam là khác nhau. Tuy nhiên, người ta nhận thấy rằng tốc độ hồi phục của hai giới cũng tạo ra sự khác biệt đáng kể. Xu hướng này cho thấy sự tương đồng với tỷ lệ phục hồi lực lượng lao động về giới tính liên quan đến các cuộc suy thoái trước đó với dữ liệu từ Mỹ. Khi nhìn vào số liệu thống kê về lực lượng lao động của Việt Nam vào năm 2020, lao động nữ có tốc độ phục hồi nhanh hơn nam giới; tuy nhiên, những lý do cơ bản cho sự giống nhau là rất khác nhau.

• Từ khóa: Lực lượng lao động Việt Nam, COVID-19, xu hướng phục hồi, giới tính.

I. Introduction

The COVID-19 pandemic is one of the most significant influencers to the global economy for years to come. Although able to function with effective coping mechanisms, Vietnam's economy still suffers greatly from the impact of

COVID-19, which has been reported to cause volatility in different markets. Along with the effects of COVID-19, the topic of recovery has also been proven to be intriguing. While the volatility of financial markets for investors is argued to be either predictable or unpredictable, the labor force recovery has shown some interesting aspects. In scrutinizing the deeply overlapping part of the sociological and economical spheres, how and why the recovery of different genders shows similarity would be looked into.

According to the General Statistics Office of Vietnam, 32.1 million citizens over the age of 15 were negatively affected by December 2020, with 69.2 percent seeing a loss in salary, 39.9 percent being forced to cut working hours, and 14 percent being forced to cease working. Even though women make up 70% of critical sectors such as weaving, electronics, and textiles, they still face inequity, low pay, and limited job options. Unlike past recessions and downturns, which disproportionately impacted male workers, COVID-19's downturn hits industries with a high female employment rate, causing women to suffer more from the epidemic (Alon

* Academy of Finance; email: phamvanngghia@hvtc.edu.vn

** Faculty of Economics, National Economic University *** CQ 8.CLC 11.6 - Academy of Finance

et al., 2020). According to research conducted in the United States, Germany, and Singapore (Reichelt et al., 2021), women are more likely to be removed from their current position and more exposed to transitions than men. Before COVID-19, Vietnam's female labor force participation rate was much higher than global figures, at 70.9 percent in 2019, compared to 47.2 percent globally and 43.9 percent in Asia-Pacific, with no notable difference in unemployment rates between the sexes. It is also believed that female employees in Vietnam have an easier time entering the labor force than in other nations. However, Vietnam's male labor force participation rates remained higher in stable occupations, while female employees accounted for the most vulnerable fields. Vietnam's number in terms of working hours fell considerably in the second quarter of 2020, owing to the closure of firms and a fall in economic activity. On the other hand, female employees were subjected to more adverse statistics. However, in investigating the third quarter of 2020, it was reported that female working hours increased faster than their male counterparts.

Although the impact of this recession was stated to have a more detrimental effect on the female labor force, the recovery speed of the female labor force exceeded the recovery speed of men in Vietnam. This result is similar to the trend witnessed in the US, where the recovering rate of female laborers was reported to be more rapid than men's (Fukui et al., 2018) across different periods. Looking back on Vietnam's statistics on male and female workforce regarding the 2007-2009 recession, the connection between the impact of the COVID-19 pandemic and the consequences of the earlier recession was drawn while the recovering rate of female labor fell short compared to men. This stated that the reasons behind the fast recovery of the women labor force among the two countries are vastly different. By looking at the statistics and results from the two countries,

hidden aspects hampering the working situation of Vietnamese female labor would be unveiled, giving suggestions to benefit the gender equality in Vietnam's workforce. In addition, by looking back at the earlier recession, a connection can be drawn to further identify female workers' vulnerability. The paper aims to investigate the recovery rate of women in the Vietnam labor force to improve and point out the hindering factors women face and eliminate such barriers.

The rest of the paper is structured as follows: Section II will revise precedent literature, while section III will mention briefly the methodology used. In section IV, the report will focus on pointing out the recovery situation of Vietnam's workforce. Section V will conclude and mention the limitations and suggestions for future research agendas.

II. Literature review

According to the International Labor Organization Vietnam in 2020, gender inequality during the pandemic has been highlighted strongly, unveiling different neglected aspects and vulnerable positions of women. Women have fewer job options and opportunities to advance because of occupational sorting, and they hold extremely few leadership roles (ILO, 2020; Tran and Nguyen, 2020). Women are more likely to work in jobs with shorter working hours and paid vacations, and while women make up half of the labor force, they make up just a quarter of those in management or decision-making roles. At an early point in their life, occupation sorting is driven by societal conventions rather than aspirational criteria, pushing women into vulnerable jobs or occupations with fewer advancement chances and lower earnings (Chowdhury et al., 2019). Female employees may face a more significant pay gap and more inadequate compensation in 2019 due to a lack of stability and prospects, not just in comparison to male colleagues but also in contrast to female workers. Female employees' wages fell during the pandemic, while the wage difference between male and female workers would stay

the same or slightly widen. While differences in working hours cause pay disparities in other nations, data suggests that working hours have nothing to do with Vietnam's pay gap rate (ILO, 2021). The Equal Remuneration Convention signed by the Vietnamese government also reduced the potential of systematic bias. Education is unlikely to be a significant factor because the education gap and inequality have shrunk. Therefore, to account for the prevailing unfavorable situation, double burden - the burden to complete both housework and work - is mentioned as a significant factor. Research in 2020 by Hoang Lan Anh also pointed out that Vietnamese women are facing double standards (Hoang, 2020). As mentioned, the recovery rate of women for this downturn exceeds men. The recovery rate of women in the US in different periods has also been reported to be consistently higher than men (Fukui et al., 2018). The increase in female workers in the labor workforce is responsible for the trend. However, it has been recorded that the increase in Vietnam female labor's work hours does not correlate with the increase in female workers. Therefore, the paper looked into the 2007-2009 and 2020 to expand and tackle how female working hours increase with few additions of employments.

III. Methodology

To report the situation of the Vietnam labor force, the research uses the method of synthesizing and interpreting information, documents, reports of competent agencies, Ministries, and branches on issues related to the research field, statistics provided from several secondary data sources (ILO Vietnam's Labor Force Survey, General Statistics Office of Vietnam). The paper looks at data on unemployment rates, working hours, and labor force participation rates for both men and women regarding the 2007-2009 recession (from 2007 to 2010) and the data in 2020 for COVID-19 crisis recovery. During 2020, the recovery of the labor force was most visible as the first two quarters

of 2020 marked the milestone of COVID-19 appearance and lockdowns, while the last two quarters showed statistics for the reopening of businesses and recovery. In addition, the statistics from the earlier recession would be considered for the vulnerability of female labor. Furthermore, figures on hours spent on housework and household work are utilized to calculate the double burden placed on female employees. Despite the fact that the participation rate had improved for three consecutive quarters, the participation gap had grown to 11.2 percent, compared to a prior year's average of 9.5 percent. The disparity between the sexes has widened, indicating that males have fared better than women in terms of unemployment. The two groups most likely to leave the workforce are old laborers in rural regions and young laborers in metropolitan areas. The statistics of unemployment for female workers can be due to the operation sorting. Workers in vulnerable jobs, such as family workers or self-employed workers, are more vulnerable. 92 percent of self-employed or self-accountable workers are not covered by social security.

IV. Main findings

The decline in the first quarter of 2020 can be explained by the Tet vacation, during which individuals reduce their working hours purposefully and consistently. The initial epidemic of COVID-19 prompted social separation and safety precautions in the second quarter of 2020. Starting in March 2020, the social distancing strategy hugely influenced economic activity. According to data, both genders have seen a significant reduction in working hours in Vietnam and globally. Globally, total working hours decreased by 8.8% in 2019 compared to the previous year. Vietnam's number fell considerably in the second quarter of 2020, owing to the closure of firms and a fall in economic activity. Female employees, on the other hand, were subjected to more adverse statistics. As a result, their working hours have decreased to 88.8 percent of what they were

in 2019 (the same statistics for men was 91.2 percent). This might be attributed to changing female employment and a lower female labor force participation rate, resulting in a drop in overall working hours.

However, in the third and fourth quarters of 2020, women's total working hours recover faster than men's, bringing the total number of hours worked by the two sexes to equal in the fourth quarter. Women's working hours climbed by 0.8 percent in the cited quarter, while men's increased by 0.6 percent, implying that women's working hours had grown by a bigger proportion than men's despite lower working participation. This might be attributed to the reopening of schools, companies, and economic activity, which has ushered Vietnam into a post-crisis recovery period. To make up for the deficit in the second quarter, both men and women extended their working hours. Women, in particular, worked 1 hour and 42 minutes more per week than males, but men worked 36 minutes more per week. According to supplied figures, women with employment in 2020 increased their working hours significantly to compensate for their loss of income; the statistics may potentially grow quarterly when women reenter the labor field. Despite the fact that female labor participation was lower overall, the working hours resulted from a significant attempt to recover after COVID-19's first strike. Therefore, the recovery in terms of working hours of female laborers is reported to be linked to the fact that women had to work longer hours instead of the addition of females in the workforce. In 2020, the unemployment rate turned in an adverse direction, resulting in a wage disparity between men and women. According to the ILO, while both male and female labor force participation rates reduced as a result of COVID-19, women's participation rates dropped more than men's. In the second quarter of 2020, with more than 1 million women out of work, the female participation rate fell by 4.8 percent, while the male participation rate

fell by 3.9 percent, compared to the same period in 2019. This pattern persisted throughout the years, with female participation rates still behind male participation rates in the third and fourth quarters of 2020 (2.6 percent and 2.4 percent for females and 1.4 percent and 2.1 percent for males respectively). Women made up 65.8% of family employees in 2019. Women are also said to be twice as likely as males to work in the home. Even before COVID-19, women between the ages of 15 and 24 were 5% more likely to work in the informal sector than women between 25 and 54. Women in this age group also found it challenging to negotiate long-term contracts with their companies. Younger and older women have the most insecure and susceptible jobs; thus, they are the ones that suffer the most during the COVID-19 crisis. Their job was not only unstable, but their earnings were also disadvantageous. Young female employees in 2020 will earn 11.7 percent less than female workers on average in 2019, whereas self-employed women would reach 50.6 percent more. The numbers for older females are 32.4 percent and 21.4 percent, respectively. Looking back on the 2007-2009 statistics, after the recession, unpaid female workers increased by 8.2% compared to their male counterparts, whose rate increased 0.1%. This further indicates the long-lasting effect of the earlier recession, which put female workers into unfavorable positions. Despite becoming active participants in the economy, women still had to shoulder the same amount of responsibility for child care and housework. Both men and women spent more time doing housework after COVID-19, however the results showed that while women spent more time doing housework and serving their families, 20% of males still reported not assisting or doing any housework. Those who said they did housework said it took up to 2/3 of a woman's time. Furthermore, family members with lower income or more free time are reported to be assigned and participate in more housework (Leong and Bond, 2015), suggesting that women may be increasingly responsible for

childcare and housework due to lower wages and higher unemployment rates. This provided insight into how the double burden has an impact on women's working quality and opportunities. According to the 2018 Labor Force Survey, over half of the non-working women said they didn't work for "personal or family reasons," but just 18.9% of non-working males said the same thing. Valentina Barcucci, a labor economist, noted that even before COVID, the working quality of women was already subpar when compared to male workers.

Therefore, the fast recovery of the female labor force in terms of working hours is different from the recovery of the US statistics in which the US trend is due to the increment of women in the workforce while with the same number of female workers, Vietnam female labor worked more time each. After the recession, Vietnam female workforce reduces in response to the double burden making any recoveries accountable by more working hours individually and, especially for the case of the COVID-19 pandemic, the reopening of services, positions, and businesses in which women take up most of the sectors' workforces- making up a small amount of loss in terms of total unemployment during the pandemic.

V. Limitations and Conclusion

The article supports the hypothesis that women in the workforce confront inequity. Although the unemployment rate has risen in recent years, widening the difference between male and female employees, the fundamental cause existed even before the epidemic. The epidemic added to unbalanced occupation sorting by highlighting an issue that needed to be addressed. Women's vulnerability in the labor force may be attributed to unequal occupational classification and labor allocation, a lack of advancement chances, a double standard, and a lack of leadership roles. While going back to previous statistics from earlier recession, although it was claimed that the 2007-2009 recession imposed a more significant threat for

male workers, the consequences are proven to be more long-term for female workers as by the end of the recession, the female labor force witnessed an increase in employment in more vulnerable positions. In addition, while the recovery trend of the US workforce can be accounted for by the "crowding out" of male employment by female employment as a movement of the grand gender convergence and the increase of female workers, the recovery trend of female labor was the result of the reopening businesses and ending lockdowns, making ways for them to navigate in the workforce under vulnerable positions. This document can be used as a reference resource for other studies looking into the labor force and gender disparity.

The study failed to account for several aspects. To begin, the article examined many data sources and identified a double standard in housekeeping. Still, it was unable to account for its link with the quality of labor and the salary of female employees or how working hours and productivity are intertwined. In this article, the double standard is hypothesized to be an underlying rationale rather than a definite proof of its influence on female employees. Future research agendas might take a more quantitative, empirical approach to the issues to determine how these variables interact. Second, the method utilized in this article is based on secondary labor force data in general thus, any assumptions regarding labor force behavior are unreliable. Qualitative research may be conducted to understand better the motivations of female workers in the Vietnamese labor force and their decisions on which occupations or sectors to pursue. Furthermore, because of the specific characteristics of the year, this research focused primarily on the labor force in Vietnam in 2020 or the first wave of COVID-19. It may not be applicable to other waves. Future research can utilize data regarding multiple waves to have a more overall look. Though the comparison between Vietnam and US data highlights the

inequality Vietnam's labor force is facing, the social and economic characteristics of the two countries are vastly different; therefore, the results drawing from the comparison between the two labor markets can only be considered as a source of idea and reference. Finally, the connection between the two recessions is only observed and proposed because the paper focuses on the recovering trend of the labor force yet has not been closely scrutinized, leaving space for a more quantitative approach in addressing the connection.

Economic recovery and development during and after COVID-19 put forward significant challenges. When a fresh wave of the epidemic emerged in 2021, the economy, which had yet to fully recover, was confronted with several dangers. In Vietnam, gender inequality continues to create an adverse condition for female employees. 2020 has generated new gender challenges that will make it much more difficult for women to advance in their careers. During the pandemic, women are more likely to experience transitions to unemployment, work from home, and reduced working hours. Yet, the pandemic has exposed part of the workforce and the diversion or the unbalance sorting of occupations and sectors, which has been overlooked. COVID-19 has resulted in company closures and social isolation. If the situation persists, the government should take appropriate measures to safeguard and defend vulnerable areas of the economy; future policy should also include the difficulties women face in achieving equality. Vietnam has distinct traits, such as a Confucianism background, well-defined gender roles, and a Communist political structure that promotes equality. Gender awareness is expanded, and gender disparity is reduced as a result of modernity. Despite the progress made, Vietnam still has a long way to go in terms of altering the attitude that has been established since the Gender Attitude Index of Vietnam has been noted to be highly negative (Grosse, 2015). Women in Vietnam continue to endure

challenges; a gender-based double standard has existed for decades (Hoang, 2020). Gender equality has gone a long way in Vietnam. Vietnam can entirely build a great working environment and circumstances for both male and female employees, given the benefits of fast economic growth and modernization.

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FOSTERING GREEN CONSUMPTION BEHAVIOURS AMONG GEN-Y CONSUMERS: THE RELATIVE IMPORTANCE OF NORMS AND EFFECTIVENESS OF MEDIA INFORMATION

Asoc.Prof.PhD. Nguyen Vu Hung* - MA. Do Thanh Long**

Abstract: While the roles of injunctive social norms, descriptive social norms and personal norms in fostering green consumption have been confirmed by previous literature, the relative importance of each type of norms to the others has been under-researched. Thus, the aim of current study is to examine collaborative impacts of the norms on the behaviours. Furthermore, the effectiveness of green action-related information in encouraging the behaviours is also examined. Data were collected from 259 Gen-Y consumers in Hanoi to test the research framework. Analysis results confirm the power of action-related information in conveying the social norms and activating personal norms. Among the norms, strong direct effect and mediating role of personal norms in the association between injunctive norms and behaviours are supported. Meanwhile, only direct effect of descriptive social norms is found significant but only weak one. Managerial implications of research findings then are discussed.

• Keywords: green consumption, generation Y, environmental information, social norms, personal norms.

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Tóm tắt: Mặc dù vai trò của các chuẩn mực xã hội mang tính định hướng, các chuẩn mực xã hội mang tính mô tả và các chuẩn mực cá nhân trong việc thúc đẩy tiêu dùng xanh đã được các tài liệu trước đó khẳng định, nhưng tầm quan trọng tương đối của mỗi loại chuẩn mực đối với các loại chuẩn mực khác vẫn chưa được nghiên cứu. Vì vậy, mục đích của nghiên cứu hiện tại là xem xét các tác động cộng tác của các chuẩn mực đối với các hành vi. Hơn nữa, hiệu quả của thông tin liên quan đến hành động xanh trong việc khuyến khích các hành vi cũng được kiểm tra. Dữ liệu được thu thập từ 259 người tiêu dùng Gen-Y ở Hà Nội để kiểm tra khung nghiên cứu. Kết quả phân tích xác nhận sức mạnh của thông tin liên quan đến hành động truyền đạt các chuẩn mực xã hội và kích hoạt các chuẩn mực cá nhân. Trong số các chuẩn mực, tác dụng trực tiếp mạnh mẽ và vai trò trung gian của các chuẩn mực cá nhân trong mối liên hệ giữa các chuẩn mực và hành vi mang tính giáo huấn được ủng hộ. Trong khi đó, chỉ tác động trực tiếp của các chuẩn mực xã hội mang tính mô tả là có ý nghĩa nhưng chỉ có tác động yếu. Các tác động cơ bản của các kết quả nghiên cứu sau đó sẽ được thảo luận.

• Từ khóa: tiêu dùng xanh, thể hệ y, thông tin môi trường, chuẩn mực xã hội, chuẩn mực cá nhân.

1. Introduction

In recent decades, many serious environmental problems have exerted adverse impacts on human life. The cause of the problems is undoubtedly the unsustainable patterns of production and consumption (Dunlap & Jorgensen, 2012). Since 1990s, changing consumer behaviours towards more sustainable patterns has become the most concern throughout the world (Liu, Qu, Lei, & Jia, 2017). To find effective ways to foster the changes, academic research has paid an attention to the role of different types of norms, namely social norms and personal norms, in guiding consumers' pro-environmental behaviours.

On the one hand, studies focusing of personal norms expect that activated personal norms would motivate the practices among consumers. By activating the norms, consumers would act environmentally friendly without any external reinforcement of rewards or sanctions. More importantly, by such way, consumers' green consumption practices could be much more

* National Economics University; email: nguyenvuhung@neu.edu.vn

** University of Transport Technology & National Economics; email: dothanhlong@st.neu.edu.vn

enduring since the behavioural motivation would be fuelled by internal self-satisfaction or self-sanction (Stern, 2000). The effects of personal norms on the behaviours were supported by numerous empirical studies in the field (e.g.: Landon, Woosnam, & Boley, 2018; Tan, Ooi, & Goh, 2017).

On the other hand, many studies emphasized the roles of social normative information in the green consumption behaviour formation. From this standpoint, rules and standards conveyed to consumers by the information are expected to guide desirable or constrain unexpected behaviours without the force of law (Cialdini & Trost, 1998). Empirically, numerous studies have reported the importance of social norms (descriptive and injunctive norms) in forming a wide range of sustainable consumption behaviours, from general pro-environmental behaviour to more specific ones such as organic food purchase, waste reduction, recycling and so on (e.g.: Han, Yu, Kim, & Kim, 2018; Yu, Chang, Chang, & Yu, 2019). However, there was also evidence that sustainable consumption behaviours did not always follow social norms or the effects of the norms appeared to be weak (Arli, Tan, Tjiptono, & Yang, 2018; Taljaard, Sonnenberg, & Jacobs, 2018).

It is easy to recognize that most literature have focused either on social norms only that are external factors or just on personal norms as an internal ones. A research model integrating the impacts of the both to date has been overlooked.

Within the scope of current study, we aim at investigating the collaborative impacts of personal norms and social norms on the green consumption behaviours to find out the better way to foster the behaviours. We expect the mediating role of personal norms in the associations between injunctive social norms, descriptive social norms and green consumption intention. Additionally, the effectiveness of media information that we labelled action-related information in conveying the social norms and activating personal norms is also examined. The study is expected to offer valuable insights for governments, policy makers to effectively

design strategies to foster the construction of sustainable consumption culture.

2. Theoretical background and research framework

2.1. Action-related information as social norm conveyor and personal norm activator

In the field of media effect research, media information exposure refers to “the extent to which audience members have encountered specific messages or classes of messages/media content” (Slater, 2004). Factually, even if consumers are aware of seriousness of environmental problems and want to protect the environment, they may not engage in a particular green consumption behaviour that they don’t know how effective the behaviour is in this situation. Therefore, to encourage consumers to act to alleviate environmental issues, media information needs to enhance consumers’ knowledge about which course of actions can effectively solve the problems (Hines, Hungerford, & Tomera, 1987). Accordingly, among different media messages, the one that we labelled action-related information informing consumers course of pro-environmental consumption actions is prerequisite to foster green consumption intention of an individual. More importantly, the action-related information not only strengthens consumers’ beliefs about the effectiveness of green consumption in solving environmental issues by informing them what other people do in this situation, it also conveys what actions are socially approved or injunctive social norms that force consumers to behave properly to avoid social sanction (Cialdini & Trost, 1998).

Also, this kind of information can be activator of pro-environmental personal norms. It is because the information may drive consumers’ attention to the environmental problems and their adverse consequences for other people, other species and the nature (Bandura, 1986). The perception of others’ needs would then activate emotional response and thus their feelings of moral obligation to protect the environment or pro-environmental personal norms (Schwartz, 1977). For such reason, we hypothesize that:

H1: Action-related information exposure

positively affects consumers' perceived injunctive social norms regarding green consumption.

H2: Action-related information exposure positively affects consumers' perceived descriptive social norms regarding green consumption.

H3: Action-related information exposure positively affects pro-environmental personal norms among consumers.

2.2. Social norms and green consumption behaviours

In the field of behavioural psychology, the effects of social norms on decision making process is not new. The others' thought and actions are standards that observers base on to evaluate whether an action is beneficial or unreward, socially approved or disapproved in a given situation. By this way, the observers can avoid erroneous or even dangerous decisions (Bandura, 1986). Accordingly, social norms implicate the influences other people have over an individual. Specifically, social norms are the way some person or group of people affects another one's opinions, attitudes, thoughts, emotions, or actions. Social normative influence on a person's behaviours can take a variety of forms such as persuasion, conformity, motivation, compliance, modelling and so on (Bandura, 1986; Cialdini & Trost, 1998).

Conceptually, social norms have been referred to as "rules and standards that are understood by members of a group, and that guide and/ or constrain human behaviour without the force of law" (Cialdini & Trost, 1998, p. 152). Based on the ways social norms exert influences on consumer behaviours, the distinction between descriptive social norm and injunctive social norm is the most prominent (Cialdini & Trost, 1998).

In the first way, descriptive norms inform people "what we should do" through "what most people do" or more specifically, among course of actions which ones are most effective and adaptive in a given situation. By this way, other's behaviours help consumers choose most adaptive action while avoiding dangerous, ineffective

trials and error. Accordingly, descriptive norms act as guidance for behaviours by providing the important information of reducing uncertainty. The guiding role of descriptive norms is therefore more prominent in situations of high ambiguity or threat (Kruglanski, Pierro, Mannetti, & De Grada, 2006). In second way, injunctive norms are signals of social approval or disapproval of the actions that forces people to behave properly to avoid social sanction and, therefore, indicate "what we ought to do?" (Cialdini & Trost, 1998). The idea of injunctive norms is similar to the conceptualization of subjective norms, the second predictor of behaviour in the Theory of planned behaviour (Ajzen, 1991).

In the field of green consumption, many studies investigating the determinants of the behaviours reported that injunctive social norms positively correlate with behavioural intention and actual behaviours. For examples, study of Hanss, Böhm, Doran, and Homburg (2016) reported significant effects of the norms on consumers' intention to purchase products with a range of green attributes. The effects of the norms on intention to engage in ecotourism were also reported by Lee and Jan (2017).

Similarly, the role of descriptive social norms in driving green consumption was also supported by previous literature. For example, the descriptive norms exerted additional influence on intention to purchase green products beside one of injunctive norms in study of Ham, Jeger, and Ivković (2015). Accordingly, we hypothesize that:

H4: Injunctive social norms positively affect green consumption intention among consumers.

H5: Descriptive social norms positively affect green consumption intention among consumers.

2.3. Personal norms and green consumption behaviours

In the field of social psychology, personal norms are defined as the basis of feelings of moral obligation generated by perception of another's need and thus motivate people to behave in order to help the other when being

activated. Behaviour that is consistent with one's personal norms is performed so as to "enhance or preserve one's sense of self-worth and avoid self-concept distress" (Schwartz, 1977, p. 226). Pro-environmental personal norms are activated by consumers' beliefs that environmental conditions threaten things they value and that they can act to reduce the threat. Such norms generally influence all kinds of behaviour taken with pro-environmental intention and are deeply rooted in altruistic values, biospheric values and egoistic values (Stern, 2000).

In green consumption research, the explanatory power of personal norms has been proved. Generally, personal norms positively influence green consumption behaviours. For instance, the norms was reported to strongly correlate with willingness to sacrifice for environment protection, eco-behaviours and consumers' supports for local products (Landon et al., 2018) or consumers' intention to purchase energy-efficient household appliances (Tan et al., 2017).

Furthermore, the addition of personal norms can cause decrease in the effects of other factors, indicating an mediating role of the variable. In the relationship with social norms, the personal norms are expected to bridge the effects of the social norms and consumers' behaviours when the social norms recognized as prevalent in a society are also accepted as bases for self-evaluation by consumers (Schwartz, 1977). Drawing on previous literature, we hypothesize that:

H6: Injunctive social norms positively affect consumers' pro-environmental personal norms.

H7: Descriptive social norms positively affect pro-environmental personal norms.

H8: Personal norms positively affect green

consumption intention among consumers.

The reseach framework is illustrated by the Figure 1.

3. Methodology

3.1. Measurements

The measurements used in this study were adapted from previous research or developed after intensively reviewing relevant literature. *Action-related information exposure* is measured by three items asking respondents about the extent they have seen or heard media information about three different green behaviours borrowed from Braun and Dierkes (2019). The measure is designed in 5-point frequency scale (1 = "never"; 2 = "once per month or less"; 3 = "about twice per month"; 4 = "once per week"; 5 = "almost every day").

Pro-environmental personal norms measure includes four items adapted from study of Garling and associates (2003). *Green consumption behavioural intention* measure includes three items borrowed from the work of Braun and Dierkes (2019). Similarly, to measure *injunctive social norms*, three items were borrowed and revised from one of Tan et al. (2017). *Descriptive social norms* measure developed after thoroughly reviewing literature about the concept includes three items asking respondents about the extent they perceive people surrounding engage in the three green behaviours of interest. Both items are designed in 5-point Likert format (from 1 = "Strongly disagree" to 5 = "Strongly agree").

3.2. Data collection

In current study, Generation Y consumers who were born from 1980 to 2000 were chosen to test our research model because of their influential consumption power (Belleau, Summers, Yingjiao, & Pinel, 2007). 300 self-complete survey questionnaires of which 259 questionnaires are usable were delivered to Gen-Y residents of three residential groups in Hanoi. The demographic characteristics of the sample are presented in Table 1.

Figure 1: The testing model

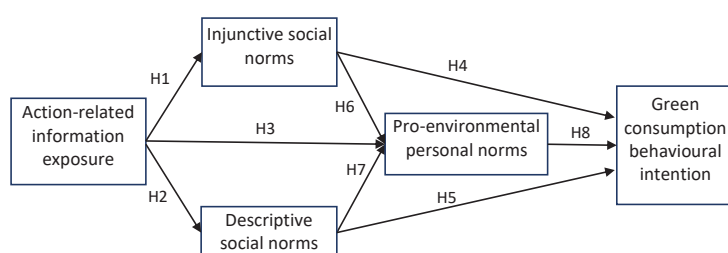


Table 1: Sample characteristics

Variables	Frequency	Percentage
<i>Gender</i>		
Male	160	62%
Female	99	38%
<i>Age</i>		
19 ÷ 24	42	16%
25 ÷ 29	64	25%
30 ÷ 34	84	32%
35 ÷ 39	69	27%
<i>Education level</i>		
High school	6	2%
Associate degree	9	3%
Bachelor's degree	141	54%
Master's degree	97	37%
Doctor degree	6	2%
<i>Income (million VND)</i>		
< 5	35	14%
5 ÷ 10	130	50%
10 ÷ 15	70	27%
15 ÷ 20	12	5%
20 ÷ 25	6	2%
> 25	6	2%
<i>Marital Status</i>		
Married	183	71%
Unmarried	76	29%

4. Findings

4.1. Reliability and validity of measurements

To test reliability and validity of measurements, we conducted confirmatory factor analysis (CFA), using SPSS AMOS Version 22. Level of goodness-of-fit for the measurement model was evaluated by the $\chi^2 = 163.230$; $df = 94$ ($p < 0.001$); $\chi^2/df = 1.736$; RMSEA = 0.053; SRMR = 0.0395; GFI = 0.925; CFI = 0.975; TLI = 0.968. Thus, the measurement model is well fit (Kline, 2005).

The analysis result of measurement model confirmed reliability and validity of the measurements. All standardized factor loadings of individual items respective latent constructs are higher than threshold value of 0.60 and thus are practically adequate (see Table 2). The composite reliabilities for the constructs are all greater than threshold of 0.70 (Hair, Black, Babin, & Anderson, 2014). Meanwhile, construct correlation matrix (Table 3) shows that all AVE values of constructs exceed 0.5 while AVE values of each pair of constructs are greater than squared correlations between them, showing discriminant validities of the constructs.

Table 2: CFA testing results

Construct	Items	Standardized Factor Loadings	AVE	Composite Reliability (CR)
Action-related information exposure	Use recycled paper	0.711	0.547	0.783
	Refuse products with unnecessary plastic wrapping	0.766		
	Walk, take the bike or use public transport whenever possible	0.74		
Pro-environmental personal norms	I feel a moral obligation to protect the environment	0.912	0.791	0.938
	I feel that I should protect the environment	0.939		
	I feel it is important that people in general protect the environment	0.903		
	Our environmental problems cannot be ignored	0.798		
Descriptive social norm	I feel that people in general use recycled paper	0.865	0.716	0.883
	I feel that people in general refuse unnecessary plastic wrapping	0.866		
	I feel that people in general walk, take the bike or use public transport whenever possible	0.806		

Construct	Items	Standardized Factor Loadings	AVE	Composite Reliability (CR)
Injunctive social norm	Most people who are important to me think I should consume in environmentally friendly way	0.877	0.756	0.902
	Most people who are important to me would want me to consume in environmentally friendly way	0.954		
	People whose opinions I value would prefer that I consume in environmentally friendly way	0.768		
Green consumption behavioural intention	I am going to use recycled paper	0.897	0.676	0.861
	I am going to refuse products with unnecessary plastic wrapping	0.84		
	I am going to walk, take the bike or use public transport whenever possible	0.72		

Table 3: Construct correlation matrix

	1	2	3	4	5
1. Action-related information exposure	0.547	0.154	0.199	0.066	0.152
2. Pro-environmental personal norms	0.393	0.791	0.289	0.031	0.358
3. Green consumption behavioural intention	0.446	0.538	0.676	0.065	0.199
4. Descriptive social norm	0.256	0.177	0.255	0.716	0.158
5. Injunctive social norm	0.390	0.598	0.446	0.397	0.756

Note:

- Values below the diagonal are correlation estimates among constructs.
- Values in italics above the diagonal are squared correlations.
- Values in bold on the diagonal are AVEs.

4.2. Structural Equation Modelling (SEM) testing results

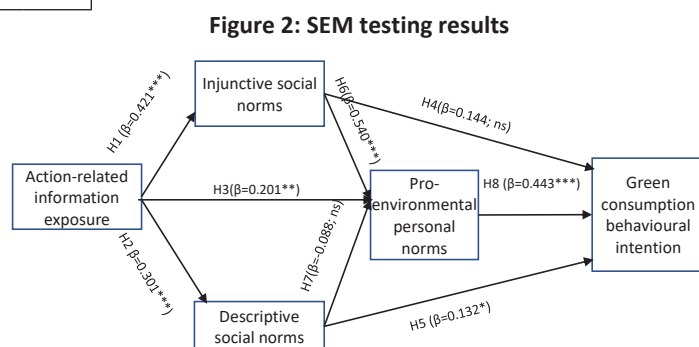
The structural equation modelling technique (SEM) was performed to test the hypotheses, using a maximum likelihood estimation procedure within IBM SPSS AMOS Software version 22. The specified structural model (Figure 2) shows a good fit to

the empirical data ($\chi^2 = 196.643$; $df = 96$ ($p < 0.001$); $\chi^2/df = 2.048$; $RMSEA = 0.064$; $SRMR = 0.0762$; $GFI = 0.911$; $CFI = 0.964$; $TLI = 0.955$) (Kline, 2005).

Figure 2: SEM testing results

As presented by Figure 2, both perceived injunctive and descriptive social norms are positively affected by action-related information ($\beta = 0.421$; $p < 0.001$ and $\beta = 0.301$; $p < 0.001$ respectively). This results highlight the importances of the media information in conveying social norms to consumers. H1 and H2 thus are supported. It also showed a positive correlation between the information and pro-environmental personal norms as expected ($\beta = 0.201$; $p < 0.05$). H3 is thus also confirmed.

Similarly, the positive and significant effects of perceived descriptive social norms on green consumption intention are supported ($\beta = 0.132$; $p < 0.05$), supporting H5. However, H4 about direct effect of injunctive social norms was not confirmed. Furthermore, the testing results support the statement about mediating role of pro-environmental personal norms in the effect of injunctive social norms on green consumption. The injunctive social norms were found to significantly activate the personal norms ($\beta = 0.540$; $p < 0.001$), that in turn exerts strong influence on their green consumption behavioural intention ($\beta = 0.443$; $p < 0.001$). H6 and H8 are therefore supported. However, as opposed to what we expected, the relationship between descriptive social norms and pro-environmental personal norms is found insignificant. H7 is thus not supported.



5. Discussion

Initial findings from previous literature showed that all three norm constructs, namely descriptive norms, injunctive norms and personal norms were positively related to green consumption behavioural intentions. Accordingly, consumers were more likely to choose green consumption alternatives when they believed that others act in similar ways (descriptive norms), or due to others' expectation (injunctive norms), or when they feel moral obligation to do so (personal norms). However, the relatively weak effects of the two kinds of social norms indicated potential mediators bridging the effects. Personal norms are expected to be such a mediator.

The purpose of this study is to elaborate on the relative importances of three kinds of norms on green consumption behaviours. Findings of current study supported the importances of both injunctive, descriptive social norms and personal norms in fostering green consumption. Among the norms, pro-environmental personal norms showed the strongest association with intentions to practice green consumption. This finding emphasizes the importance of considering the moral component of green consumption practices of which the effects will remain more stable (Stern, Dietz, Abel, Guagnano, & Kalof, 1999).

Meanwhile, only direct effect of descriptive social norms was found significant. The insignificant impacts of injunctive social norms may be due to the presence of personal norms in the research model. In fact, the research results revealed the important mediating role of the personal norms in the effect of injunctive norms. Specifically, expectations of important others may not directly affect behavioural intentions. Instead, it indirectly affects the behaviours through activating personal norms. Information campaigns thus could target strengthened pro-environmental personal norms through conveying injunctive social norms, which is in turn converted into behavioural decisions that favour eco-friendly patterns over unsustainable ones.

Current research findings also showed an effective way that media information should focus in order to foster green consumption practices

among Gen-Y consumers. More specifically, the findings highlight the importance of environmental message that inform consumers what others do to protect the environment. Frequency of exposure to this kind of message will reinforce consumers' perceptions about what others do and what others approve, which then directly motivate them to engage green consumption or indirectly encourage the behaviours by activating their pro-environmental personal norms. Furthermore, the information would directly arouse consumers' feeling of moral obligation to engage in green activities by direct their attention to the adverse consequences of environmental problems for other people, other species and the nature.

6. Limitation and implications for future research

There are some limitations that cannot be ignored in this study. *First*, this study utilized self-completed survey approach to test the hypotheses. This approach has certain limitations admitted by scholars. Although survey approach is very popular in empirical research, it does not allow testing for causality. Therefore, different methods such as experiment or longitudinal approach can be used to re-examine the generalizability of findings. *Second*, our study focuses on green consumption intention. Meanwhile, the intention-behaviour gap has been mentioned by many scholars. Future research can re-test the idea of this study with actual behaviours.

To conclude, the present study offers practical implications for managers and policy makers in the field of green consumption by investigating the relative important role of norms and finding an effective way to design media information strategy. Confirmed effectiveness of action-related information as well as mediating role of the personal norms provides meaningful managerial implications for fostering green consumption behaviours for sustainable development of human being.

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FACTORS AFFECTING CUSTOMERS' SATISFACTION SHOPEE VIETNAM'S ECOMMERCE SERVICE

PhD. Tran Van Dat*

Abstract: Based on data from 238 participants customers shopping on an e-commerce website, regardless of gender, age, education level, job and income. The results found that five factors have a positive impact on satisfaction with Shopee Vietnam's e-commerce services, which are: responsiveness, website design, information quality, safety and security. From measuring the influence of these factors, the administrative implications of this study contribute to improving customer satisfaction for the Shopee Vietnam e-commerce service, which is the commercial channel. This will receive satisfaction from customers when using the service, leading to more purchases here.

• Keywords: e-commerce, service quality, responsiveness, website design, information quality, safety and security.

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Tóm tắt: Dựa trên 238 khách hàng tham gia mua sắm trên website thương mại điện tử, không phân biệt giới tính, độ tuổi, trình độ học vấn, công việc và thu nhập. Kết quả cho thấy 5 yếu tố có tác động tích cực đến sự hài lòng đối với dịch vụ thương mại điện tử của Shopee Việt Nam, đó là: khả năng đáp ứng, thiết kế website, chất lượng thông tin, an toàn và bảo mật. Từ việc đo lường mức độ ảnh hưởng của các yếu tố này, ý nghĩa quản trị của nghiên cứu này góp phần nâng cao sự hài lòng của khách hàng đối với dịch vụ thương mại điện tử Shopee Việt Nam, là kênh thương mại. Điều này sẽ nhận được sự hài lòng của khách hàng khi sử dụng dịch vụ, dẫn đến việc mua hàng tại đây nhiều hơn.

• Từ khóa: thương mại điện tử, chất lượng dịch vụ, khả năng đáp ứng, thiết kế website, chất lượng thông tin, an toàn và bảo mật.

1. Introduction

Vietnam is a country with enormous potential in the digital economy, having regularly achieved high economic transformation speeds in recent years because to unique assets such as a youthful, educated and easily accessible populace. Early exposure to digital technology: Vietnam has 71.54 million smartphone users (Statista, 2021). The

digital economy market was valued at VND 267 billion in 2020, accounting for 5.5 percent of total product and service sales in Vietnam that year (Minh Ngoc Nguyen, 2021). Despite the current economic circumstances, Vietnam's e-commerce will continue to grow and will go a long way toward changing Vietnamese customers' buying habits. Vietnam is predicted to generate 1733 billion VND by 2030, approximately equal to 27 percent of its GDP in 2020, if it can fully leverage the benefits that the digital economy provides to the economy (AlphaBeta, 2021). In 2020, it is anticipated that 49.3 million Vietnamese would purchase online (Ministry of Industry and Trade, 2020). With the huge influence of the COVID-19 pandemic on people's preferences for online buying and delivery, it can be seen that online shopping behavior is creeping and growing widespread everywhere and everyone in the territory of Vietnam. Rather of going to the store and shopping in person, it is far more convenient to shop at home. Shopee is without a doubt Vietnam's most well-known e-commerce company.

Shopee is an application/website to buy and sell goods online. This e-commerce exchange is located in Singapore. Shopee was first launched in 2015, covering the following countries:

* Department of Marketing - Banking University of Ho Chi Minh City; email: dattv@buh.edu.vn

Singapore, Taiwan, Vietnam, Malaysia, Thailand, Indonesia, Philippines and Brazil, respectively. With an activity orientation, a shopping application on smartphones has the same operation as a social network, meeting the shopping needs of customers anytime, anywhere. Moreover, Shopee, as an intermediary between buyers and sellers, integrated the operating, shipping and payment support systems by linking with AirPay (later renamed ShopeePay). On the shopee.vn website, there are many items for customers to choose from in various categories, from health and life, household items, cosmetics, fashion, food products, electronics, etc., with price ranges from high to low. Vietnamese customers can consult products before deciding to buy them based on a public product review system, and Shopee also provides a customer care system to handle problems in commercial transactions. electronic. Shopee's appearance in Vietnam is one of the steps to stimulate Vietnamese people to participate in online shopping and contribute to changing Vietnamese buying behavior.

In the fiercely competitive e-commerce market, the big players joined in, constantly investing and upgrading service quality to bring the highest satisfaction to customers. Shopee's major competitors, such as Lazada and Tiki, are gradually improving the quality of their e-commerce services to compete for the top position in the industry. If Shopee in 2020 has a number of visits of up to 281,385,626 times, ranking first among the 10 most visited e-commerce websites in Southeast Asia, Lazada is in second place with 132,154,967 likes and Tiki is in sixth place with 22,491,175 likes (iPrice Group, 2020). Tiki's distinguishing feature that Shopee cannot match is the high rate of genuine goods and the return rate of goods of less than 1% (Qandme, 2020). Although Lazada is not as prominent and accounts for many visits as Shopee, it ranks second in the index of visits on the iOS operating system and first in the index of visits for Android users. It can be said that if Shopee is subjective and negligent in maintaining and improving the quality of its e-commerce services, its leading position in the industry may be lost to its competitors. Shopee needs

to understand the wishes of customers when experiencing Shopee's e-commerce services and how to improve and ensure the same quality of its e-commerce services. In other words, service quality is the most important factor in increasing customer satisfaction when making purchases on Shopee.

2. Literature Review

E-commerce refers to the practice of purchasing, selling, and exchanging ownership of things, services and information through the internet (Mesenbourg, 2001). E-commerce refers to the electronic manufacturing, distribution, marketing, sale and delivery of products and services (WTO, 2017). E-commerce, according to contemporary definitions, now encompasses not only the buying and selling of products and services via the Internet, but also the activities of exchanging electronic data, online money transfer, depositing and withdrawing money by credit card online and so on. As a result, the scope of e-commerce operations encompasses nearly every sphere of economic activity, with a wide range of behaviors. E-commerce, e-marketplace, e-procurement, e-government, e-banking and other similar terms come to mind.

E-commerce services are comparable to other types of services but differ from products in that they contain traits that make them difficult to describe and measure, such as intangibility, heterogeneity, inseparability and non-storability (Zeithaml & Bitner, 2000).

When clients utilize e-commerce websites, the customer's assessment and impression of service quality is referred to as e-commerce service quality. Many theoretical models have been developed/improved by researchers all around the globe to evaluate service quality in general and e-commerce service quality in particular. Zeithalm et al (2000) developed the e-SERVQUAL model by extending the original Parasuraman et al (1988) model on service quality criteria to include e-service quality research. E-service quality is assessed using this model, which considers seven factors: efficiency, dependability, commitment, privacy, responsiveness, compensation and interaction.

Customer satisfaction when shopping on an e-commerce channel is the degree to which customers feel compared to the experience they had before shopping (Li & Zhang, 2002). Anderson & Srinivasan (2003) define customer satisfaction when shopping on an e-commerce network as when customers are satisfied with the previous buying experience of a commercial service provider electronic. Customer satisfaction as an outcome, service quality as a cause. Satisfaction is predictive and expected; service quality is an ideal standard. Customer satisfaction or satisfaction is a general concept, expressing customers' satisfaction when consuming a service and service quality, focusing on specific components of the service (Zeithaml & Bitner, 2000). In other words, service quality and customer satisfaction are closely related, in that service quality is what appears before deciding customer satisfaction. The causal relationship between these two factors is a key question in the majority of customer satisfaction research. If the quality is improved but not according to the customer's needs, i.e., what the customer wants, the customer will never be satisfied with this service. Therefore, when using a service, if customers perceive the service as having high quality, they will be satisfied with that service. Conversely, if the customer perceives the service as being of poor quality, dissatisfaction will arise. As a result, the dependability elements of responsiveness, website design, information quality, safety and security will be used to measure e-commerce service quality in this study, which is based on the theoretical framework of (Zeithalm et al, 2000). On the other hand, when buying through e-commerce platforms, these characteristics have a direct influence on client satisfaction.

At Digikala Company, Iran's most popular B2C e-commerce platform, Giti and Farid (2018) explored the important elements determining consumer happiness. As a result, the writers concentrate on aspects such as website design, information quality, website usability, order fulfillment quality, security and privacy, as well as trust thinking. According to the findings, all of the aforementioned criteria have a substantial

positive link with customer satisfaction. Security and privacy have a greater impact than the other six critical criteria. Manuela and Robert (2019) investigated and assessed the influence of online service quality on consumer satisfaction and purchase intent on e-commerce websites. The study examines the impact of the following criteria on e-service quality: website design, dependability, responsiveness and privacy. Isar et al (2020) detected the impact of five service quality dimensions, including content usefulness, content effectiveness, service stability, service responsiveness and supplier reliability. These five factors have a relationship between customer satisfaction and online purchase intention. This study has highlighted that customer satisfaction has the strongest influence on customers' online purchase intentions. In other words, the quality of e-commerce services not only affects the satisfaction but also the purchase intention of customers in the e-commerce channel.

3. Research Methods

The article uses the least squares (OLS) method to measure the impact of five factors, including responsiveness, website design, information quality, safety and security on customer satisfaction when purchasing on e-commerce channels from Shopee. The proposed research model is as follows:

$$SA = \beta_0 + \beta_1 * RE + \beta_2 * WD + \beta_3 * IQ + \beta_4 * SF + \beta_5 * SE \quad (1)$$

β_0 is the coefficient of freedom. The coefficients β_1 ; β_2 ; β_3 ; β_4 ; β_5 ; β_6 is the regression coefficient of the RE; WD; IQ; SF; SE.

The dependent variable SA is customer satisfaction with e-commerce services of Shopee. The independent variable are responsiveness (RE), website design (WD), information quality (IQ), safety (SF) and security (SE).

Data is collected from two sources: secondary data and interviews with experienced experts in the field of e-commerce to build and complete the research variables, thereby completing the questionnaire and primary data through questionnaires was sent to 238 individual customers shopping on an e-commerce website

regardless of gender, age, education, job and income (research paper using ways to write decimals according to international standards).

Research results

Table 1: Descriptive statistical results of quantitative factors

Factors	Minimum	Maximum	Mean	Std. Error
Responsiveness (RE)	1.00	5.00	3,2675	0,73481
Website design (WD)	1.00	5.00	3,5899	0,93280
Information quality (IQ)	1.00	5.00	3,4580	1,04580
Safety (SF)	1.33	5.00	3,0420	0,64742
Security (SE)	1.33	5.00	3,6286	0,96776

Of the 5 factors, the customer's level of agreement with safety is the lowest, with an average score of 3,042 and the highest is the security factor, with an average score of 3,6286. The remaining factors are still evaluated around an average score of approximately 3,5.

Table 2: Table of regression results by enter method

Model	R	R ²	R ² correction	Error of estimate	Durbin-Watson
1	0,713a	0,508	0,497	0,52093	2,058

According to the results of Table 2, the coefficient of determination R² is adjusted by 0.508. The variation of five independent factors (RE, WD, IQ, SF and SE) explains 50.8% of the variation in SA (customer satisfaction). The Durbin-Watson (d) test shows us the result $d = 2,036$ ($1 < d < 3$), so we can conclude that the residuals are independent of each other, that is, there is no correlation between the residuals.

Table 3: Regression coefficients

Model	Unnormalized coefficients		Normalization coefficient	t	Sig.	Statistics collinear	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-0,109	0,256		-0,428	0,669		
RE	0,269	0,041	0,341	6,608	0,000	0,796	1,256
WD	0,231	0,035	0,329	6,610	0,000	0,855	1,170
IQ	0,189	0,054	0,166	3,525	0,001	0,951	1,052
SF	0,107	0,040	0,141	2,673	0,008	0,762	1,313
SE	0,178	0,057	0,167	3,154	0,002	0,760	1,316

Table 3 demonstrates that the regression coefficients of all independent variables RE, WD, IQ, SF, and SE have a significance level Sig. less than 0.05. As a result, the regression coefficients of the independent variables RE, WD, IQ, SF, and SE are all statistically significant, indicating that they all have an influence on the dependent variable SA. The following is the model of elements that influence customer satisfaction when utilizing Shopee's services:

$$SA = 0.341*RE + 0.329*WD + 0.166*IQ + 0.141*SF + 0.167*SE$$

According to the beta coefficient in Table 3, it can be seen that the survey subjects rated the importance of the factors affecting customer satisfaction as reliability (0.341), responsiveness (0.329), information quality (0.166), website design (0.141), safety and security (0.167). The findings of the evaluation will aid in the formulation of management implications based on the degree of attention placed on undervalued elements and the promotion of highly valued aspects. The coefficients of the independent factors are all positive, indicating that the factors are positively connected with customer happiness while using Shopee's services and that Shopee has to improve these aspects if it wants to retain customer satisfaction.

4. Management implications

Shopee must adhere to the promises and policies made to customers. This is the most important component in determining Shopee's reputation and gaining consumer confidence. Return, exchange, warranty, claim and compensation policies should be edited and completed in a more clear and reasonable manner. Shopee should pay greater attention to these rules so that customers are aware of their benefits and do not perceive too many dangers while making a purchase. On the website, don't brag about your products or services; instead, utilize self-portraits to provide authenticity and provide correct introduction information. Customers also want vendors to feature genuine photographs of things in their adverts, according to research, so they can study and buy exactly what they want.

Shopee has to give a pricing comparison table, calculate shipping costs, a shopping plan (if consumers wish to buy a whole set of pricey items) or comparable product alternatives and alternative products on the website to help customers save time looking and choosing. To be able to operate better in customer service, Shopee's customer support and consultation hotline must be upgraded. To reduce client wait times, hotline employees must be able to rapidly resolve any issues that arise, and the number of consultants should be increased.

To avoid a situation where the information on the website is one kind and the product/service delivered to clients is another, the posted product/service information must first be filtered. Some information items and services on Shopee are currently too limited and repetitious in different booths. We need to enhance and give more information about items and services to customers, such as shape, color, attributes, usage and so on. Furthermore, information about the goods must be clearly and accurately announced on the packaging and product labels so that customers can better understand and feel the product, avoiding the situation where customers' perceptions differ from their actual experience when purchasing in a traditional manner.

Shopee's website must be designed to be rigorous, simple, and easy to use. The text on the website must be short, clear and attractive to readers. The website's ability to navigate must also be convenient, presenting the table of contents clearly and linking it, allowing customers to find products easily, quickly and accurately so that readers can see it again and again when they need to. need. The company's human resources need to be ready to help customers when they have difficulties with online shopping. It should be able to automatically identify problems when customers notify them that they need help and add an FAQ feature (Frequently Asked Questions) so that the system can classify itself and immediately find answers in the list of available answers, or else the question will be referred to the admin department and the customer will be notified of the response time. In addition, it is necessary to create automatic reply emails or

instructions during the purchase process to help customers feel cared for, respected and show the professionalism of the service, thereby increasing customer service satisfaction.

To ensure that customer information is not disclosed, Shopee should organize training and remind and check employees' professional ethics on a regular basis. When it comes to sensitive consumer data, security software must be used with caution. Only those who have been given permission can be handled. Shopee should also select a security solution provider for online transactions, particularly those involving electronic payments. The organization must have its own security policy, which must be revised on a regular basis as the work environment or technology evolves. Shopee has to put up a mechanism to deliver alerts on the website and even via email to customers to confirm transaction, order and payment status for consumers' peace of mind.

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IMPACT OF FEMALE LEADERS ON VIETNAMESE BANK PERFORMANCE

PhD. Nguyen Hong Thu* - BA. Nguyen Thi Kieu Trang** - PhD. Dao Le Kieu Oanh***

Abstract: The purpose of this study is to investigate the impact of female leaders on the performance on Vietnamese commercial banks. The article uses secondary data from the financial statements of 31 commercial banks representing Vietnam Commercial Bank in the period 2006-2020. The author employs regression models including Pooled Ordinary Least Squares (Pooled OLS), Fixed Effects Model (FEM) and Random Effects Model (REM). Then, the model is tested with Wald test for Pooled OLS and FEM, followed by Hausman test for FEM and REM, Langman Multiplier test for Pooled OLS and REM to select the optimal model; the next step is correcting the error for the model with the Generalized Least Squares (GLS) technique and finally the GMM method to overcome the endogenous occurrence in the research model. The findings of the study demonstrate that there is a substantial number of female leads in the Board of Directors, but that this has had little impact on enhancing the performance of Vietnamese commercial banks.

• Keywords: board of directors, performance, female leaders.

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Tóm tắt: Mục đích của nghiên cứu này là tìm hiểu tác động của các nữ lãnh đạo đến hiệu quả hoạt động đối với các ngân hàng thương mại Việt Nam. Bài viết sử dụng dữ liệu thứ cấp từ báo cáo tài chính của 31 ngân hàng thương mại đại diện cho Ngân hàng TMCP Việt Nam Thương Tín giai đoạn 2006-2020. Tác giả sử dụng các mô hình hồi quy bao gồm Bình phương tối thiểu thông thường gộp chung (Pooled OLS), Mô hình hiệu ứng cố định (FEM) và Mô hình hiệu ứng ngẫu nhiên (REM). Sau đó, mô hình được kiểm tra với kiểm định Wald cho Pooled OLS và FEM, tiếp theo là kiểm tra Hausman cho FEM và REM, kiểm tra Langman Multiplier cho Pooled OLS và REM để chọn mô hình tối ưu; bước tiếp theo là sửa lỗi cho mô hình bằng kỹ thuật Tổng bình phương tối thiểu (GLS) và cuối cùng là phương pháp GMM để khắc phục sự xuất hiện nội sinh trong mô hình nghiên cứu. Kết quả của nghiên cứu cho thấy rằng có một số lượng đáng kể các nữ lãnh đạo trong Hội đồng quản trị, nhưng điều này có ít tác động đến việc nâng cao hiệu quả hoạt động của các ngân hàng thương mại Việt Nam.

• Từ khóa: ban giám đốc, hiệu suất, các nhà lãnh đạo nữ.

1. Introduction

Female leaders are increasingly being employed in executive leadership roles in enterprises, and many female leaders have held prominent positions in society as well as in executive leadership, such as Ms. Victoria Kwakwa as World Bank Regional Vice President for East Asia from April 15th, 2016, according to World Bank, and Ms. Alison Rose as CEO of Royal Bank of Scotland (RBS) of the United Kingdom from November 1, 2019, according to Nat West group. In Vietnam, according to the 2019 annual report of Vietnamese commercial banks, Ms. Thai Huong is the Vice Chairman of the BOD cum General Director of Bac A Commercial Joint Stock Bank, and the position of Chairwoman of the BOD is Ms. Tran Thi Thoang; Ho Chi Minh City Development Commercial Joint Stock Bank appointed Ms. Le Thi Bang Tam as Chairwoman of the Board of Directors, Ms. Nguyen Thi Phuong Thao as Standing Vice Chairman of the Board of Directors; Saigon Thuong Tin Commercial Joint Stock Bank has Ms. Nguyen Duc Thach Diem

* Thu Dau Mot University, email: thunh@tdmu.edu.vn

** Thu Dau Mot University, email: kieutrangntkt85@gmail.com

*** Banking University of Ho Chi Minh City, email: oanhdlk@buh.edu.vn

as General Director cum member of the Board of Directors. It demonstrates that in the world of Finance and Banking, more and more women are taking on executive leadership roles and achieving outstanding results.

To be able to assess the impact of female leaders on the performance of Vietnamese commercial banks, the authors choose the topic *The Impact of Female Leaders on The Performance of Vietnamese Commercial Banks* as their research topic. The purpose of this research is to look at the structure of female leaders in the Boards of Directors of Vietnamese commercial banks from 2006 to 2020 in order to show how the percentage of female leaders on the boards of directors affects the performance of Vietnamese commercial banks.

2. Literature review

Theory of Resource Dependence and Gender Diversity in the Board of Directors. Pfeffer and Salancik's (1978) Resource Dependence Theory indicates that enterprises rely on resources outside of themselves to exist. Businesses are in danger as a result of these dependencies. Businesses can link up with external entities that control those resources to lessen dependency and uncertainty.

Pfeffer and Salancik (1978) attribute three benefits to board linkages: advice and counsel, legitimacy and channels for communicating. In terms of advice and counsel, accessible materials indicate that gender-diverse governance boards are involved in higher-quality discussions to address complex issues, some of which can be considered unattractive in the male councils, Kravitz (2003), Huse and Solberg (2006). As for legitimacy, corporate practices are legitimized by social norms and values. Cox et al. (1991) proposes value-in-diversity hypotheses by indicating that, as women's equal rights increasingly become a trend in society, it is legal for companies to appoint female directors to their boards. Female executives with diverse experiences and view points are better suited to link their companies with female customers and the female workforce in society when it comes to channels for communicating. Hillman et al. (2007) applied resource dependence theory to

examine the gender diversity of the board and found that US firms with gender diversity boards can achieve these benefits. In summary, resource dependence theory points to the beneficial effects of gender diversity boards.

Agency theory, managerial theory of the firm and gender diversity theory in the Board of Directors

In the enterprise, the agent problem arises when the manager does not have the good interests of the share holders to make decisions. The solution of the problem is to increase supervision from the Board of Directors. Fama and Jensen (1983) argue that the guidance and supervision of the BOD are essential in minimizing these conflicts of interest. Female directors are more involved in supervisory activities, according to empirical evidence. More gender-diverse boards, according to Gul et al. (2008) and Adam and Ferreira (2009), necessitate greater audit and managerial responsibility.

The influence of BOD gender diversity on corporate decisions also depends on the quality of corporate governance. In well-managed firms, the gender diversity of the BOD can be detrimental to firm value through unnecessary oversight, Adams and Ferreira (2009). Ferreira and Adams (2009). Gul et al. (2011), on the other hand, argue that having a gender-diverse BOD can help organizations improve their governance.

3. Data and methodology

3.1. Data

Following data collection, the study examines the most complete data of 31 Vietnamese commercial banks using secondary data from audited financial statements issued on the Vietnamese stock exchange for the years 2006 to 2020. Furthermore, secondary data was gathered from annual reports, management reports from 31 Vietnamese commercial banks, data from the World Bank, and data from related articles.

3.2. Methodology

The ratio between the results achieved and the costs required to achieve that result is used to assess efficiency. Commercial banks' performance can be measured using a variety of indicators.

This study uses three financial indicators to measure the performance of commercial banks, namely Return on Assets (ROA), Return on Equity (ROE), and Net Interest Margin (NIM). According to Rose (2004) financial ratios such as ROA, ROE and NIM are calculated using the following formulas:

$$ROA = \frac{\text{Return}}{\text{Assets}}$$

$$ROE = \frac{\text{Return}}{\text{Equity}}$$

$$NIM = \frac{\text{Investment returns} - \text{Interest expenses}}{\text{Average Earning Assets}}$$

Previous studies have utilized financial indicators such as ROA, ROE, and NIM to measure operational efficiency, such as Ameer and Mhiri (2013), who used three financial indicators to measure the performance of Tunisian commercial banks. The author of this research article claims that three financial indicators, ROA, ROE, and NIM, are used to quantify the operational performance of Vietnamese commercial banks and that they are also a dependent variable in the research model of bank performance (BPer) variable. In addition, the authors examine the impact of female leaders on the performance of Vietnamese commercial banks through the percentage of female leaders in the Board of Directors as the Women variable.

The authors offer the following model to explain the impact of female leaders on the performance of Vietnamese commercial banks, based on prior research by García - Meca et al. (2015):

$$BPer_{it} = \beta_0 + \beta_1 Women_{it} + \beta_2 For_{it} + \beta_3 BoardSize_{it} + \beta_4 Indep_{it} + \beta_5 Duality_{it} + \beta_6 Act_{it} + \beta_7 BankSize_{it} + \beta_8 Loans_{it} + u_{it}$$

In which:

BPer: Bank performance.

β_0 : intercept factor.

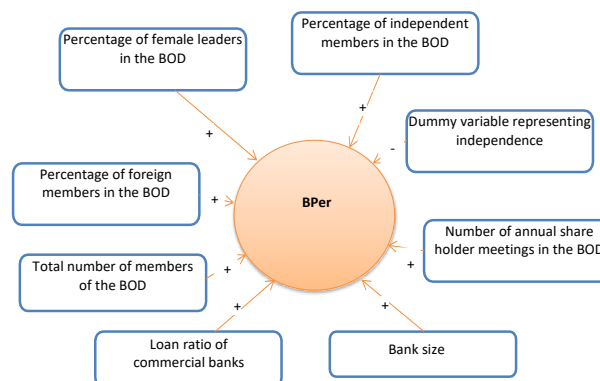
$\beta_1, \dots, \beta_{10}$: slopes of the independent variables.

u : statistical residuals.

i : The index representing commercial banks.

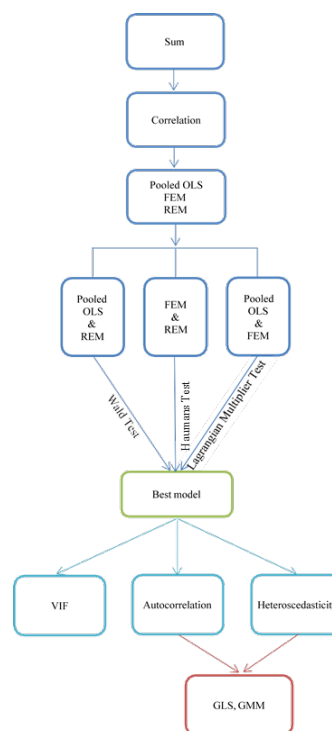
t : the index representing the observation period (from 2006 to 2020).

Figure 1: Model research



This study uses estimation methods for regression models with methods including Pooled Ordinary Least Squares (Pooled OLS), Fixed Effects Model (FEM), Random Effects Model (REM), followed by a test to select a suitable model, testing, and handling defects on the selected model. In addition, the study also uses the Generalized Method of Moments (GMM) to handle endogenous problems (if any) in the research model with the following diagram:

Figure 2: Research methodology



4. Results

Table 1: Descriptive Statistics

Variable	Obs.	Mean	Std.dev	Min	Max
ROE	432	0,0929672	0,0648731	-0,0459247	0,3055816
ROA	432	0,0089719	0,0069152	-0,0038244	0,0595185
NIM	432	0,0285327	0,0128337	-0,0061374	0,1036237
Women	416	0,1773702	0,1578423	0	0,8
For	416	0,0778916	0,1185086	0	0,4286
BoardSize	417	7,122302	1,743644	0	14
Indep	416	0,853813	0,1398974	0,125	1
Duality	386	0,0025907	0,0508987	0	1
Act	288	1,118056	0,3824828	0	3
BankSize	433	31,85179	1,391721	27,38751	34,9553
Loans	433	0,5422404	0,1309247	0,1138	0,8448
Bank	465	16	8,953905	1	31

Source: Result from the analysis

Table 2: Correlation matrix of variable ROE

	ROE	L.ROE	Women	Forneigners	Board Size	Indep	Duality	Act	BankSize	Loans	Bank
ROE	1.0000										
L.ROE	0.1267	1.0000									
Women	-0.1628	0.0751	1.0000								
For	0.2037	-0.090	-0.149	1.0000							
BoardSize	0.2450	-0.103	-0.094	0.3486	1.0000						
Indep	0.1957	-0.035	-0.213	0.1097	0.0538	1.0000					
Duality	0.0052	0.0050	0.1532	-0.043	-0.0120	0.0084	1.0000				
Act	0.0925	0.0799	-0.092	0.2433	0.0876	-0.029	-0.019	1.0000			
BankSize	0.4917	-0.086	-0.004	0.2744	0.3929	-0.011	0.0257	0.1514	1.0000		
Loans	0.1423	-0.083	-0.016	-0.049	0.0873	-0.180	0.0241	0.0870	0.3008	1.0000	
Bank	0.0559	0.0966	-0.332	0.0684	-0.2187	0.0922	0.0572	0.0956	-0.0158	-0.117	1.000

Source :Result from the analysis

Table 3: Correlation matrix of variable ROA

	ROA	L.ROA	Women	Forneigners	Board Size	Indep	Duality	Act	BankSize	Loans	Bank
ROA	1.0000										
L.ROA	0.1395	1.0000									
Women	-0.246	0.0265	1.0000								
For	0.1353	-0.098	-0.149	1.0000							
BoardSize	0.1366	-0.074	-0.094	0.3486	1.0000						
Indep	0.2529	0.0408	-0.213	0.1097	0.0538	1.0000					
Duality	-0.005	-0.023	0.1532	-0.0431	-0.0120	0.0084	1.0000				
Act	0.1106	-0.002	-0.092	0.2433	0.0876	-0.029	-0.019	1.0000			
BankSize	0.1618	-0.115	-0.004	0.2744	0.3929	-0.011	0.0257	0.1514	1.0000		
Loans	0.0696	-0.200	-0.016	-0.0492	0.0873	-0.180	0.0241	0.0870	0.3008	1.0000	
Bank	0.1158	0.1299	-0.332	0.0684	-0.2187	0.0922	0.0572	0.0956	-0.0158	-0.117	1.00

Source: Result from the analysis

Table 4: Correlation matrix of variable NIM

	NIM	L.NIM	Women	Forneigners	BoardSize	Indep	Duality	Act	BankSize	Loans	Bank
NIM	1.0000										
L.NIM	-0.049	1.0000									
Women	-0.260	0.0106	1.0000								
For	0.0314	-0.158	-0.149	1.0000							
BoardSize	0.0674	-0.105	-0.094	0.3486	1.0000						
Indep	0.1413	0.0378	-0.213	0.1097	0.0538	1.0000					
Duality	-0.036	0.0104	0.1532	-0.043	-0.012	0.0084	1.0000				
Act	0.1054	-0.091	-0.092	0.2433	0.0876	-0.029	-0.019	1.000			
BankSize	0.0794	-0.105	-0.004	0.2744	0.3929	-0.011	0.0257	0.151	1.0000		
Loans	0.2437	-0.239	-0.016	-0.049	0.0873	-0.180	0.0241	0.087	0.3008	1.0000	
Bank	0.1231	0.1444	-0.332	0.0684	-0.218	0.0922	0.0572	0.095	-0.0158	-0.117	1.000

Source: Result from the analysis

Table 5: VIF coefficients

Variable	VIF	1/VIF
Women	1,12	0,895766
For	1,21	0,825621
BoardSize	1,26	0,791688
Indep	1,13	0,885623
Duality	1,03	0,974566
Act	1,08	0,930097
Banksze	1,35	0,738174
Loans	1,17	0,857417
Mean VIF	1,17	

Source: Extracted from Stata15 software.

Table 6: Diagnostic test (ROE)

No	Tests	PooledOLS	FEM	REM	FEM	Pooled OLS	REM
ROE	F-test	F – test that all $u_i=0$: $F(12,251)=8,34$ Prob > F=0,0000 < α => select FEM					
	Hausmantest			Prob>chi2= 0,2247> α => select REM			
	Breusch and Pagantest					Prob>chibar2=0,0000 < α => select REM	
ROA	F – test that all $u_i=0$: $F(12,251)=6,66$ Prob > F=0,0000 < α => select FEM						
			Prob>chi2=0,080 90> α => select REM				
					Prob>chibar2=0,0000 < α => select REM		
NIM	F – test that all $u_i=0$: $F(12,251)=3,62$ Prob>F=0,0001< α =>selectFEM						
			Prob>chi2=0,000 0< α => select FEM				
					Prob>chibar2=1,0000> α => select Pooled OLS		

Source: Extracted from Stata 15 software

According to the findings of the model selection test, the REM model is the best fit for the dependent variable ROE, ROA. And, the FEM model is the best fit for the dependent variable NIM.

Tests for auto correlation and heteroscedasticity with the REM estimation model of the dependent variable ROE.

Table 7: The results of the model defect test with the dependent variable ROE

No	Tests	Statistics	Hypothesis	Results
ROE	Autocorrelation test	Prob>F=0,0976 > α	H0: no autocorrelation H1: have autocorrelation	No autocorrelation
	Heteroscedasticity	Prob>chibar2=0,0000< α	H0: noheteroscedasticity H1: have heteroscedasticity	Have heteroscedasticity
ROA	Auto correlation test	Prob>F=0,0166 < α	H0: no autocorrelation H1:have autocorrelation	The model occurs autocorrelation.
	Heteroscedasticity	Prob>chibar2=0,0000< α	H0: no heteroscedasticity H1: have heteroscedasticity	The model is subject to heteroscedasticity.
NIM	Auto correlation test	Prob>F=0,6195> α	H0: no autocorrelation H1: have autocorrelation	The model occurs autocorrelation.
	Heteroscedasticity	Prob>chibar2=0,0000< α	H0: no heteroscedasticity H1: have heteroscedasticity	The model is subject to heteroscedasticity.

Source: extracted from Stata 15 software.

The model is either heteroscedastic or autocorrelation. To overcome the heteroscedasticity, the author uses regression according to the GLS method.

Table 8: Results with dependent variable ROE

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Pooled OLS	FEM	REM	GLS	DGMM	SGMM
Women	-0.0332 (0.0228)	-0.0410** (0.0199)	-0.0395** (0.0199)	-0.0306 (0.0199)	-0.0467** (0.0195)	-0.0472*** (0.0108)
For	-0.0141 (0.0306)	0.0117 (0.0269)	0.00803 (0.0268)	-0.0186 (0.0263)	-0.0299 (0.0453)	-0.0480 (0.0377)
Board size	0.000877 (0.00231)	-0.000487 (0.00210)	-8.64e-05 (0.00208)	0.000127 (0.00178)	-0.00155 (0.00253)	0.00130 (0.00218)
Indep	0.0761*** (0.0273)	0.0501** (0.0240)	0.0528** (0.0240)	0.0613*** (0.0224)	0.0932*** (0.0291)	0.0720** (0.0237)
Duality	0.00383 (0.0581)	0.00306 (0.0510)	0.00180 (0.0510)	0.0110 (0.0557)	0.0306*** (0.00886)	0.0146*** (0.00389)
Act	-0.000391 (0.00932)	-0.00207 (0.00839)	-0.00217 (0.00836)	-0.00693 (0.00744)	-0.00239 (0.00610)	0.00126 (0.00924)
Bank size	0.0303*** (0.00373)	0.0311*** (0.00338)	0.0306*** (0.00336)	0.0285*** (0.00286)	0.0309*** (0.00279)	0.0255*** (0.00153)
Loans	0.00323 (0.0311)	0.0530* (0.0301)	0.0444 (0.0297)	0.0838*** (0.0275)	0.156*** (0.0426)	0.0807 (0.0502)
L.ROE					0.148 (0.0990)	-0.0217 (0.0742)
Constant	-0.952*** (0.115)	-0.973*** (0.105)	-0.952*** (0.105)	-0.923*** (0.0916)		-0.835*** (0.0585)
Observations	272	272	272	272	189	250
R-squared	0.275	0.345				
Number of YEAR		13	13	13	12	13
AR(1)					0,010< α	0,012< α
AR(2)					0,918> α	0,745> α
Sargan test					0,780> α	0,189> α
Hansen test					0,732> α	0,473> α
Number of group, number of instrument					12>11	13>12
Results					Condition satisfied	Condition satisfied

Pvalue in parentheses, ***p<0.01, **p<0.05, *p<0.1

Source: Extracted from Stata 15 software.

Table 9: Results with dependent variable ROA

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Pooled OLS	FEM	REM	GLS	DGMM	SGMM
Women	-0.00623** (0.00240)	-0.00713*** (0.00216)	-0.00690*** (0.00216)	-0.00514** (0.00206)	-0.00806** (0.00330)	-0.00760*** (0.00182)
For	-0.00202 (0.00322)	0.000416 (0.00292)	-0.000137 (0.00291)	-0.00234 (0.00274)	-0.00251 (0.00433)	-0.00347 (0.00422)
Board size	0.000167 (0.000243)	1.26e-05 (0.000228)	7.90e-05 (0.000225)	0.000210 (0.000201)	-7.82e-05 (0.000300)	0.000243 (0.000207)
Indep	0.00925*** (0.00288)	0.00655** (0.00261)	0.00692*** (0.00261)	0.00572** (0.00234)	0.00680** (0.00254)	0.00740*** (0.00234)
Duality	0.00137 (0.00612)	0.000357 (0.00554)	0.000268 (0.00554)	-0.00144 (0.00673)	-0.00380 (0.00224)	-0.00272** (0.000984)
Act	0.000989 (0.000983)	0.000835 (0.000912)	0.000870 (0.000907)	0.000531 (0.000853)	0.00134* (0.000628)	0.00118 (0.00129)
Bank size	0.000872** (0.000393)	0.000948** (0.000367)	0.000883** (0.000365)	0.000749** (0.000316)	0.000850 (0.000734)	0.000237 (0.000449)
Loans	0.00212 (0.00328)	0.00711** (0.00327)	0.00592* (0.00321)	0.00720** (0.00290)	0.0179*** (0.00419)	0.0108** (0.00382)
L.ROA					0.163 (0.222)	0.0102 (0.0905)
Constant	-0.0302** (0.0121)	-0.0319*** (0.0114)	-0.0293*** (0.0113)	-0.0269*** (0.00994)		-0.0137 (0.0152)
Observations	272	272	272	272	189	250
R-squared	0.110	0.143				
Number of YEAR		13	13	13	12	13
AR(1)					0,105> α	0,022< α
AR(2)					0,182> α	0,266> α
Sargan test					0,212> α	0,047< α
Hansentest					0,498> α	0,308> α
Number of group and number of instrument					12>11	13>12
Results					Condition unsatisfied	Condition satisfied

Pvalue in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: extracted from Stata 15 software

Table 10: Results with dependent variable NIM

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Pooled OLS	FEM	REM	GLS	DGMM	SGMM
Women	-0.0175*** (0.00482)	-0.0188*** (0.00460)	-0.0175*** (0.00482)	-0.0180*** (0.00543)	-0.0231*** (0.00681)	-0.0230*** (0.00442)
For	-0.00569 (0.00647)	-0.00552 (0.00621)	-0.00569 (0.00647)	-0.00749 (0.00846)	-0.0148 (0.0102)	-0.00911 (0.00739)
Board size	2.11e-05 (0.000488)	-7.19e-05 (0.000486)	2.11e-05 (0.000488)	0.000803 (0.000519)	1.32e-05 (0.000445)	5.09e-05 (0.000203)
Indep	0.0138**	0.00858	0.0138**	0.00894*	0.00566	0.0126*

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Pooled OLS	FEM	REM	GLS	DGMM	SGMM
	(0.00579)	(0.00555)	(0.00579)	(0.00518)	(0.00823)	(0.00593)
Duality	-0.00225	-0.00626	-0.00225	0.00110	-0.0120***	-0.00769***
	(0.0123)	(0.0118)	(0.0123)	(0.00911)	(0.00329)	(0.00160)
Act	0.00196	0.00293	0.00196	0.00108	0.000423	0.00306
	(0.00197)	(0.00194)	(0.00197)	(0.00145)	(0.00704)	(0.00404)
Banks size	1.59e-05	0.000254	1.59e-05	-0.00205	-0.000273	0.000344
	(0.000790)	(0.000782)	(0.000790)	(0.00134)	(0.00111)	(0.000636)
Loans	0.0257***	0.0351***	0.0257***	0.0444***	0.0407***	0.0419***
	(0.00659)	(0.00695)	(0.00659)	(0.00750)	(0.00877)	(0.00680)
L.NIM					-0.269**	0.0305
					(0.121)	(0.0947)
Constant	0.00437	-0.00436	0.00437	0.0625		-0.0151
	(0.0242)	(0.0243)	(0.0242)	(0.0415)		(0.0233)
Obs.	272	272	272	272	189	250
R-squared	0.136	0.185				
Number of year		13	13	13	12	13
AR(1)					0,039< α	0,015< α
AR(2)					0,150> α	0,355> α
Sargan test					0,036< α	0,939> α
Hansen test					0,081> α	0,961> α
Number of group, and number of instrument					12>11	13>12
Results					Conditionsatisfied	Conditionsatisfied

Pvalue in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: extracted from Stata 15 software

5. Discussions

The DGMM approach does not entirely satisfy the conditions to ensure model quality for the dependent variables of ROE, ROA, and NIM, as evidenced by the regression results with three dependent variables of ROE, ROA, and NIM. The SGMM approach satisfies all of the requirements for first-order auto correlation, second-order auto correlation, the tight constraint test for the instrumental variable, and the appropriateness test for the instrumental variable. As a result, we can observe that the SGMM approach meets all of the model quality assurance criteria, therefore it is used to regress three dependent variables: ROE, ROA, and NIM.

The findings reveal that the Women variable is statistically significant and has a negative impact on the performance of Vietnamese commercial banks as assessed by the dependent variables of ROE, ROA, and NIM.

The Women variable has statistical significance for the performance of Vietnamese commercial banks as measured by ROE, ROA, and NIM. This demonstrates that having a higher percentage of female leaders in the BOD does not improve the operational efficiency of Vietnamese commercial banks.

The variable percentage of BOD members who are foreigners in total BOD members (For), the numerical variable of BOD members (Boardsize), the numerical variable of BOD meetings (Act) have no statistical significance for the operational efficiency of Vietnamese commercial banks. This demonstrates that the number of foreign BOD members, BOD members, and BOD meetings has no bearing on the performance of Vietnamese commercial banks.

The numerical variable of independent members in the BOD over the total number of BOD members (Indept) is significant and has a positive impact on ROE, ROA and NIM. It indicates that the higher the number of independent members on the BOD compared to the overall number of members on the BOD, the more efficient the Vietnamese commercial banks' operations are.

The dummy variable equals 1 when the CEO is the chairman of the BOD, and it equals 0 (Duality) when the CEO is not. It is substantial and has a positive impact on ROE, but it is significant and has a negative impact on ROA and NIM. As a result, when the CEO is also the chairman of the BOD, the company will perform well in terms of ROE but not in terms of ROA or NIM.

The Bank size variable is considerable and has a positive impact on ROE; however, it is not significant with ROA or NIM. The larger the bank size, the more effective the operation of Vietnamese commercial banks measured by ROE.

With ROE, the variable of loan-to-total assets is not important; but, with ROA and NIM, it is considerable and has a favorable impact. The higher the loan-to-total assets ratio, the more efficient Vietnamese commercial banks' operations will be.

6. Conclusions

The Women variable is significant in the regression results and has a negative impact on the three indicators of ROE, ROA, and NIM. This is in contrast to the findings of García-Meca et al. (2015), who discovered that the number of female leaders in the BOD had a significant and favorable impact on commercial bank performance as evaluated by the Tobin's Q and ROA index.

From the research data, female leaders make up the majority of BOD members, with only a few female leaders holding the position of Chairman of the BOD, such as Ms. Tran Thi Thoang of Bac A Commercial Joint Stock Bank and Ms. Le Thi Bang Tam of Ho Chi Minh City Development Commercial Joint Stock Bank. This contributes to female leaders' decision-making being limited when they are members of the BOD. The decision-making process for the position of Chairman of the BOD will be decisive and contribute to the operational efficiency of Vietnamese commercial banks.

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FACTORS AFFECTING THE CHOICE OF A PLACE FOR MEDICAL EXAMINATION - CASE OF TAM DUC HOSPITAL

PhD. Dao Le Kieu Oanh* - PhD. Duong Quynh Nga**

Abstract: *This study examines the factors affecting hospital choice decisions of 440 patients in Tam Duc hospital in Vietnam and attempts to determine their importance level. Determination of these variables is critical for focusing management efforts on these critical areas and developing successful marketing strategies to maintain and grow hospital patient bases in the future. Our findings highlight the importance of service performance as well as the quality of expertise, cost of treatment and effectiveness of medical examination and treatment in informing such choices. Vietnamese health care managers may utilize these results to get a better understanding of how patients make cardiac health care facility selections and to create marketing strategies that will help them promote their facilities more successfully.*

• **Keywords:** *hospital choice, private cardio health care hospitals, choice factors, customer behavior.*

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Tóm tắt: Nghiên cứu này xem xét các yếu tố ảnh hưởng đến quyết định lựa chọn bệnh viện của 440 bệnh nhân tại bệnh viện Tâm Đức, Việt Nam và cố gắng xác định mức độ quan trọng của chúng. Việc xác định các biến số này là rất quan trọng để tập trung nỗ lực quản lý vào các lĩnh vực quan trọng này và phát triển các chiến lược tiếp thị thành công để duy trì và phát triển cơ sở bệnh nhân của bệnh viện trong tương lai. Phát hiện của chúng tôi nêu bật tầm quan trọng của việc thực hiện dịch vụ cũng như chất lượng chuyên môn, chi phí điều trị và hiệu quả khám chữa bệnh trong việc đưa ra những lựa chọn như vậy. Các nhà quản lý chăm sóc sức khỏe Việt Nam có thể sử dụng những kết quả này để hiểu rõ hơn về cách bệnh nhân lựa chọn cơ sở chăm sóc sức khỏe tim mạch và tạo ra các chiến lược tiếp thị giúp họ quảng bá cơ sở của mình thành công hơn.

• Từ khóa: lựa chọn bệnh viện, bệnh viện tư nhân chăm sóc sức khỏe tim mạch, yếu tố lựa chọn, hành vi khách hàng.

1. Introduction

There is a combination of public and private services in the healthcare system. Although the number of private hospitals is growing, just

6% of all healthcare institutions were privately held in 2014. However, private hospitals today offer more than 60% of total of outpatient care and have developed into an integral part of the national healthcare system. In recent times, despite large investment of money and resources, many private hospitals have been getting a lot of reports about the low utilization rate. The lack of patients resulted in their insufficient revenue, which cannot compensate for the cost of personnel, medicines and equipment depreciation. The health care sector is a sector of the national economic system and belongs to the service sector, serving social health needs and contributing to the national GDP.

After a period of conducting the medical socialization policy, Vietnam has had large and medium-sized private hospitals, setting up their own distinctive brands of high quality services, such as Hanoi French Hospital and An Sinh Hospital, etc., and even towards the scale of a more extensive, comprehensive strategy, achieved by building a chain of hospitals, clinics. For instance, Hoan My Medical Corporation (is available in HCMC, Da Nang, Dong Nai, Da Lat, Can Tho and Ca Mau), Vinmec (is available in

* Banking University of Ho Chi Minh City, email: oanhdlk@buh.edu.vn

** Ho Chi Minh City Open University, email: nga.dq@ou.edu.vn

Ha Noi, HCMC, Phu Quoc), and especially Tam Duc Heart Hospital. Ever since its establishment on March 08, 2006, Tam Duc Heart Hospital has quickly become a hopeful promise for people who are suffering from heart diseases, needing a heart operation to survive, to install a pacemaker, to fix a leaky valve. However, Tam Duc Heart Hospital also has to deal with these problems that other private hospitals have undergone recently.

Improving the quality of Health Care Services is regarded as the key strategic objective in Vietnam's Socio-Economic Development Plan. A wide range of solutions to enhance the health services is initiated: "Consolidation, development in basic health systems and medical facilities can help reinforce the initial healthcare and backup medical facilities; Development of The Health sector's organization; Enhanced training and advanced expertise, medical ethics, improved attitude of medical staff towards patients; Active health education". Therefore, it is important to understand the factors that influence patients' hospital choice. Previous hospital choice studies explored the variables that influence patients to utilize particular inpatient services.

This study extends previous work which examined the impact of factors such as quality of expertise, treatment costs, quality of service and quality of treatment examination on hospital choice in Tam Duc hospital on hospital choice of patients. This study aims to contribute more scientific and practical basis to help hospital's administrators have more information to determine the policies and decisions in improving the quality of the hospital more accurately.

This study is presented in 5 sections. Next section presents the review literature in hospital choice. Section 3 describes an exploratory model that explains cardiac care hospital patients' choice. In section 4, the statistical results are discussed. Section 5 concludes and provides some practical implications for heart health care management and policy.

2. Literature review

It is critical to understand the variables that contribute to patients' hospital selection. Earlier hospital choice research examined the factors

that affect patients' decisions to choose specific inpatient treatments. The authors suggest that rural patients would not forego their local healthcare facilities in order to get treatment at other institutions if they considered the care to be better. However, previous research has identified the following significant predictors of patients' hospital choice behavior: (1) patient characteristics such as gender, age, race, and financial resources (Adam, 1991; Bronstein, 1991; Roh (2005); Tai (2004); and (2) hospital characteristics such as bed capacity, distance between the patient's residence and hospitals, and the hospital's network with other health care facilities (Adams, 1991; Buczko 1992; Chernew, 1998; Luft, 1986, 1990; Bronstein, 1991; Roh, 2005; Tai, 2004). In the work of Balia et al. (2020), there are considerable disparities between local and distant providers when it comes to hospital attractiveness, with private ownership and a strong dedication to research playing a favorable influence solely for the latter.

Numerous previous studies have discovered that hospital competition has resulted in lower hospital prices, lower hospital cost growth rates, lower margins, and changes in the adoption and use of technology (Baker, 2002; Bamezai, 1999; Bundorf, 2004; Robinson, 1991; Gaskin, 1997; Zwanziger, 1988 - 1994 - 2000). Several further studies showed that hospitals in more competitive markets and in regions with a greater HMO penetration offered a better level of treatment to adult patients with medical problems (Rogowski, 2007; Sisk, 1998). Kessler and McClellan (2002) discovered that hospital competition reduced hospital expenditures and poor outcomes in cardiac treatment. According to Kessler and Geppert (2005), hospital competition enhanced resource usage matching to patient acuity level. They found that hospitals situated in a more competitive health care market provided higher quality services suitable for the severity or complexity of their patients' situations (24). (Kessler, 2005). Even when there are large changes in the decision environment, econometric approaches may give valuable supplementary information, according to Raval et al. (2021).

Goldsteen et al. (1994) identified the factors influencing hospital choice by analyzing the inpatient discharge data of 2172 rural Illinois patients. They discovered that patient age, payment source, the community's per capita income, the number of hospital services, the existence of a psychiatric service, and the financial health of the hospital were all important predictors of hospital choice. Yaghubi (2011) notes that patients now have a larger part in decision-making and hospital selection than they did in the past. According to Soleimani (2003), consumer behavior research is critical for marketing since effective marketing requires a thorough understanding of consumers' wants and desires. Taylor et al. (2004) shown that criteria such as ease of access, quality of treatment, hospital reputation, and wait time all play a role in hospital selection. They discovered that giving patients with enough information may assist them in making an educated choice. Geber Michael et al. (2007) performed a research in Eritrea including 1657 patients. They discovered that significant variables like as education, the quality of health care services, salaries, the severity of illness, social standing, and the patient's location all have a role in choosing healthcare providers statistically. According to Coulter et al. (2005), factors such as the likelihood of a successful surgery, waiting time, hospital reputation, follow-up capabilities, doctor reputation, doctor-hospital relationships, hygiene standards, and service quality are likely to influence patients' hospital selection decisions. Boshoff (2004) demonstrated that the quality of service, the nursing staff's empathy, and the private section's insurance coverage all have an effect on the loyalty and happiness of consumers as marketing objectives. In Vietnam, both the private and governmental sectors provide healthcare services, and with the private sector accounting for 60% of healthcare organizations, the key issue is why people choose private companies.

We draw a number of implications on the basis of analysis of survey results to help Tam Duc Heart Hospital attract more patients to use their services. The research topic used qualitative research method in order to determine concepts

used in the measurement scale of factors affecting the selection of Tam Duc Heart Hospital of people in HCMC. The investigation was done in a form of group discussion, 01 group consisting of 10 health specialists working at Tam Duc Heart Hospital and 01 group consisting of 10 patients who used medical services at the hospital.

Therefore, we proposed hypotheses for these factors:

Hypothesis H1: The quality of service factor correlates to the selection of Tam Duc Heart Hospital in HCMC.

The cost of medical examination and treatment factor plays an important role in most studies on patients' satisfaction and choice of hospital (Mohammad Amin Bahrami, 2013; Andaleeb & ctg, 2007; Dor and ctg (1987); Phùng Thị Hồng Hà & Trần Thị Thu Hiền, 2012; Phạm Xuân Lan & Phùng Thị Hồng Thắm, 2011). The patients' income factor in other investigations also relates to the cost factor. The selection of hospital will depend on patients' income with the possibility of paying high or low fees.

Hypothesis H2: Treatment Cost factor correlates to the selection of Tam Duc Heart Hospital in HCMC.

Theo Anderson & ctg (1994) emphasized that the feeling of the cost plays an important role for customer satisfaction which leads to the decision on selecting services, because customers often think about the cost when value the service.

Hypothesis H3: Effectiveness of medical examination and treatment factor correlates to the selection of Tam Duc Heart Hospital in HCMC.

For the effectiveness of medical examination and treatment factor, studies of Mohammad Bahrami (2013), McMullan et al. (2004), Phùng & Trần (2012), Phạm & Phùng (2011) all emphasize this as one of the factors determining whether people choose to use the hospital services or not. The better the hospital's treatment, the more patients choose the hospital. Therefore, the author proposed this following hypothesis is:

Hypothesis H4: Quality of expertise factor correlates to the selection of Tam Duc Heart Hospital in HCMC.

The competence of doctors and nurses in research of Andaleeb & ctg (2007), Phùng & Trần (2012) and Phạm & Phùng (2011) is the reflection of the professional quality of the hospital's staff. Hospitals with a highly skilled medical team will be able to bring high medical examination and treatment effectiveness to patients. The hypothesis for this factor in the author's research model as follows:

For the draft questionnaire, we have conducted a test interview with a group of 10 people to check the contents, the words of the scale and continued to adjust the scale and decide the last official questionnaire. Thus, from observation variables that measure the factors affecting the selection of Tam Duc Heart Hospital and variables that decide the overall choice, after discussing the authors group left the remaining 21 observation variables, including:

The quality of service is measured by 5 observation variables.

- The quality of expertise is measured by 4 observation variables.

- Effectiveness of medical examination and treatment is measured by 5 observation variables.

- The cost of medical examination and treatment is measured by 4 observation variables.

- The overall choice decision is measured by 3 observation variables.

Table 1. Preliminary scale

Variables	Denote
Quality of expertise	
You believe that Tam Duc Heart Hospital is always on schedule	CLDV1
You believe that Tam Duc Heart Hospital's waiting rooms are comfortable	CLDV2
You believe that Tam Duc Heart Hospital is fully equipped with modern medical equipment	CLDV3
You believe that Tam Duc Heart Hospital has quick administrative process and procedure	CLDV4
You believe that Tam Duc Heart Hospital's medical staff always treat patients with friendliness	CLDV5
Effectiveness of medical examination and treatment	
You believe that the professional qualifications of doctors at Tam Duc Heart Hospital create a sense of trust in the patient	CM1

Variables	Denote
You believe that the quality of the tests on cardiovascular diseases is guaranteed	CM2
You believe that the treatment regimens for cardiovascular diseases of doctors at Tam Duc Heart Hospital make patients feel secure.	CM3
You believe that Tam Duc Heart Hospital's doctors provide adequate information about medical records to cardiovascular patients	CM4
Medical examination and treatment effectiveness	
You choose Tam Duc Heart Hospital because it brings trust to cardiovascular patients	HQKCB1
You believe that your health is improved after your course of treatment	HQKCB2
You believe that Tam Duc Heart Hospital guarantees the exact determination of the patient when providing services	HQKCB3
You believe that Tam Duc Heart Hospital does a good job of preventing the risks, the development of cardiovascular diseases that may occur to patients	HQKCB4
You believe that the treatment of cardiovascular diseases of the hospital has been effectively operated	HQKCB5
The cost of medical examination and treatment	
You believe that the fee matches the quality of service provided by Tam Duc Heart Hospital	CPKCB1
You believe that Tam Duc Heart Hospital's fee corresponds with your treatment method	CPKCB2
You believe that Tam Duc Heart Hospital's fee is acceptable	CPKCB3
You believe that Tam Duc Heart Hospital's fee is suitable to your income	CPKCB4
Hospital choice decision	
You will choose Tam Duc Heart Hospital to solve your cardiovascular health problems	LUACHON.1
You are willing to recommend Tam Duc Heart Hospital to other people when they have a need for cardiovascular examination and treatment	LUACHON.2
Tam Duc Heart Hospital is your first choice	LUACHON.3

The survey was carried out by interviewing method through 440 questionnaires.

Method: Each day randomly give 20 questionnaires to 20 patients and their family (10 inpatients and 10 outpatients), for 22 working day, a total of $20 \times 22 = 440$ questionnaires. The number of questionnaires collected from the survey was 419, after processing left the remaining of 400 complete questionnaires. The author entered this data from 400 questionnaires into SPSS software to use for subsequent analysis steps.

3. Methodology

Descriptive data statistics shows that: About gender: 266 people are male (comprise 66.5%), 134 people are female (comprise 33.5%). About age: There are 46 people aged 18-24 (comprise 11.5%), 194 people aged 25-34 (comprise 48.5%), 96 people aged 35-44 (comprise 24%), 64 people aged 45 or over (comprise 16%). The common age group is 25-44 (comprise 72.5%). About income: There are 23 people earning less than 5 million/month (comprise 5.8%), 62 people earning 5 - less than 10 million/month (comprise 15.5%), 151 people earning 10 - less than 15 million/month (comprise 37.8%), 164 people earning above 15 million/month (comprise 41%). The common income group is 10 million/month or over (comprises 78.8%). Thus, the survey participants are mainly male, between the ages of 25 and 44, with incomes from 10 million/month or more.

Cronbach's Alpha coefficient was used in advance to eliminate garbage variables. Accordingly, observed variables with the variable correlation coefficient - total less than 0.3 will be eliminated and the criteria for selecting the scale is Cronbach's Alpha from 0.6 or higher (Nunnally and Burnstein, 1994). EFA method was used for 18 observation variables of 4 independent factors, with Principal component analysis method, Varimax rotation and the stoppage when extracting the Eigenvalues factor of 1.

Table 2. Dependent Factor EFA Analysis

Kaiser-Meyer_Olkin Measure of Sampling Adequacy		0.689
Bartlett's Test of	Approx Chi-Square	448.671
Sphericity	Df	3
	Sig.	0.000

KMO coefficient equals to 0.689 (satisfactory must be ≥ 0.5) so EFA factor Analysis corresponds with the data. Chi-square statistics of Bartlett's test reach a 448.671 value with significance level Sig. = 0.000 (satisfactory must be ≤ 0.05). Therefore, these observation variables are correlated to each other in the overall range. The sum of extracted variance is 73.404% (satisfactory must be $\geq 50\%$) indicates that 01 drawn factor

can explain 73.404% of the data's variation. The scales, therefore, are accepted. Thus, the scales after analyzing still remain the same observation variables.

4. Findings

Correlation Analysis

The result of correlation matrix run shows that the factors "CLDV", "OP", "CM" are correlated in the same direction with the choice decision in quite strong levels, the correlation coefficient is statistically significant with significance level < 0.01 . And the factor "CPKCB" is negatively correlated with the choice decision with significance level > 0.01 . In addition, the independent variables are also correlated with each other, so when analyzing regression, researchers need to pay attention to the probability of multicollinearity phenomenon.

Table 3. Correlation coefficient matrix

		CLDV	CPKCB	HQKCB	CM	LUACHON
CLDV	Pearson Correlation	1	0.010	0.559**	0.319**	0.609**
	Sig. (2-tailed)		0.846	0.000	0.000	0.000
CPKCB	Pearson Correlation	0.010	1	0.020	0.027	-0.078
	Sig. (2-tailed)	0.846		0.697	0.586	0.122
HQKCB	Pearson Correlation	0.559**	-0.020	1	0.349**	0.549**
	Sig. (2-tailed)	0.000	0.697		0.000	0.000
CM	Pearson Correlation	0.319**	0.027	0.349**	1	0.532**
	Sig. (2-tailed)	0.000	0.586	0.000		0.000
LUACHON	Pearson Correlation	0.609**	-0.078	0.549**	0.532**	1
	Sig. (2-tailed)	0.000	0.122	0.000	0.000	

*** The correlation is significant at the 0.01 level

** The correlation is significant at the 0.05 level

* The correlation is significant at the 0.1 level

Table 4. Regression analysis

R	R ² RSquare	Adjusted RSquare	Std. Error	FChange	Sig. FChange	Durbin- Watson
0.732 ^a	0.536	0.531	0.61740	114.159	0.000	2.173

Table 5. Regression analysis results

Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinear Statistics	
	Beta	Std. Error	Beta			Allowable Level	VIF
(Constant)	0.009	0.149		0.063	0.950		
CLDV	0.388	0.043	0.381	9.095	0.000	0.669	1.494
CPKCB	-0.055	0.022	-0.086	-2.513	0.012	0.998	1.002
HQKCB	0.229	0.045	0.216	5.107	0.000	0.654	1.529
CM	0.346	0.038	0.337	9.088	0.000	0.855	1.170

The model has an adjusted R^2 coefficient = 0.531, means that 53.1% of the variation of Choice Decision variable (LUACHON) is explained by the variation of the 4 components with a reliability of 95%.

Durbin-Watson = 2,173 satisfies the requirement $1 < \text{Durbin-Watson} < 3$

Assess the suitability of the model: The adjusted R^2 coefficient = 0.531 shows that the suitability of the model is quite high. The independent variables can explain 53.1% of LUACHON variable. Durbin-Watson = 2,173 satisfies the requirement $1 < \text{Durbin-Watson} < 3$

Multi collinearity examination: Variance magnification coefficient $VIF = 1/\text{Tolerance}$ satisfies the condition $1 \leq VIF < 10$, indicating there is no multi collinearity phenomenon.

Test the implicit assumptions of linear regression

According to the standardized residual frequency diagram, the mean value $\text{Mean} = -1,42 \cdot 10^{-15}$ (near 0) and standard variance = 0,995 (approximately 1). The normal distribution graph of the residuals also shows that the distribution of the residuals has a normal distribution form. Observing the Q-Q Plot graph of the residuals, the observation points of the residuals are mainly concentrated near the expectation line, so the distribution of residuals is normally distributed and satisfies the requirement of the normal distribution of the residuals.

Regression results

Quality of service (CLDV)

Hypothesis H1: The quality of service has a positive (+) impact on Choice Decision. The standardized regression coefficient $\beta_1 = 0,381$, sig. (β_1) = 0,000 < 0,05: support the hypothesis

Cost of medical examination and treatment (CPKCB)

Hypothesis H2: The cost of medical examination and treatment has a negative (-) impact on Choice Decision. The standardized regression $\beta_2 = -0,086$, sig. (β_2) = 0,012 < 0,05: support the hypothesis

Effectiveness of medical examination and treatment (HQKCB)

Hypothesis H3: The effectiveness of medical examination and treatment has a positive (+) impact on Choice Decision. The standardized regression coefficient $\beta_3 = 0,216$, sig. (β_3) = 0,000 < 0,05: support the hypothesis.

Quality of expertise (CM)

Hypothesis H4: The quality of expertise has a positive (+) impact on Choice Decision. The standardized regression coefficient $\beta_4 = 0,337$, sig. (β_4) = 0,000 < 0,05: support the hypothesis

The test results of the hypotheses are summarized in the following table:

Table 6. Test the hypotheses

Hypothesis	Results
H1: The quality of service has a positive impact on Choice Decision.	Accept
H2: The cost of medical examination and treatment has a negative impact on Choice Decision.	Accept
H3: The effectiveness of medical examination and treatment has a positive impact on Choice Decision.	Accept
H4: The quality of expertise has a positive impact on Choice Decision.	Accept

Research results discussion

From the linear regression equation, we see that 4 components effect on the selection of Tam Duc Heart Hospital of people in Ho Chi Minh City with various degrees, the gap difference is considerable, from 0,086 to 0,381, demonstrates the different effects of these components on people's choice of Tam Duc Heart Hospital. The author will analyze the components based on the beta coefficient from high to low. Therefore, the quality of service has the largest beta coefficient of 0,381; followed by the quality of expertise with 0.562 beta coefficient; the effectiveness of medical examination and treatment 0,337 and the cost of medical examination and treatment has the smallest beta coefficient -0,086.

The quality of service has the strongest impact on the selection of Tam Duc Heart Hospital of people in HCMC. By increasing one unit of Quality of service, the selection of Tam Duc Heart Hospital increases by 0,381 units. The second strongest impact on the selection of Tam Duc Heart Hospital of people in HCMC is the quality of expertise. By increasing one unit of Quality of expertise, the selection of Tam Duc Heart Hospital increases by 0,337 units. The effectiveness of medical examination and treatment has the third strongest impact on the selection of Tam Duc Heart Hospital of people in HCMC. By increasing one unit of Effectiveness of medical examination and treatment, the selection of Tam Duc Heart Hospital increases by 0,216 units. Finally, the factor the cost of medical examination and treatment has a negative impact on the selection of Tam Duc Heart Hospital of people in HCMC. By decreasing one unit of Cost of medical examination and treatment, the selection of Tam Duc Heart Hospital increases by 0,086 units. This is reasonable because the higher the cost of treatment, the more it affects the selection of the hospital.

Through testing the scale based on Cronbach's Alpha reliability coefficient and the factor analysis EFA, it is shown that the scales have reached the required reliability. The regression analysis results indicate that the research model is suitable for the data. In addition to assessing the scale and testing the theoretical model, we also analyze the level of importance of the factors affecting the selection of Tam Duc Heart Hospital, including 4 factors respectively: Quality of service (CLDV) with $\beta = 0.381$, Cost of medical examination and treatment (CPKCB) with $\beta = -0.086$, effectiveness of medical examination and treatment (HQKCB) with $\beta = 0.216$, Quality of expertise (CM) with $\beta = 0.337$. The research model can explain 53.1% of the variation of the selection of Tam Duc Heart Hospital of people in HCMC. The factor "Quality of service" with $\beta = 0,381$ indicates that the selection of Tam Duc Heart Hospital of people in HCMC is most strongly affected by it.

According to the survey results, the patients feel satisfied with "The hospital is always on schedule", "The waiting rooms of Tam Duc Heart Hospital is comfortable", "Tam Duc Heart Hospital is fully equipped with modern medical

equipment", "Administrative process and procedure of Tam Duc Heart Hospital are quick", "Tam Duc Heart Hospital's medical staff always treat patients with friendliness". Thus, this is a current strategic competitive factor and also the basis for boosting the remaining factors, so Tam Duc Heart Hospital continues to promote the quality of service in order to attract patients.

5. Conclusion

According to the regression results, we found that the factors proposed to be included in the model all showed a large impact on the decision to choose Tam Duc Heart Hospital of people in Ho Chi Minh City. The normalized regression equation is as follows:

$$LUACHON = 0.381*CLDV - 0.086*CPKCB + 0.216*HQKCB + 0.337*CM$$

From the linear regression equation, we can see that 4 components affect the choice of Tam Duc Heart hospital of people in Ho Chi Minh City with different degrees. We analyzed the components based on the beta coefficient. Therefore, Quality of Service has the largest beta coefficient of 0.381; next Professional quality 0.337; The efficiency of medical examination and treatment is 0.216 and finally the cost of medical examination and treatment - 0.086. Service quality has the strongest impact on the choice of Heart Tam Duc hospital of people in Ho Chi Minh City. When increasing by one unit Service quality will increase the decision to choose Heart Tam Duc hospital by 0.381 units. Next, Professional quality has the second strongest impact on the choice of Heart Tam Duc hospital of people in Ho Chi Minh City. When Professional quality variable increase one unit, the hospital decision variable will increase to 0.337 units. The effectiveness of medical examination and treatment has the third strongest impact on the choice of Tam Duc Heart Hospital of people in Ho Chi Minh City. When increasing by one unit the efficiency of medical examination and treatment will increase the decision to choose Heart Tam Duc hospital by 0.216 units. Finally, the cost factor of medical examination and treatment has a negative influence on the choice of Heart Tam Duc hospital of people in Ho Chi Minh City. When reducing one unit the cost of medical examination and treatment will increase the decision to choose Heart Tam Duc hospital by

0.086 units. This is reasonable because the higher the patient's cost; the more it affects the choice of hospital for treatment. Unlike in the past, patients are no longer oblivious to the services they get at hospitals. They understand the worth of their money and want higher-quality services. Patients want the highest quality healthcare treatments accessible. Given patients' increasing knowledge and sensitivity to their illnesses and treatment procedures, each hospital's service framework must be modified in accordance with appropriate models. Hospital administrators must be aware of the requirements for a good hospital and the expectations of patients. They should ascertain which factors are more significant to patients and which problems result in their complaints. To succeed in a competitive setting, managers must consider all of these variables and make the best possible use of available resources. Although care was taken to ensure the data collection was useful and credible, the study has some limitations, including the following: the sample size is small and non-random (to maximize respondent relevance); the study area is limited to the relatively Tam Duc hospital in HCM city, which means that the insight gathered cannot be extrapolated to patients in North and Central Vietnam, or in smaller towns. Due to time and budget constraints, we could not be gathered from areas outside of HCM. The results should be evaluated carefully, and no sweeping conclusions should be drawn. Nonetheless, taking geographical variables and patient sample variety into account, the results should be applicable to different demographic groupings.

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IMPROVING THE ANALYSIS OF FINANCIAL STATEMENTS JOINT STOCK ENTERPRISES AT COMMERCIAL BANKS IN VIETNAM

MA. Pham Thi Thu Hoai - MA. Le Thi Tram Anh*

Abstract: After the 4th Covid-19 epidemic broke out in Vietnam, businesses faced many difficulties and challenges such as difficulty in accessing customers, cash flow imbalance, supply chain disruption, etc. Enterprises in general and joint stock enterprises in particular need capital to maintain and develop production and business. Therefore, commercial banks make a great contribution to providing loans to businesses. However, in order to lend to businesses, banks need to assess the financial capacity of enterprises through financial statements, this is a very important step to help banks reduce risk.

• Keywords: joint stock enterprise, commercial bank.

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Tóm tắt: Sau khi làn sóng dịch Covid-19 lần thứ 4 bùng phát tại Việt Nam, các doanh nghiệp phải đối mặt với nhiều khó khăn, thách thức như khó tiếp cận khách hàng, mất cân đối dòng tiền, gián đoạn chuỗi cung ứng, ... Doanh nghiệp nói chung và doanh nghiệp cổ phần nói riêng rất cần vốn để duy trì và phát triển sản xuất kinh doanh. Do đó, các ngân hàng thương mại đóng góp rất lớn trong việc cung cấp các khoản vay cho các doanh nghiệp. Tuy nhiên, để cho doanh nghiệp vay vốn, ngân hàng cần đánh giá năng lực tài chính của doanh nghiệp thông qua báo cáo tài chính. lập báo cáo tài chính, đây là bước rất quan trọng giúp ngân hàng giảm thiểu rủi ro.

• Từ khóa: doanh nghiệp cổ phần, ngân hàng thương mại.

1. Introduction

In the process of international economic integration, the development of enterprises is a matter of great concern to the Party and State, considered as one of the key tasks in the socio-economic development strategy of country. Promoting enterprise development will promote the development of the economy, make

an important contribution to the gross national economic product, create many goods and services for the economy. In the past 2020, with the outbreak of the Covid-19 disease, businesses have faced many difficulties. Businesses need capital for business development and business recovery. That shows that expanding lending to businesses is an opportunity for commercial banks, but it also brings many risks for banks. Therefore, the analysis of corporate financial statements plays a very important role, helping the bank to estimate the profitability as well as the risk level of the credit, thereby making a decision to lend the business. Currently, banks only calculate and analyze a number of indicators such as short-term debt ratio, quick ratio, considering capital structure, assets,... through data on financial statements to assess the financial position of corporate customers. That leads banks to not fully and accurately assess the financial situation, making the level of risk in lending increased. In addition, banks have only introduced and built a system of indicators for analyzing the financial situation for corporate customers in general, but have not yet built a system of indicators for each type of

* Department of Statistics - Analysis, Faculty of Accounting - Auditing, Thuongmai University;
email: hoai.phamtkpt@tmu.edu.vn, letramanh@tmu.edu.vn

business in the form of ownership, especially joint stock enterprises.

Therefore, the completion of financial statement analysis in assessing the financial position of joint-stock companies is very important for commercial banks in order to minimize risks, improve credit quality and contribute to the development of the economy. The analysis of financial statements of joint-stock companies is very necessary at commercial banks in order to make a practical contribution to completing the analysis of financial statements of joint-stock companies, which enhances appraisal activities at commercial banks.

2. Literature review

Currently, there are a number of scientists in the country who research, evaluate and approach the analysis of financial statements from different aspects. The authors have synthesized a number of master theses, doctoral theses and research works as follows: Vo Thi Minh Tam (2014) "Improving the analysis of financial statements for loans credit at Agribank Quang Binh". The author presented and systematized the basic theory of financial statement analysis, the process of analyzing corporate financial statements for credit loans. At the same time, the author evaluates the current situation of analyzing financial statements for credit loans at Agribank Quang Binh, and proposes some complete solutions such as: completing the process of analyzing financial statements to serve customers, credit lending activities, supplementing criteria for analyzing cash flow statements, improving staff qualifications, etc. Ngo Thi Lan Huong (2015) "Completing the analysis of customer financial statements at Joint Stock Commercial Bank for Foreign Trade of Vietnam, Da Nang branch". The author presents the criteria for evaluating the results and the factors affecting the analysis of customer financial statements at commercial banks. At the same time, assessing the current situation of analyzing customer financial statements at a joint stock commercial bank for foreign trade of Vietnam, and proposing perfect solutions, however, the author has not

clearly stated the analysis process, financial statements at the bank. Nguyen Van Tuan (2019) "Completing the analysis of financial statements of corporate customers in lending activities at Joint Stock Commercial Bank for Investment and Development of Vietnam - Pho Nui Branch". The author has clarified the basic theoretical issues of analyzing financial statements of corporate customers and evaluated the analysis of financial statements of corporate customers for banking lending activities, from which proposes solutions to improve the content of financial statement analysis. However, in this study, the author only stopped at researching and evaluating the analysis of financial statements in general without classifying the groups of financial analysis criteria suitable for each type of business. Nguyen Khanh Phuong (2019) "Completing financial analysis of corporate customers in lending activities of joint stock commercial bank for investment and development of Vietnam - HoanKiem branch". The author has assessed the current situation of financial analysis of corporate customers at BIDV - HoanKiem branch through such contents as databases, analytical methods, analytical organization and content of financial analysis main. In addition, the author also evaluates internal and external factors affecting financial analysis at BIDV, and at the same time, the author proposes solutions to improve analysis at BIDV - branch of HoanKiem. In addition, there are a number of other studies by authors such as Nguyen Quynh Chi (2009); Le Van Cuong (2015); Vo Thi Thao Van (2015); Pham Manh Hung (2018);

In the world, researches on analyzing financial statements of corporate customers are also of interest to many scientists. Authors group Mostafa Monsur Hasan, Adrian Cheung, Grantley Taylor with the article "Financial statement comparability and bank risk-taking" (2020) This study examines the relationship between the ability to evaluate financial statements and acceptability the bank's risk taking. Analysis of a number of publicly listed US banks for the period 1994-2019 shows that banks with more

comparable financial statements are associated with significantly less risk taking. The authors also assess that the ability to analyze financial statements and risk tolerance of small banks is better than that of large banks. Overall, this study provides unique insights into the role of financial statement assessment in limiting risk-taking in the banking sector. Author Stephen H. Penman (2006) with the study “Financial statement analysis and security valuation”, the author offers a way to determine the value of a company through financial statement analysis to assess the position of liabilities and equity of that company. The author stands from the perspective of an investor to analyze the market value of a stock using the fundamental principles analysis method. By using the company’s accounting information combined with modern financial theories to develop analytical tools and determine the actual value of investment activities. However, the author only stops at the general analysis to help the investment in securities, but has not analyzed and evaluated specific types of enterprises. Author K.R. Subramanyam (2014) with the study “Financial analysis statement: eleventh edition” The author raised the basic problems of financial statements and financial statement analysis. The author has also shown that financial statements are relevant to the decisions of many individuals including investors, creditors, consultants, managers, auditors, directors, analysts, managers and staff. The author also lays out the analytical skills needed for business success and applies to real-world companies.

There are also a number of articles related to financial statement analysis such as: “Model selection for financial statement analysis: Variable selection with data mining technique” by Ken Ishibashia, Takuya Iwasakia, Shota Otomasaa and Katsutoshi Yada (2016); The article “Application of machine learning models and artificial intelligence to analyze annual financial statements to identify companies with unfair corporate culture” by Joanna Wyrobeka (2020).

The researches of the scientists all provide the basics of financial statements and financial statement analysis. However, these studies mainly analyze financial statements for the subjects who are investors and managers, but have not paid attention to the contents of financial statement analysis for subjects who are credit professionals. In commercial banks, they study deeply the details of financial statement analysis for each type of enterprise, especially joint-stock enterprises.

3. Object and scope of research

The research topic focuses on analyzing and evaluating the current situation of analyzing financial statements of joint-stock companies in credit activities at a number of joint-stock commercial banks such as Seabank, Tienphong Bank, Vietinbank, BIDV, Vietcombank, Techcombank, ... this is the group of commercial banks with the largest market share in commercial banks

Research method (Methodology): Using expert method, survey and collect practical information on analyzing financial statements of joint-stock enterprise at commercial banks in Vietnam today. The authors conducted in-depth interviews with 21 experts representing different commercial banks in Vietnam. These experts are the ones who directly direct the analysis of the financial statements of the joint-stock companies when they need to borrow capital.

Table 1. Expert interview survey content

Interview contents	Reality	Limitations, existence and causes	Solutions
Organize the analysis of financial statements	- Steps to organize the analysis of financial statements - Analytical methods	- Limit, exist - Reason	- Temporary solution - Protracted solution - Suggestions to superiors
Financial statement analysis process	- Analytical Regulations - Analytical Process	- Limit, exist - Reason	- Temporary solution - Protracted solution - Suggestions to superiors

Interview contents	Reality	Limitations, existence and causes	Solutions
Analytical content	<ul style="list-style-type: none"> - Asset and capital analysis - Solvency analysis - Analysis of the ability to secure loans - Analyze the efficiency of capital use - 	<ul style="list-style-type: none"> - Limit, exist - Reason 	<ul style="list-style-type: none"> - Temporary solution - Protracted solution - Suggestions to superiors
Qualifications of the credit officer	<ul style="list-style-type: none"> - Qualification - Capacity, experience - Level of information technology application 	<ul style="list-style-type: none"> - Limit, exist - Reason - Factors affecting 	<ul style="list-style-type: none"> - Temporary solution - Protracted solution - Suggestions to superiors

Source: Compiled by the author

4. Result discussion

Assessing the current situation of analyzing financial statements of joint-stock companies customers at commercial banks in Vietnam.

Advantages: Analyzing financial statements of customers of joint-stock companies at Commercial Bank has the following advantages, specifically:

First: Commercial banks have issued regulations and procedures to guide the analysis of financial statements fully, clearly, in detail, and have been trained and implemented synchronously to all credit officers, used in the commercial banking system in Vietnam.

Second: The financial statements of joint-stock companies are analyzed and evaluated at the time of loan appraisal and re-evaluated during the loan process (every 6 months, 1 year to analyze the financial position of the enterprise) and unscheduled analysis showing unusual signs of the economy, industry, or business). This analysis helps the credit officer not only grasp the financial situation of the borrowing enterprise at the time of appraisal but also the production and business process, see good or bad trends, or changes movements in the production and business situation, seeing good or bad trends,

or fluctuations in the production and business situation of the enterprise.

Third: When analyzing financial statements of joint-stock companies at commercial banks, the evaluation criteria system reflects the financial situation and solvency of enterprises. From there, credit officers can assess the advantages and limitations of the financial situation of the business, and limit the risks from credit activities.

Fourth, at commercial banks, the credit officers of the corporate customer department are all trained at undergraduate and graduate levels, with a relatively young age, so the acquisition of information as well as the use of proficient use of information technology in the process of calculating financial indicators of joint-stock companies to help the calculation bring high accuracy, fast and efficient. Moreover, now, banks all have their own internal credit rating system, general information about the business field of the borrowing enterprise is unified throughout the system. Therefore, the collection of general information about the enterprise is greatly shortened and ensures the accuracy of information about the enterprise, which plays a particularly important role in the process of analyzing the financial statements of the borrowing enterprise.

Limitations and Existences

In addition to the achieved results, in the process of analyzing financial statements of joint-stock companies at commercial banks, there are some limitations as follows:

First, through interviews with senior and middle managers, managers believe that the bank's information collection and processing system has not met the requirements of the analysis of join - stock enterprise financial statement analysis. Credit officers mainly still use documents for analysis based on sources provided by enterprises, and through discussions with enterprises and consulted at the CIC center of the State Bank of Vietnam, the credit risk center of The commercial banks. The information in the press and media has not yet been paid attention.

Second: Credit officers analyze financial statements based on reports provided by

customers without any appraisal or re-appraisal. Therefore, the system of inaccurate calculation criteria leads to inappropriate conclusions, and the lending decision faces many risks.

Third, the analysis of financial statements of joint-stock companies by the credit officer is incomplete, some of the criteria set by the credit officer are not accurate, and there are no specific criteria for Joint-Stock enterprises. According to the process of guiding the analysis of financial statements of commercial banks, the content of financial statement analysis is quite complete and detailed, but in practice, credit officers often ignore some contents and analyze the financial statements, when there is an abnormal fluctuation, the credit officer does not find out the cause and make an appropriate judgment. In the content of the general analysis of financial statements, the credit officer almost did not analyze the cash flow statement to assess the ability to generate future cash flows, the ability to pay dividends. part... The analysis of loan security of the borrowing enterprise can be performed by a credit officer, but the analysis is only a formality and when there is a shortage (or excess) it is ensured that the credit officer does not inquire causes and propose solutions to preserve capital for the Bank. In almost all cases, the credit officer gives a result that is enough to secure the loan.

Fourth: The analysis of financial statements of corporate customers in general and corporate customers in particular in the lending process is a formality. According to the regulations of the commercial bank every 6 months, 1 year, it is required to inspect and comprehensively analyze the financial situation of the enterprise, the production and business situation, the loan security situation of customers. However, the periodic analysis of the credit officer is a formality, the assessment is transient, not down to the actual unit, so the fluctuations in the customer's activities after granting credit are often not grasped, could not advise the Board of Directors on solutions, to limit credit risks.

5. Complete solutions

Solutions to improve the quality of information collection and processing

Information collection and processing plays an important role, greatly influencing the quality of financial statement analysis of joint-stock companies in credit activities of banks. Collecting complete and accurate information is crucial to the analysis of financial statements of customers of joint-stock enterprises. In addition, the full information source also helps the commercial bank to grasp the developments of the domestic and international markets, economic fluctuations and changes in the economic development guidelines and policies of the state, from which the Bank sets out timely policies and measures to adjust operations to avoid risks and damages and stabilize for development. Therefore, the Bank needs to have solutions to further improve the quality of the collection work, especially information related to the financial statements of enterprises.

The bank needs to set up a database to store systematic information about businesses that have had or are having a credit relationship with the bank, which are classified by industry or field of operation for easy lookup. In addition, there is updated general information about the characteristics of the business field and the ongoing advantages and disadvantages in that business that the credit officer should pay attention to analyze. These sources of information are stored by the Bank in the form of computerized data banks and connected to an internal network, which is connected to the Head Office and to the Internet to facilitate information extraction for both banking system. In order to obtain information for aggregation, the Bank should stipulate that the credit officers after each loan must also summarize the objective assessment to conduct systematic archiving.

In addition, in order to have high-quality information, in addition to the documents received by the Bank from loan customers, the Bank needs to directly interview some key people of the business such as: Director, Accountant Chief,... At the same time, credit officers need to seriously and thoroughly observe the actual situation of production and business of enterprises to understand the past and present situation. It allows to estimate somewhat the accuracy

of some numbers in the financial statements of enterprises. However, the effectiveness of this job depends a lot on the experience of each credit officer.

Banks need to fully exploit sources of credit information, information on collateral of loan enterprises provided by the State Bank's CIC Credit Center. CIC's inquiry does not stop only during credit appraisal, but also in the process of analyzing periodic financial statements, in unusual events, the credit officer must conduct an inquiry to understand the credit relationship of the business with other credit institutions for timely adjustment of credit granting and make to decisions.

With financial statements, the Bank must ask enterprises to provide data of at least the last 3 years. Currently, although the regulations require the collection of financial statements of enterprises for 3 consecutive years, in reality, enterprises usually only provide data for 2 years, but the data for 2 years cannot represent the development trend of operations production and business at the enterprise. Moreover, for businesses that are not traditional customers, it is necessary to ask customers to audit these reports. The bank may require the enterprise to have the auditor's certification on the final settlement reports sent to the bank.

Solution to complete the content and process of analyzing financial statements of joint-stock enterprises

The analysis of financial statements of enterprises in general and joint stock enterprises in particular is a problem that all commercial banks are always looking for ways to improve. The technical methods, norms, and indicators of the analysis of financial statements of corporate customers often change in the financial management system, so banks need to pay attention to the changes. About the method: Credit officers of banks need to be flexible in using data analysis methods, for example, there are cases where using ratio analysis method has given unclear results. If you are hesitant in making a loan decision, the credit officer should use more consecutive alternative methods, the

difference method to find out what is the cause. About the index system: Currently, commercial banks do not have norms, industry average data for comparison in financial statement analysis. To overcome this, the bank can compile its own industry data as a basis for credit officers to compare and contrast when analyzing. To get this data, bank can assign a separate department specializing in statistics on financial indicators of enterprises that have and are having credit relations with the Bank in various industries periodically to see trends generally accepted direction of each period, thereby setting standards for individual banks. It can be said that this is a very difficult solution to implement, often having to rely on the experience of some good credit officers, but doing it will bring great benefits.

In the process of analyzing financial statements of customers of joint-stock enterprise, it is necessary to rely on the increase (decrease) of coefficients and indicators to find out the causes and evaluate each financial item of the enterprise, not just the simple calculation of coefficients as it is today. The analysis of this cause has great significance in evaluating enterprises.

Analyzing the statement of cash flows is a particularly necessary step in the process of analyzing corporate financial statements. The bank needs to ask the customer to provide the full financial statement and if the customer does not have the financial statement, the credit officer should learn to collect more information from the accountant of the financial statement preparation unit to serve as a basis for analysis.

Complete solution to organize the analysis of financial statements of joint-stock enterprises

This is an important issue for any commercial bank. A well-organized business assessment will create favorable conditions to reduce risks of both the Bank and the enterprise, and at the same time, help the analysis of financial statements of enterprises to take place quickly and accurately, making enterprises better understand the situation. catch the right business opportunity. Therefore, the Bank needs to come up with effective solutions to gradually achieve the most organizational optimization.

Currently, the business planning department of commercial banks is mainly young staff, so the most effective way to assign tasks in the department is to work in groups to promote the creativity of youth and promote the strengths of each staff. The assessment given is objective in nature and especially working in groups will help credit officers improve their professional qualifications faster. According to this assignment, each appraisal task will be assigned to a group to perform. Team members will be responsible for researching an issue and then synthesizing and exchanging opinions to reach consensus on the financial situation of the enterprise. Thus, the analysis of corporate financial statements will ensure quality, objectivity as well as time as prescribed. The assignment of responsibilities in groups means that a group of people will take on a job and in the group there will be a member with primary responsibility, a member with secondary responsibility, so that after giving credit to the customer if the member absence (or rotation) of the sub-member who is able to perform the job that best meets the customer's needs.

Solutions to improve financial analysis for credit officers

In banking activities, especially in credit activities, the complexity and risks are very high, so the human factor plays a particularly important role. The analysis of financial statements in particular as well as the assessment of customers in general is an important operation of credit activities, it determines the success or failure of loans. Bank officers performing this job must have higher qualifications than other professions. The requirements of this job require that leaders as well as staff directly doing credit work not only have good qualifications and professional capacity, but also have ethical qualities, a high sense of responsibility, and a strong sense of responsibility, work experience. They must have analytical skills, have a thorough understanding of many economic fields, and understand the law. Banks need: To assign jobs according to each person's capacity and experience, and to delegate authority to request credit according to qualifications and experience.

Professionally qualified and experienced credit officers are assigned to manage high-value or high-risk loans. Young cadres are allowed to take on loans of small value and low risk; The bank needs to have a reward and subsidy system to suit each individual credit officer; The bank should organize periodic meetings to summarize the situation, evaluate and draw lessons on the appraisal of customers in general and the analysis of corporate financial statements in particular; Banks need to set minimum requirements for qualifications and experience in recruitment in order to have good quality human resources; The Bank should have preferential policies for good professionals to attract these teams to work for the Bank, or invite them to work as advisors and collaborators for the Bank.

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ADVANTAGES AND DISADVANTAGES IN APPLYING PERFORMANCE MEASUREMENT SYSTEM IN ENTERPRISES IN VIETNAM

MA. Hoang Thi Kim Ung*

Abstract: *Under the trend of globalization, world economic integration and trade liberalization and increasingly fierce competition, enterprises must find the right motivation for sustainable growth in order to improve their competitiveness. In order to strengthen and improve competitiveness, in addition to formulating strategies, investing in marketing activities, researching and developing new products, investing in modern technology, the management capacity of enterprises and the application of modern enterprise management tools are being focused and prioritized. Performance measurement system (PMS) is a basic content of modern management accounting that has been applied effectively in developed countries, but in Vietnam, the application level is still limited. The article focuses on researching and analyzing the current situation of using PMS in some sample enterprises in Vietnam, pointing out the advantages and disadvantages, thereby proposing some useful recommendations.*

• Keywords: *measurement, performance result, management accounting.*

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Tóm tắt: *Tự do hóa thương mại và cạnh tranh ngày càng gay gắt, đòi hỏi các doanh nghiệp phải tìm được động lực phù hợp để tăng trưởng bền vững nhằm nâng cao năng lực cạnh tranh của mình. Để củng cố và nâng cao năng lực cạnh tranh, ngoài việc xây dựng chiến lược, đầu tư cho hoạt động marketing, nghiên cứu phát triển sản phẩm mới, đầu tư công nghệ hiện đại, thì năng lực quản trị của doanh nghiệp và ứng dụng các công cụ quản lý doanh nghiệp hiện đại đang được chú trọng và ưu tiên. Hệ thống đo lường hiệu quả hoạt động (PMS) là một nội dung cơ bản của kế toán quản trị hiện đại đã được áp dụng có hiệu quả ở các nước phát triển, nhưng ở Việt Nam, mức độ áp dụng vẫn còn hạn chế. Bài báo tập trung nghiên cứu, phân tích thực trạng sử dụng PMS tại một số doanh nghiệp mẫu ở Việt Nam, chỉ ra những thuận lợi và khó khăn, từ đó đề xuất một số khuyến nghị hữu ích.*

• Từ khóa: *đo lường, kết quả hoạt động, kế toán quản trị.*

1. Theoretical framework of performance measurement systems

Currently, there are many views about the measurement system illustrated by scholars of

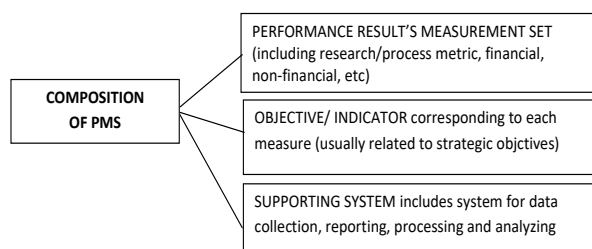
different schools. Bourne et al. (2003) said that: Measurement of business performance refers to the use of a set of multidimensional measures for the planning and management process of the organization. According to Ittner et al. (2003): Strategic performance measurement systems provide information that allows an organization to determine how to most effectively achieve its goals and arrange management processes such as setting goals, making decisions, and evaluating performance in association with strategic objectives. According to Neely et al (1995): PMS is an information system used by managers to track the execution of business strategy by comparing performance with strategic objectives. PMS includes systematic methods for setting business goals and periodic reports. It refers to a system of multi-dimensional measures, including financial and non-financial measures, internal and external measures, measures that quantify the achievements achieved by the organization and also the measure used to predict the future. In the research on the development process of PMS, Suwit Srimai et al (2011) have summarized a number of PMS models: Balanced Scorecard, Knowledge-based Measurement Model, Comparative Business Scorecard Comparison,

* Academy of Finance; email: hoangkimung@gmail.com

Prism Performance Model, Dynamic Multi-Dimensional Performance Model, etc. Each PMS model is studied and put into use with different metrics and aspects.

PMS can be described through three basic components and is most mentioned in the definitions of PMS below (See Figure 1).

Figure 1: Composition of PMS



Source: Franco - Santos et. al (2007)

2. Theoretical framework of performance measurement systems

To achieve the research objectives, the article uses basic qualitative research methods mainly such as collecting information from specialized books, published data, and related scientific works in topics, etc., and combines some traditional research methods such as: surveys, and interviews, etc. The questionnaires and surveys are broadcast live or conducted through the design of questionnaires on the tool via google (google docs) and sent to the respondents through online email tool. In reality, all of these answer sheets are included in the data processing by the google docs tool.

With a survey sample size of 245 enterprises operating for profit in the territory of Vietnam, according to the convenient sampling method, the author conducted a testing survey with 10 enterprises under the research object. Thereby, completing the questionnaire is more suitable to reality. After that, the author will conduct an official mass investigation. The author distributed 245 survey questionnaires to managers and accountants at enterprises during the period from April 2020 to June 2020 in which 225 responses were made via the Internet, 20 were answered directly.

In Vietnam, PMS is known through two popular tools, KPI (Key performance indicator) and BSC (Balanced Scorecard). In recent years,

a series of consulting firms on KPI - BSC have been born, including names such as OCD Management Consulting Company, Institute of International Economics and Trade (iEIT), Balanced Scorecard VN (BSV). A series of seminars and training courses on BSC and KPI were held partly to show the needs and concerns of Vietnamese enterprises in the management of their business results. Furthermore, in order to support the implementation of BSC and KPI easily, many software have also been developed to support the process of synthesizing and track KPI implementation results more conveniently. Although there are no specific statistics on the number of Vietnamese enterprises applying business performance measurement tools such as KPI and BSC, many large corporations such as Vietnam Electricity, Traphaco Joint Stock Company, Post and Telecommunications Group information, and so on, have applied this tool.

Table 1: Quantity and structure of enterprises surveyed

Enterprise	Quantity (Enterprises)	Ratio (%)
I. Based on field of activity	245	100,0
1. Commercial enterprises	81	33,1
2. Service enterprises	80	32,7
3. Manufacturing enterprises	52	21,2
4. Others	32	13,0
II. Based on the form of ownership	245	100,0
1. Joint stock company	132	53,9
2. Limited liability company	52	21,2
3. State-owned enterprise	26	10,6
4. Private enterprise	11	4,5
5. Joint venture company	3	1,2
6. Company with 100% foreign capital	3	1,2
7. Others	18	7,3
III. Based on the number of employees	245	100,0
1. Less than 100 employees	158	64,5
2. From 100 to 500 employees	63	25,7
3. From 500 employees or more	24	9,8

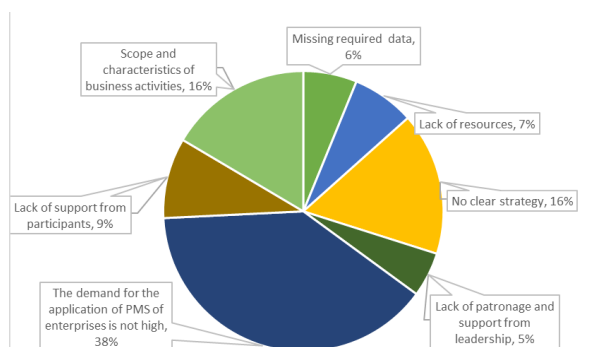
Source: Author's statistics

Out of the total 245 answers, 81 commercial enterprises accounted for the highest rate of 33.1%, 80 service enterprises accounted for 32.7%, 52 manufacturing enterprises accounted for 21.2% and 32 enterprises belonged to the category of enterprises, and others accounted for 13%. According to the form of ownership of enterprises, surveyed enterprises belong to

different forms of ownership. Among 245 answer sheets, there were 132 joint stock companies, accounting for 53.9%, 52 limited liability companies, making up 21.2%, 26 state-owned enterprises accounting for 10.6%, 11 private enterprises making up 4.5%, 3 joint venture companies and 3 companies with 100% foreign capital together accounting for 1.2% and the rest belong to the other group with 18 enterprises being equivalent to 7.3%. If we classify enterprises subject to the survey by number of employees, out of 245 answer sheets, there were 158 enterprises with less than 100 employees, accounting for 64.5%, 63 enterprises with 100 to 500 employees and 24 enterprises with less than 100 employees. The ratio of enterprises with 500 or more employees was 9.7%.

In addition to the basic information for statistics and sample description as described above, the author has included in the survey questionnaire's questions about extended information for the purpose of collecting some more relevant information. This information indicates some important points for business managers and some directions for further research for researchers. One of the important statistical results as well as the biggest difficulty and obstacle that enterprises face when applying the PMS model in their enterprises was illustrated in the Figure 2.

Figure 2: Difficulties and obstacles when applying PMS



Source: Summarization of author from the survey

Advantages

Initially, Resources to implement PMS application are not lacking. Vietnam's workforce is considered to be quite agile, smart, and diligent,

so this can also be considered an advantage for Vietnamese enterprises when applying performance measurement methods. With dynamism, curiosity, passion for creation and improvement, employees will easily understand their nature, responsibilities and benefits when there is a change in the management system of the enterprise.

Secondly, Data sources to apply PMS are relatively abundant. Since in the present time, with the development and support of science, technology and information technology, businesses can build a complete and abundant data set to respond to the business performance measurement systems.

Thirdly, Enterprise managers have been proactive in innovation, approaching modern business performance measurement and management models. In addition, enterprises have taken the initiative in standardizing and basically modernizing the corporate governance process, quickly seizing opportunities in the context that the global economy is falling into difficult times. The initiative in innovation thinking and quick access to modern management tools in measuring business performance are regarded as strong points and will become the driving force behind the research and application of PMS in enterprises.

Disadvantages

Firstly, the demand for PMS system application is not high. Although managers have actively approached modern management models, the real need to apply PMS model is still not adequate. This may stem from the core reason that the leader's determination is not high.

Secondly, the scope and characteristics of businesses also create challenges for Vietnamese enterprises when applying PMS. The application of PMS in commercial and service enterprises will be easier to implement than in manufacturing enterprises because they have direct contact with customers.

Thirdly, enterprises do not have a clear strategy. This reveals the difficulty in applying the PMS implementation process in enterprises. In reality, PMS is built on a solid foundation that is enterprise

strategy. Therefore, the strategic planning ability of enterprises will directly affect the operation and development of PMS. Besides the success in strategic planning of large-scale enterprises, for small and medium-sized enterprises, the planning and operation strategy are still limited. Some enterprises only make short-term operation plans, mainly monthly and quarterly production and business plans. They build the next year's plan and strategy by analyzing the previous year's strengths - weaknesses and taking the previous year's business results in addition to a certain percentage, without having built a coherent, clear and long-term business strategy, leading to many difficulties in the development and application of PMS.

3. Suggestions and Conclusion

Stemming from the difficulties when applying PMS analyzed above. The author proposes some recommendations to improve the effectiveness of PMS application in Vietnamese enterprises as follows:

Firstly, on the side of enterprises, business leaders need to show their determination in a practical way to apply PMS. Building and applying PMS requires determination from leaders to employees. Leaders must motivate and help members understand PMS, have a clear management perspective, understand the organization, show determination and be consistent with the set implementation plan, always take the motion "doing the right thing" as the role model, and encourage employees in the implementation process.

Secondly, enterprises need to create conditions for employees to participate in the design, implementation and application of PMS. The role of staff is actually critical in the PMS adoption process, increasing the level of support and alignment of the participants.

Thirdly, on the part of State management agencies, it is necessary to promote specific programs to support enterprises for raising PMS awareness and supporting effective application methods.

Fourthly, business associations need to enhance their role to support and develop enterprises. The role of these organizations can be implemented through organizing seminars on PMS experience in real enterprises in Vietnam, organizing training courses, visiting and learning experiences between

domestic and foreign enterprises. Developing human resources, especially management capacity for key officials of enterprises. In addition, there should be research and consulting projects to enhance the effectiveness of PMS application for businesses, thereby shortening the difference between industries and fields in the application of PMS.

Fifthly, universities, research institutes and other training institutions should actively participate to carry out research, training and development projects to replicate effective governance models like PMS.

In order to apply and promote the effectiveness of PMS, in addition to the efforts of enterprises, it is necessary to have the simultaneous participation of state management agencies, associations, business support institutions, training units through concrete and practical solutions. Besides corporations, large enterprises that have been applying, many Vietnamese enterprises do not understand and are aware of PMS properly. The basic theories about PMS and some recommendations given by the article are suggestions to help Vietnamese enterprises research, learn, and apply PMS widely.

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CORPORATE INCOME TAX OF SMES IN VIETNAM - KEY ISSUES AND POLICY RECOMMENDATIONS

Msc. Luu Huyen Trang*

Abstract: *Financial difficulties are always a problem that hinders the development of SMEs in Vietnam. The corporate income tax (CIT) policy for SMEs is a typical measure of Government in supporting these enterprises. However, the CIT policy remains a range of limitations that reduce its effectiveness. These issues include tax evasion and avoidance; the limited effectiveness of tax incentives; the problem with fairness in tax treatment; ineffective impact on SMEs; the burden of compliance costs; not support enterprises in scientific and technological innovation. Based on the analysis, this paper has proposed some policy recommendations with the purpose of enhancing the effectiveness of CIT policy for SMEs in the coming time.*

• Keywords: corporate income tax, SMEs, compliance cost, tax incentives, tax evasion and avoidance.

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Tóm tắt: Khó khăn về tài chính luôn là vấn đề cản trở sự phát triển của các DNVTN tại Việt Nam. Chính sách thuế thu nhập doanh nghiệp (TNDN) đối với DNVTN là một biện pháp tiêu biểu của Chính phủ trong việc hỗ trợ các doanh nghiệp này. Tuy nhiên, chính sách thuế TNDN vẫn còn nhiều hạn chế làm giảm hiệu lực của chính sách. Những vấn đề này bao gồm trốn và tránh thuế; hiệu quả của các ưu đãi thuế còn hạn chế; vấn đề về công bằng trong đối xử thuế; tác động không hiệu quả đến các DNVTN; gánh nặng chi phí tuân thủ; không hỗ trợ doanh nghiệp đổi mới khoa học và công nghệ. Trên cơ sở phân tích, bài báo này đã đề xuất một số khuyến nghị về chính sách nhằm nâng cao hiệu quả của chính sách thuế TNDN đối với DNVTN trong thời gian tới.

• Từ khóa: thuế thu nhập doanh nghiệp, doanh nghiệp vừa và nhỏ, chi phí tuân thủ, ưu đãi thuế, trốn và tránh thuế.

1. Overview of Vietnamese SMEs

According to the General Statistics Office, by the end of 2020, there are about total 811,538 enterprises. Of which, only 66.8.0% of enterprises are operating, equivalent to 541,709 enterprises. Micro and small-scale enterprises account for

the highest proportion of the total number of enterprises (accounting for 98%). On December 31, 2019, there were 449,031 micro-sized enterprises, accounting for 67.2% of enterprises nationwide; 179,319 small-scale enterprises (26.8%); 22,788 medium-sized enterprises, equivalent to 3.4%; and 17,367 large-scale enterprises, accounting for only 2.6%.

Large-scale enterprises generate the highest net revenue in the entire enterprise sector of the country. In the period 2016-2019, this sector, in average, generates 15.8 million billion VND, accounting for 72% revenue of the entire business sector, an increase of 85.6% compared to the average period of 2011-2015. On the other hand, medium-sized enterprises generated 2.2 million billion VND, equal to 9.9%, up 85.6%. Small-scale enterprises generated nearly 3.4 million billion VND, accounting for 15.2%, up 46.5%. Finally, micro enterprises contributed the lowest proportion of total net revenue of the entire enterprise sector with 638.5 trillion VND, make up only 2.9%.

Regarding pre-tax profit in the period 2016-2019, each year operating enterprises generate 843.5 trillion VND, an increase of 84.1% of the average profit in the period 2011-2015. In which, large-scale enterprises generated 860.8 trillion VND of pre-tax profit per year, up 87.5%; medium-sized

* Academy of Finance; email: tranglh@hvtc.edu.vn

enterprises generated 29.6 trillion VND, grown by 85.1%; small-scale enterprises generated 1.5 trillion VND (in the period 2011-2015, enterprises in this area lost 3.0 trillion VND per year); micro enterprises lost 48.5 trillion VND (increasing their loss by 34.5 trillion VND compared to the previous period 2011-2015).

In term of capital of enterprises: By the end of 2019, the total capital for production and business of all operating enterprises is 43.3 million billion VND, mainly in the area service sector (accounting for 65.7%); 59.8% of that capital is from non-state enterprises. According to enterprise scale, 66.6% of capital belongs to large enterprises, equivalent to 28.8 million billion VND; micro and small enterprises attracted 11.3 million billion VND for production and business, accounting for 26.0% and the remain part was of medium-sized enterprises with 3.2 million billion VND.

In the 2020-2021 period, over 90% of SMEs have temporarily closed or stopped operating due to the impact of the Covid-19 pandemic. The obstacles that SMEs face are difficulties in accessing customers; interrupted and broken supply chain; imbalanced cash flow and difficulties in labour management. Some businesses are also affected by other problems such as reduction in orders and output, delayed investment progress or even cancelling projects. In addition, businesses also incur additional costs to prevent the COVID-19 epidemic...

It is apparent that SMEs in Vietnam have a small capital scale but account for a large proportion of the number of active businesses. SMEs are considered as a driving force for economic growth of economy when they make important contributions to the state budget, create jobs for a large number of workforce, and help diversify industries and sectors. However, financial difficulties are always a problem that hinders the development of these businesses. The Government, therefore, has implemented many different measures to provide financial support to SMEs. The corporate income tax (CIT) policy for SMEs is a typical one.

In recent years, this is considered as a support tool that has the most direct influence on the financial resources of SMEs. CIT policies are adjusted from time to time in accordance with

the context of the economy. This policy has made important contributions to the growth of the small business sector. However, beside the achieved results, the CIT policy still has many limitations that reduce its effectiveness. The study will address the problems and shortcomings of the CIT policy for SMEs by some appropriate policy recommendations.

2. Method of research

In order to analyze the issues relating the CIT of SMEs in Vietnam, the research uses the synthesis method for the secondary data from Vietnam ministry of Planning and Investment and General Statistics Office of Vietnam as well as the data of CIT from Ministry of Finance. Additionally, the paper also synthesizes and analyzes the CIT regulations as well as experts' opinion about CIT of SMEs over the periods of time. Based on the gathered information, the author is going to investigate the shortcomings of the SMEs' CIT. Some policy recommendations will be proposed to alleviate the issues with the purpose of enhancing the efficiency of CIT for SMEs.

3. Corporate income tax of SMEs in Vietnam and key issues

3.1. Corporate income tax policy for SMEs

Regulations on interest rates

Most CIT adjustments are tax rate adjustments. Currently, there are no specific regulations on tax rates for SMEs, but the government has separate preferential regulations for these enterprises from time to time with the aim of overcoming difficulties and promoting the development of this sector. The growth of SMEs helps to ensure long-term revenue for the budget, and the CIT rates tend to decrease over the years.

Before July 1, 2013, the generally applied CIT rate was 25%. In which, there are special incentives for SMEs, especially some 30% of CIT reduction. This is considered the initial move of the state on CIT preference for SMEs in Vietnam. The urgent implementation of this incentive for SMEs has made an important contribution to helping businesses stabilize production and business activities, especially in the period after the 2008-2009 global financial crisis.

The CIT Law dated June 19, 2013 stipulates that enterprises with a total annual revenue of 20

billion VND or less will be applied 20%, while the general tax rate is 22%. This preferential rate is applied during the period from July 1, 2013 to the end of 2015. In addition, in the period 2012-2014, due to the difficult economic situation, the Government has proposed a number of resolutions to supplement additional incentives on extending the tax payment period for some groups of businesses. Since 2016, there has been no specific preferential policy for SMEs when all businesses pay CIT at the same general tax rate of 20%.

In 2017, the Law on Support for SMEs 04/2017/QH14 was passed under which SMEs are allowed to apply for a limited period of lower CIT rate than usual. Some proposed tax incentives for SMEs include businesses with a total annual revenue of less than 3 billion VND and the average number of employees participating in social insurance of no more than 10 people each year. These enterprises will only have to pay 15% of revenue for CIT. For enterprises with an average annual number of employees of 100 people or less, combined with the condition that the total annual revenue is from VND 3 billion to VND 50 billion, the tax rate of 17% will be applied. Exemption from corporate income tax for 2 consecutive years when there is taxable income for newly established small businesses and micro enterprises from business households. However, these drafts are still in the process of analysis and have not been applied.

Entering 2020, due to the impact of the Covid-19 pandemic, many tax incentives and extension of CIT payment deadline for SMEs are proposed by the government. In two consecutive years, 2020 and 2021, enterprises with a turnover of less than 200 billion VND will be entitled to a 30% reduction in the payable CIT rate. This is considered a financial support move for businesses in general and SMEs in particular that are facing difficulties during this period.

Policies to reduce tax base

Accelerated Depreciation

Enterprises operating with high efficiency are allowed to depreciate quickly, but not exceeding twice of the depreciation rate determined by the straight-line method. Accordingly, enterprises have capital to quickly innovate technology for some fixed assets according to current regulations

of the Ministry of Finance on management, usage, and depreciation of fixed assets.

Loss transfer

Law No. 32/2013/QH13 amending and supplementing several articles of the Law on CIT, adding provisions for loss transfer between quarters and years. Enterprises are allowed to temporarily transfer losses into income (taxable income minus tax-free income) of subsequent years. The period of loss transfer shall not exceed 5 years, counting from the year following the year in which the loss is incurred.

Thus, SMEs that have suffered losses in previous years can allocate those losses in subsequent years to reduce CIT payable. Thus, enterprises can overcome difficult periods and have capital to restructure enterprises and continue carrying out production and business activities.

Regulations on eligible expenses

The 2013 CIT Law stipulates those eligible expenses are deducted in favour of businesses, helping to reduce CIT payable, and increase after-tax profit. Enterprises can expand capital for reinvestment activities. Enterprises are entitled to deduct all actual expenses incurred in connection with their production and business activities and have full legal invoices and documents. In addition, the costs related to the loss, damaged goods will be included in the deductible expenses.

Tax-free income

SMEs investing in a number of industries and areas with special difficulties will be exempted or enjoy tax incentives from earning. These include income in the field of agriculture, scientific research and technological development, social improvement, foreign joint ventures, and environmental issues.

Regulations on setting up science and technology development funds

Law 32/2013/QH13 Amending and Supplementing Law on CIT stipulates: Enterprises are allowed to set up science and technology funds from pre-tax income. The maximum amount of funds that can be set aside is 10% of taxable income. This fund is used to invest and spend in order to enhance the scientific and technological

potential of enterprises and industries, contributing to improving efficiency and competitiveness. The appropriation of this fund will reduce taxable income, helping to lower the burden of CIT payable. This regulation demonstrates Vietnam's determination to pursue science and technology development policy.

3.2. Key issues of SMEs' CIT

Tax evasion and tax avoidance are common and frequent

To take advantage of tax incentives, SMEs can find ways to keep it as only small and medium-sized businesses to benefit from tax incentives or find ways to evade taxes. Enterprises often determine the lack or incorrect revenue for calculating CIT, accounting for expenses that are not in accordance with regulations when determining taxable income in various forms, such as: declaring CIT exemptions and reductions incorrectly, transfer price or declare loss, late tax payment, tax debt.

Compared with FDI enterprises, the tax evasion and avoidance in SMEs is still much lower. However, along with the development of the market economy, the risk of taking advantage of tax incentives to evade and avoid taxes in SMEs is in the rise. Tax evasion and avoidance leads to reduced tax revenue of government and loss of tax fairness.

The effectiveness of tax incentives has not been fully assessed

The calculation of tax expenditures in Vietnam is still limited due to the lack of statistics, so the actual state support for SMEs has not been calculated, which affects the impact assessment of tax incentives to the operation of SMEs.

The actual tax rate paid to a group of enterprises will be calculated based on the total current CIT amount of this group and the total profits of the tax paying enterprises. The analysis above has shown that estimating tax spending using enterprise survey data has limitations such as inaccurately reflecting the tax base, increasing the actual tax rate paid by enterprises in unreasonable way. These limitations may cause the lower estimate level compared with the actual tax expenditure figure. Thus, the spending figure of CIT for the whole economy will be at least twice as high as the figure

estimated by the study from the enterprise survey data sets.

The fairness in tax treatment is not guaranteed

Enterprises receiving tax incentives have a lower actual tax rate than the general tax rate, but businesses still use public goods and services like enterprises which pay full tax. This can create inequality among businesses, especially in the context that many businesses take advantage of loopholes in the tax administration process to receive tax incentives.

The implementation is sometimes unfair, due to the way SME is defined. There are many businesses that can have very large revenue due to activities in areas such as commerce but are still SME.

Revenue is the basis for determining the current CIT incentives for SMEs. This requires the agency to find a way to calculate the businesses' revenue, thus incurring costs in the management process. Besides, there are also businesses with the same revenue scale but different profit rates in various business lines. Industries with high margins will have higher income levels and benefit more from this regulation. The calculation of tax on revenue therefore does not ensure fairness in terms of economic benefits for businesses. Therefore, changing the income threshold for the revenue threshold will ensure more fairness and reasonableness for businesses.

Effectiveness of impact on SMEs is not high

Although there have been many incentives for SMEs, in the tax spending structure, large enterprises is still the group that enjoys the most tax spending. Specifically, in 2016, as per the statistics of Nguyen Duc Thanh, Pham The Anh, Nguyen Tien Dung, Hoang Thi Chinh Thon, large enterprises in terms of both number of employees and capital enjoy incentives. These enterprises were operating in two industries: Trade & services and Industry & construction. Additionally, non-state enterprises accounted for 70% of the large enterprises with the largest tax spenders.

The numbers show that tax incentives have unintentionally increased advantages for large enterprises, which can be a risk for the group of SMEs. Large enterprises inherently have the advantage of scale, receiving more tax incentives will increase the advantages compared to SMEs

and thus affect the competitive advantage of these businesses. Calculations show that the group of enterprises with a tax expenditure ratio of over 100 billion, belongs to the industry, has foreign investment capital. The number of enterprises with all 3 above characteristics is nearly 1.6 thousand enterprises (accounting for 1% of the total number of enterprises with positive profits), but tax expenditure of this group accounts for 41% of total tax expenditure. The actual tax rate paid by this group is 8% and 90% of the enterprises of this group are in industrial zones.

The burden of compliance costs remains relatively high

Since the Law on Support for SMEs took effect from January 1, 2018, there have been no preferential policies and laws on separate CIT rates for SMEs. The application of various preferential tax rates in different periods, together with the unclear provisions on tax exemptions and incentives, make the CIT Law complicated. As a result, there are compliance costs for businesses in tax declaration and payment.

The effectiveness of supporting enterprises in scientific and technological innovation is not high

The maximum level of deduction for the science and technology fund is only 10% of the annual taxable income. The 10% level is relatively small because the cost of science and technology investment accounts for a large part of the activities of enterprises. Especially in the context of the current 4.0 science and technology revolution, most SMEs find it difficult to compete in terms of capital and scale with large-scale enterprises, so development based on the technology platform is being considered as an advantage of SMEs. Many businesses spend a relatively high percentage on science and technology development. Therefore, the 10% regulation as currently applied does not really encourage SMEs to improve their level of science and technology.

4. Policy recommendations

Focus on the targeted preferential recipients

It is necessary to review current tax incentives to attract investment effectively, and at the same time, to minimize the issuance of new policies that reduce state budget revenue. The Government should narrow the schedule tax incentives for fields that have developed in width and depth without

maintaining investment attraction policies, areas in economic zones but on the list of areas with conditions favorable socioeconomic conditions. Preferential policies are only applied selectively to a number of specific industries, especially enterprises in the field of science and technology.

In order to achieve the goal of a simple and suitable tax incentive policy, it is necessary to apply CIT incentives in the direction of regardless of new investment projects and expansion investment projects. This is considered a solution to help increase investment capital for the entire economy in general and SMEs in particular.

Researching to apply a new form of CIT incentives for suitable businesses has been effectively applied by many developed and developing countries (reduction of tax on investment, allowing to be included in deductible expenses). They will enjoy a higher rate than those actually spend on area encouraged by the State, such as spending on research and development, environmental protection, etc., in order to encourage stable and long-term investment.

Building a taxable income threshold to identify SMEs

Revenue is the criterion to determine whether SMEs are eligible for tax incentives. Enterprises with a turnover of 20 billion VND or less will enjoy a preferential tax rate of 20% (the common tax rate is 22%). To overcome the problem of tax unfairness, it is necessary to apply a taxable income threshold based on the actual income (profit earned) of the business instead of the revenue. In addition, the use of progressive tax rates can be considered to help automatically regulate the resources of enterprises. To ensure the number of businesses to enjoy incentives and encourage businesses, proceed to apply from 0-10 billion VND, enjoy 15% interest, from 10-20 billion VND, apply 17% as proposed by the Law on SMEs support. The figure of 10 billion VND will help expand the beneficiaries of tax incentives, but it will cause a large loss of state budget revenue. However, this tax spending will be considered a source of investment and development of the economy. According to the multiplier model, it will help increase output for the economy. The difference between the two tax rates of 15% and 17% is not too large, it can prevent tax avoidance

of businesses with incomes over 10 billion VND. Businesses will be not afraid of expanding their operation scale for fear of tax. The division of these two tax rates may lead to reduction in the state budget's revenue, but it will create the motivation to restore production activities for enterprises, especially in the context that SMEs are heavily affected by Covid-19 pandemic. Due to these policies, they generate more revenue and create added value to the economy.

Special incentives for newly established SMEs

CIT incentives focus on many prioritized localities and industries but lack incentives for newly established SMEs. Newly established businesses are subject to many difficulties, especially financial difficulties. In the current Covid-19 context, the number of bankrupt businesses is relatively large, especially small and medium sized enterprises. In order to revive businesses in the coming time, the topic proposes to apply CIT exemption for newly established businesses in the first 2 years with income not exceeding 20 billion VND. This regulation will create conditions for newly established enterprises to accumulate more capital for their further development. To avoid the situation that many enterprises make profit by shutting down their business operations, dissolving and then establishing new ones, tax administration agencies need to build a system to manage business information. In addition, place of registration of production and business is also classified according to information about the owner and representative of the enterprise. It can minimize the loss of revenue due to businesses evading taxes.

CIT incentives promote research and development activities in SMEs

Science and technology development is an inevitable trend of the economy. Promoting research and development by domestic enterprises will support other industries to develop together. Apparently, there is an increasing number of businesses based on technology to operate. Many domestic enterprises must rely on some foreign enterprises and large enterprises. To be able to make the most of domestic resources, it is necessary to have a clear policy and to take advantage of all domestic resources. In fact, the state has a policy to encourage enterprises to invest in science and

technology (no more than 10% of taxable income), but the level of incentives as analyzed above is still relatively low and unsatisfactory. Especially investing in technology development requires a lot of capital and the payback time is slower than many commercial lines. Therefore, the psychology of SMEs is quite hesitant to participate in this field. To ensure the mobilization of resources in the economy, the state needs to adjust incentives for these enterprises. Therefore, 100% of actual expenses invested in scientific and technological research and development should be deducted when calculating CIT. This regulation ensures that only enterprises that invest in scientific and technological research and development are eligible for incentives.

Implement accelerated depreciation for SMEs

In order to help SMEs turn capital quickly and improve production and business efficiency, there should be separate regulations on depreciation for these businesses. The author proposes to allow SMEs to depreciate 70% of machinery and equipment; measuring and testing tools; equipment and means of transport... In the context of the rapid development of science and technology, businesses need to continuously invest in renewing machinery and equipment to improve productivity and meet the needs of the market. With the regulation of 70%, enterprises only need about 2 years to return their investment in fixed assets, speed up capital turnover, improve production and business efficiency; encourage enterprises with investment capital to renew fixed assets for production and business activities.

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ENHANCE THE QUALITY OF APPRAISAL OF SMALL AND MEDIUM ENTERPRISES' INVESTMENT PROJECTS IN COMMERCIAL JOINT STOCK BANKS

BA. Nguyen Thuy Linh*

Abstract: *Lending in general and lending capital in specific have made a significant contribution to profits of commercial banks in Vietnam. Appraisal procedures, especially investment project ones, play a key role in risk management activities in those banks, assisting them in capital preservation and guaranteeing the sustainable development for commercial banks.*

• **Keywords:** *appraisal procedures, investment projects.*

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Tóm tắt: Hoạt động cho vay nói chung và cho vay vốn nói riêng đã đóng góp đáng kể vào lợi nhuận của các ngân hàng thương mại ở Việt Nam. Thủ tục thẩm định, đặc biệt là các thủ tục dự án đầu tư, đóng vai trò quan trọng trong hoạt động quản lý rủi ro của các ngân hàng đó, hỗ trợ họ trong việc bảo toàn vốn và đảm bảo sự phát triển bền vững cho các ngân hàng thương mại.

• Từ khóa: thủ tục thẩm định, dự án đầu tư.

Appraising business investment projects is crucial to all credit institutions. As a result, before this research, there were a plethora of other related papers ("Investment Project Appraisal in Lending Activities in Bank for Investment and Development of Vietnam JSC (BIDV) - Thua Thien Hue Branch" (2016) by Doan Van Nhat Huy, "Financial appraisal of Investment Project" by Don Dayananda and partners, 2017). As a result, on the basis of inheriting domestical and international papers, this research develops and proposes some solutions for the appraisal quality enhancement to be well fit in this new era.

1. Introduction

Recently, numerous scandals in the banking sector have happened, which results in the leakage of state budget, amounting to millions of billion VND; not to mention the fact that entailing repercussions are so serious that they could pose potential risks on the national finance scheme. Therefore, credit institutions in Vietnam are apparently taking tight control over the credit management procedure with a view to minimizing the non-performing loan ratio, making the whole scheme safe and smooth for operation and transaction.

2. Overview on appraisal procedures of small and medium enterprises' (SME) investment projects in commercial joint stock banks

2.1. Definition

The appraisal of investment projects is doing research and objectively and thoroughly analyzing every economic-technical aspect of the project under the close relationship with natural environment and socio-economic background before making decisions on lending capital for that project. Indeed, the appraisal of investment projects is a procedure which separately monitor

* Email: nhatlinh1999@gmail.com

and assess basic contents of a specific project, secluding from the compilation of that project. Appraising investment projects aims at creating a solid foundation for effective investment activities; as a result, conclusions drawn from investment project appraisal are the crucial basis for units and competent authorities to make decisions on investment, investment allowance, or project funding.

2.2. Objectives and goals of appraising SME investment projects in commercial joint stock banks:

2.2.1. Objectives of investment project appraisal:

Generally, objectives of investment project appraisal are to choose the best investment projects and reject worse ones. However, these objectives could be different depending on the target users. *With investors*, good investment project appraisal helps investors carefully check all contents in investment projects, eliminating errors before making investment decisions. With credit institutions, appraisers can assess borrowed-capital projects to guarantee the legality, authenticity and completeness, hence determining the amount of borrowed capital and conditions for funding (interest, loans, etc) and minimizing potential risks, uncollectible accounts and bad receivable debts. With the state, appraising investment project helps specialists assess the effectiveness of projects in terms of finance and socioeconomic background and assess the rationality of projects through effectiveness and feasibility

2.2.2. Roles of investment project appraisal

There are five main roles of appraising investment projects. *First*, good appraisal of investment projects is of great help in determining both pros and cons of a project in terms of legality, market, technical-technology, environment, finance and socio-economic benefits. *Second*, it helps government agencies assess the suitability of the project with the general development planning of the business line, the local area where the project is going to be launched and

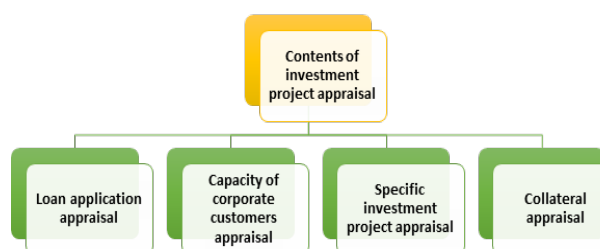
the whole country. In addition to this, it also helps the investors choose the best alternative of investment. *Third*, appraising investment projects assists appraisers accurately decide whether they should lend capital or fund investors. *Finally*, appraisal is undoubtedly a great financial tool for appraisers to determine the legal status as well as the capacity of production and business of investors.

2.3. Appraisal procedures and contents of SME investment projects

2.3.1. Appraisal procedures

Practically, in most commercial joint stock banks, the appraisal procedure contains 3 main steps: (1) Data collection- appraisers receive a full profile including business and project documents; (2) Data processing, analysis and assessment; (3) Report submission - appraisers write reports on investment projects based on scale and characteristics.

2.3.2. Appraisal contents



- Loan application appraisal: Relationship managers mainly use comparative and collated method to assess the authenticity and completeness of the company profile in the comparison with requirements and norms of the law and of the bank, including legal/financial records, investment project records, and collateral records.

- Capacity of corporate customers appraisal: Relationship managers would appraise five main parts of a business, namely: legal capacity, organization and human resource management capacity, financial capacity, production and business activities, credit relationship reliability with credit institutions at the time when the business applies application for credit facilities.

- Specific investment project appraisal: In this content, appraisers conduct project urgency and goal appraisal, legality appraisal, input materials supply capacity appraisal, output services consumption appraisal, technical aspect appraisal, organization and management investment project appraisal.

- Credit relationship appraisal: This is regarded as the most important appraisal which is compulsory for all business profiles in banks. Credit Relationship Appraisal assists appraisers to assess the creditworthiness of previous loans so that they could rank the business credit relationship, thus choosing the most suitable credit package to grant the business. Practically, each bank has its unique system to check the credit relationship.

- Collateral appraisal: Collateral is perceived to serve several functions. Not only does it have economic values but it also shows legal factors to ensure that even in environments with high risks in lending and high costs in borrowing, transactions still happen and interests between borrowers and lenders are closely matched. Playing that critical role, appraisal contents of collateral are, therefore, thoroughly and extensively conducted and regularly updated.

2.4. Proposals for quality enhancement of appraisal procedures of SME investment projects in commercial joint stock banks

First, methods for the innovation of the system of administrative formalities should be applied as soon as possible. In practice, administrative formalities in general and administrative formalities related to land and real estate are still comparatively redundant, having a detrimental impact on both time and money of a project. Hence, the innovation in administrative formalities as well as reducing unnecessary jobs and procedures would facilitate the appraisal, making it more convenient and effective.

Second, State Bank of Vietnam should implement more specifically institutions and actualize the application of international practices and norms in banking sector into the operation of the banking system in Vietnam. Undoubtedly,

this will help State Bank proactively grasp international credit regulations in order to promote heavily investment activities, competing with banks who tend to penetrate the Vietnamese market such as Shinhanbank, Sumitomo or HSBC.

Third, human resource quality must be improved via human eccentric strategies. It can be concluded that appraisers play a crucial role in processing borrowing-capital demands of customers. As a result, commercial joint stock banks should frequently hold training sessions and training classes for appraisers to exchange knowledge and increase professional knowledge in general and professional knowledge of appraisal in specific. This, then, will help staff in banks figure out problems in each step, subsequently expressing opinions and coming up with solutions together to deal with unexpected problems during the appraisal.

Four, enhancing risk management procedures and internal supervision. Practically, effective risk management activities play a crucial role in reducing both external and internal risks for banks. As a result, risk management activities and internal supervision must be conducted monthly, following strictly regulations of debt classification and risk provision. Commercial banks should form a special department to deal with bad/overdue debt, which would be a basis for specialists to devise risk management plans monthly and quarterly.

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