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Exploring the relationship between financial development and economic growth in ASEAN-5 countries and Vietnam

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ABSTRACT

This study examines the impact of financial development on economic growth in ASEAN-5 countries and Vietnam from 2000 to 2021, using panel data and employing OLS, FEM, and REM models. The urgent need for financial development is critical to ensuring international integration and enhancing Vietnam's economic development. The independent variables considered include Broad Money Growth (BMG), the capital requirement for the private sector (CLP), Domestic Credit provided by the Banking sector (DCB), and financial market price indicators (INF), and their effects on economic growth (GDP). The findings indicate that financial development significantly influences economic growth, with impacts ranging from 13% to 37%. The private sector's capital demand alone accounts for 37% of economic growth in these countries. This study underscores the positive relationship between financial development and economic growth, where financial development stimulates growth. The practical implications include recommendations for financial policies to promote integration and economic growth in developing countries. These findings provide empirical evidence supporting the necessity of careful financial system management to ensure sustained economic development. Furthermore, this research offers valuable insights for policymakers in the region, emphasizing the need for strategic financial reforms and innovations to foster long-term economic stability and growth.

Contribution/Originality: This study reveals a relationship between financial innovation and economic growth, with evidence of threshold effects. Findings challenge the linear correlation assumption between monetary expansion and GDP growth.

1. INTRODUCTION

The determinants of economic growth have long been a central topic in development economics, standing out as one of the most intriguing topics to study, especially in developing countries. Research has shown that economic expansion is primarily dependent on the accumulation of inputs that serve as essential elements in the manufacturing process. The relationship between financial development and the manufacturing process is primarily linked to the beneficial impact of capital on long-term economic growth.

Hence, financial development is crucial in enabling economic activity by mobilizing capital and ensuring effective allocation of resources, addressing information asymmetry, controlling risks, and minimizing transaction costs (Lee

& Wong, 2005). Financial development fundamentally interconnects with the attainment of economies of the scale and enhancement of economic performance and growth (Khatun, 2016; Kyophilavong, Uddin, & Shahbaz, 2016).

The impact of financial development on economic growth has been the subject of a tremendous deal of research. Yet, the bulk of these analyses highlight the robustness of financial markets in developed countries. The integration of financial markets, instruments, and intermediaries is vital for encouraging economic growth, according to research that compares financial development and economic growth across different nations (Luintel, Khan, Arestis, & Theodoridis, 2008). Financial systems and advancements vary across different regions of the world. Underdeveloped banking sectors often contribute to the presence of ineffective financial markets in developing nations, as they retain a significant amount of money in unproductive current assets. This leads to greater transaction and information costs, ultimately leading to inefficient allocation of resources.

Moreover, Rioja and Valev (2004) demonstrated that in advanced economies, the financial sector predominantly supports economic growth by improving productivity, while in underdeveloped countries, its main role is to facilitate the accumulation of capital. Prior academic research and practical investigations have observed that financial development has the potential to boost productivity growth by facilitating efficient capital allocation and promoting the technological advancement. Nevertheless, regardless of differences in financial systems and levels of progress, studies conducted in both industrialized and developing countries have repeatedly shown the positive impact of financial development on economic growth.

Expanding a country's financial system is critical to the development of any economy. Building stronger financial institutions, tools, and markets may pave the way for massive investment and economic growth, which in turn helps alleviate poverty. Financial development enhances the availability of valuable information on potentially lucrative ventures and facilitates the efficient allocation of cash. Simply put, the rise of financial institutions reduces the expense of gathering information and facilitates the effective implementation of agreements and transactions. Moreover, improving financial accessibility promotes dynamic efficiency in the system by initiating structural improvements and increasing overall economic well-being.

The Association of Southeast Asian Nations (ASEAN), which is located in the center of a dynamically flourishing region, provides its member countries with a crucial opportunity to improve the socioeconomic well-being of their populations. The development of robust infrastructure, advanced communication networks, and the seamless facilitation of people, goods, and services movement throughout the region can accomplish this. For the purpose of this investigation, the selection procedure concentrated on the five most prominent nations that are members of the Association of Southeast Asian Nations (ASEAN), namely Malaysia, Indonesia, Singapore, Thailand, Cambodia, and Vietnam. The gross domestic product of each individual nation was the primary factor that was considered while selecting the criteria for membership. Research indicates that the expansion of the financial sector is the most significant factor among numerous elements that influence economic growth. When it comes to the financial sectors of their economies, policymakers, particularly those in developing nations, frequently look for insights into the possible benefits that may be gained by experiencing greater liberalization.

An abundance of persuasive data demonstrates that financial development plays a vital role in promoting economic advancement. This evidence comes from both economic theory and extensive practical experiences. Nations that have achieved genuine development consistently strive to alleviate financial constraints, thereby advancing their financial development. Prior to the 1980s, it was common practice for governments to intervene in the financial markets of countries that were still in the process of developing (Greenwood & Smith, 1983). These government interventions manifest themselves in the form of the compulsion of desired interest rates, the distribution of credit based on administrative judgments rather than market factors, and the enforcement of prohibitions on foreign capital. Nevertheless, over the past three decades, a significant number of developing economies have adopted the development financing method. The ASEAN-5 nations and Vietnam are the subjects of this research, which explores the effects of financial development on the economic growth of these countries.

2. THEORETICAL FRAMEWORK

2.1. Endogenous Growth Theory

During the 1980s, there emerged a novel and more revolutionary finding in specialist research. Underdeveloped nations have not exhibited a higher rate of economic growth compared to affluent nations, and the disparities in capital returns are not as pronounced as anticipated by the model. Contrary to the expectations of Solow, Mankiw, Romer, and Weil (1992); Romer (1986) and Lucas (1988) capital did not enter the developing world to exploit the significant profits. The proposition suggests that nations that allocate a larger part of their gross national income towards the development of physical and human resources are likely to attain a greater level of stable income, as demonstrated in the Solow (1956) model, and experience accelerated economic growth. This implies that the growth rate in the long run is determined from inside the model itself rather than being only influenced by external variables like the expansion of the labor force and worldwide technical advancements.

The causal link between financial development and economic growth might differ among nations due to at least three factors. One possible factor for differences in economic growth rates is the institutional structure of the financial system. Certain types of financial plans may have an advantage over others in promoting faster economic growth. Gerschenkron (1962) taxonomy categorizes financial systems into two distinct approaches: banking-based and market-based financial systems (Frankel, Montgomery, Friedman, & Gertler, 1991).

The main features of a bank-based financial system are the close involvement of banks and their relatively low level of capital market development and importance. Companies commit to shareholders by ensuring the presence of strong banks on their management boards. Very few mergers occur, and the management remains accountable and can be removed or changed at any time if proven inefficient. Banks in these financial systems have continued to operate despite the emergence of globalization and financial liberalization, which has increased dramatically since the collapse of Bretton Woods in the early 1970s (Helleiner, 2010). However, these developments create new challenges for the viability of bank-based financial systems. Thus, the critical feature of a bank-based financial system is that firms rely heavily on bank loans and not so much on equity, with banks performing an essential supervisory role. So, banks play an important role in the growth and development process. Banks typically contain physical capital and provide a safety valve by changing or removing the management team at an early stage when problems arise. Such systems are common in Japan, Germany, and Korea.

On the other hand, the market-based financial system, which is generally the financial system of the United Kingdom and the United States, is distinguished by highly developed capital markets, in which banks are involved. Banks have a minimal role in the distribution of money and ownership of financial assets. The capital market, which is an open market that actively stimulates mergers and acquisitions, is the source of the majority of the long-term funds that are provided by the offshore market. In light of the fact that shareholders frequently have difficulty expressing their concerns unless a crisis occurs, this particular feature is regarded as a realistic strategy for establishing management accountability to the company.

Finance has become part of an international financial system, making these financial systems even more important. In this context, global connections take precedence over ties with domestic industries. Second, the financial sector's policies can also have important implications regarding whether financial strengthening can promote growth; therefore, different approaches across countries can result in a causal nature between financial development and growth. Finally, when the extended institutional structure is considered, although the financial system is identical, the financial policies implemented in the region can vary according to how governments operate and affect their performance. The same financial policies work differently in different countries because of differences in the effectiveness of the institutions implementing them. Economic research has a strong foundation for the first two reasons mentioned above, while recent studies have focused on the third.

2.2. Empirical Studies

Financial system growth encompasses the expansion of the scale, effectiveness, and resilience of financial markets, as well as the improvement of their accessibility, which yields various economic benefits. A sophisticated financial market facilitates the transformation of an economy's savings into lucrative investments (Diamond, 1984; Stiglitz, 1993) diminishes expenses related to acquiring information, thus resulting in more efficient distribution of capital (Greenwood & Jovanovic, 1990) and also decreases the costs associated with corporate governance (Bencivenga & Smith, 1993). Furthermore, the emergence of financial intermediaries facilitated technical advancements that enhanced the effectiveness of economic operations (King & Levine, 1993). Additionally, as described by Levine (1997) financial institutions enable the exchange of goods and services and have a crucial function in spreading out investments, protecting against risks, and reducing potential losses. According to Levine (1997) capital accumulation and technical innovation play a vital role in financial development and growth. The financial system's credit allocation acts as a bridge between the financial and real sectors, enabling the financing of both working capital needs and fixed capital investments. These investments lead to increased productivity and enhancements in the real sector (Das & Guha-Khasnobis, 2008).

However, some economists hold a different view regarding the relationship between financial development and economic growth. Robinson (1952) contended that other factors primarily drive economic growth, with finance having a limited impact. Research by Van Wijnbergen (1983) and Buffie (1984) suggests that the development of financial systems causes borrowers to shift from the informal sector to the formal sector. This shift results in a reduction in the general availability of credit, thereby restricting the economic development potential of the related sector. Furthermore, Lucas (1988) emphasized that financial markets have a reduced impact on the advancement of the economy.

Furthermore, Shan (2005) recently highlighted that the Asian economic crisis in 1997 has heightened skepticism regarding financial development as a driving force for economic growth. This is due to the financial market's failure to effectively channel significant capital flows into viable business ventures. Additionally, the global financial crisis of 2008 demonstrated that the breakdown of financial markets primarily resulted from issues related to subprime mortgage lending.

Hence, the inability of economies to effectively monitor and regulate the ever-evolving financial markets, coupled with the challenge of keeping up with financial innovation, underscores the necessity for the cautious and robust development of financial markets. Such an imperative holds significant implications for the overall health of an economy.

Le, Ho, and Vu (2019) employed the GMM methodology to examine the influence of financial development on economic growth in ASEAN-3 nations over the period of 2000-2014. They discover a favorable correlation between stock market capitalization and economic growth. Furthermore, Abubakar and Gani (2013) conducted a comprehensive analysis of the enduring correlation between financial development indices and economic growth in Nigeria from 1970 to 2010. Research utilizing the VECM model demonstrates that in the long run, increasing investment and the total credit provided by commercial banks have a significant and favorable effect on economic growth. On the other hand, increase lending to the private sector, higher market interest rates, and increased government expenditure have a significant negative impact on economic development.

Pradhan, Arvin, Bahmani, Hall, and Norman (2017) examined the associations among the depth of the banking sector, the level of trade openness, and the rate of economic development. They used a panel dataset covering ASEAN nations from 1961 to 2012. The findings of this study suggest a consistent and stable connection throughout time between trade openness, banking sector depth, and economic development. Furthermore, there is also a short term association between these variables. The author suggests promoting substantial expansion within the banking sector and increasing trade liberalization through governmental interventions.

Próchniak and Wasiak (2016) study the impact of financial sector development on changes in the structure and economic growth of countries from 1960 to 2016. The study revealed that the financial sector's growth negatively influenced the agricultural sector's progress, but it did not exhibit a corresponding impact on the advancement of the industrial sector. Importantly, countries boasting a high level of financial sector development exclusively observed this adverse effect. Additionally, the findings highlighted that the expansion of the agricultural sector adversely affected the growth of the financial sector, while conversely, the industrial sector's development had a positive influence on the progress of the financial sector.

Using the PMG technique, Al-Moulani and Alexiou (2017) showed the long- and short-term effects of insurance, banking, and stock markets on economic growth. For the period 1981 to 2008, the sample includes 31 countries. The study offers compelling evidence indicating that private credit acts as a hindrance to economic growth. Nonetheless, the impact of life insurance and the stock market on growth appears to be less pronounced across various time series. Furthermore, the study underscores that the influence of financial activities on growth is subject to fluctuations across different periods, income levels, and stages of financial development. As a result, nations at various stages of development should consider engaging in distinct financial activities tailored to their circumstances to achieve enduring and sustainable growth.

3. RESEARCH METHODS AND DATA

3.1. Regression Model OLS, FEM, REM

Panel data regression model:

$$GDP_{it} = \beta_0 + \beta_1 DCB_{it} + \beta_2 CLP_{it} + \beta_3 INF_{it} + \beta_4 BMG_{it} + \varepsilon_{it}$$

In which:

GDPit: indicating the domestic product for country i in year t.

DCBit: indicating domestic credit provided by banks in country i year t.

CLPit: indicates the capital requirement for the private sector for country i year t.

INFit: independent variable in the model, financial market price indicators for country i year t.

BMGit: independent variable in the model, *Broad Money Growth for* country i year t.

β0, β1, β2, β3, β4 are the coefficients in the model.

εit: the error term.

i: country, i (Malaysia, Indonesia, Singapore, Thailand, Philippines, and Vietnam).

t: year, t (2000, 2021).

3.2. Variable Description

The study aims to investigate the relationship between financial development and economic growth GDP of ASEAN-5 countries and Vietnam. The study has 5 variables: GDP, BMG, CLP, DCB, and INF. Financial development includes 4 components: Broad Money Growth (BMG), the capital requirement for the private sector (CLP), Domestic Credit provided by the Banking sector (DCB), and financial market price indicators (INF), which are taken quarterly for the period 2000 to 2021. We choose these variables based on established theories and empirical models. They also represent characteristic aspects of financial development that are relevant to any country's financial systems.

3.3. Research Data

We collected secondary data from 2000 to 2021. The selection of this period guarantees adequate representation and suitability of the data series for the study's objectives. Simultaneously, the dataset encompasses the period during which countries, particularly Vietnam, acceded to the World Trade Organization (WTO), leading to certain alterations in financial development. Therefore, the research time frame can measure the impact of

financial development on economic growth. The Gross Domestic Product (GDP) percentage is derived from international financial data provided by the Asian Development Bank (ADB). Broad Money Growth (BMG) is measured as a percentage, financial market price indicators (INF) are indexed, and the capital requirement for the private sector (CLP) and Domestic Credit provided by the Banking sector (DCB) are the four components that constitute financial depth. The International Monetary Fund's (IMF) sources these components from its financial statistics (IFS). These variables exhibit trends but do not follow a normal distribution. This study transforms these variables into their natural logarithms to approximate a normal distribution, aiming to meet the input data requirements of the model. The deviation must be minimized to ensure accuracy.

4. RESEARCH RESULTS AND DISCUSSION

4.1. Choosing the Best Regression Model

The correlation coefficient matrix shows the degree of interaction of the independent variables.

Table 1. Matrix of correlation coefficients between independent variables.

	CLP	INF	BMG	DCB
CLP	1.0000			
INF	0.1062	1.0000		
BMG	0.6187	-0.1221	1.0000	
DCB	0.3106	-0.0399	0.5624	1.0000

Table 1 displays the results of the regression, indicating that all independent variables can be incorporated into the model without the presence of multicollinearity.

Table 2. The OLS regression results.

F(4, 127) = 3.02				Prob > F = 0.0204		
GDP	Coefficient	Standard. error	t	P>|t|	[95% confidence]	
CLP	-0.236	0.141	-1.67	0.097	-0.516	0.043
INF	-0.124	0.453	-0.27	0.785	-1.020	0.773
BMG	0.119	0.049	2.42	0.017	0.022	0.216
DCB	0.215	0.131	1.64	0.104	-0.045	0.476
_cons	4.742	2.208	2.15	0.034	0.373	9.110

Table 2 displays the p-value of the F statistics (0.0204). The subsequent phase involves doing regression analysis with a constant difference in intercepts between the regression functions of the objects. Table 3 displays the results of the fixed-effects regression (FEM).

Table 3. The FEM regression results.

F(4,122) = 3.67				P > F = 0.0074		
GDP	Coefficient	Standard. error	t	P>|t|	[95% confidence]	
CLP	-2.443	0.749	-3.26	0.001	-3.925	-0.960
INF	2.285	0.925	2.47	0.015	0.454	4.115
BMG	-0.095	0.107	-0.89	0.374	-0.307	0.116
DCB	0.289	0.301	0.96	0.338	-0.306	0.885
_cons	33.337	10.151	3.28	0.001	13.242	53.431
F test that all u_i=0: F(5, 122) = 2.83			Prob > F = 0.0187			

The FEM model is statistically significant with the probability of F statistics (0.0187). The FEM model shows that the capital demand of the private sector (CLP) and the financial market's development level affect the economic growth of ASEAN-5 and Vietnam. The regression with the random intercept difference between the objects' regression function is conducted. Table 4 shows the random-effects regression (REM).

Table 4. The REM regression results.

Wald chi2(4) = 7.37		Prob > chi2 = 0.0117				
GDP	Coefficient	Standard. error	z	P>|z|	[95% confidence]	
CLP	0.373	0.238	-1.56	0.011	0.840	0.094
INF	0.009	0.497	0.02	0.098	-0.965	0.983
BMG	0.132	0.063	2.10	0.036	0.008	0.256
DCB	0.272	0.218	1.24	0.021	-0.157	0.701
_cons	5.505	2.857	1.93	0.034	-0.096	11.105

The REM model demonstrates statistical significance, as indicated by the likelihood of the F statistics (0.0117). The FEM model indicates that the expansion of the money supply (BMG), the capital required for the private sector (CLP), and the domestic credit given by banks (DCB) have influenced the degree of economic growth in ASEAN-5 and Vietnam. Based on the outcomes of these research models, the author will use the F test to choose whether to use Pooled OLS or FEM. Additionally, the author will utilize the Hausman test to pick between REM and FEM. Ultimately, the author will decide on the most appropriate estimate method. The author used the F-test to choose the appropriate model between Pooled OLS and FEM, assuming:

H_0: The Ordinary Least Squares (OLS) model is a more appropriate choice for the sample data compared to the Finite Element Method (FEM).

H_1: The Finite Element Method (FEM) is a more appropriate choice for analyzing the sample data compared to the Ordinary Least Squares (OLS) model.

The financial system is a collection of financial intermediaries (commercial banks, non-bank credit institutions, insurance businesses, etc.) and financial markets (stock and bond markets) through which households, businesses, and governments finance their activities and invest their savings, as well as make use of other financial services, such as payments, insurance, and financial support. Financial development is a set of factors, policies, and institutions to ensure increased depth (including scale and liquidity), access to capital and financial services of individuals and businesses, as well as efficiency (providing financial services at low costs, sustainable revenue) of intermediaries and financial markets.

Table 5. Model selection test (F test) between pooled OLS and FEM.

F statistics	P-value
3.67	0.0074

Table 5 presents the results of the F-test comparing the pooled OLS and Fixed Effects Models (FEM). The F-statistic of 3.67 and a corresponding p-value of 0.0074 indicate a significant difference between the two models at the 5% significance level. Given the rejection of the null hypothesis, the FEM is deemed more appropriate for the sample data than the OLS model. To further discriminate between FEM and Random Effects Model (REM), a Hausman test is subsequently performed.

Table 6. Model selection test (Hausman test) between FEM and REM.

Chi-square	P-value
8.66	0.0702

Table 6 presents the results of the Hausman test to determine the most suitable model between Fixed Effects (FEM) and Random Effects (REM). The conventional significance levels cannot reject the null hypothesis, as indicated by the chi-square statistic of 8.66 and corresponding p-value of 0.0702. Consequently, the Random Effects Model (REM) is preferred over the FEM for this analysis.

4.2. Regression Model Assumptions Testing

4.2.1. Multicollinearity Test

Multicollinearity is the phenomenon where independent variables in a model are linearly correlated. Researchers perform hypothesis testing to check for the absence of multicollinearity using the Variance Inflation Factor (VIF) criterion.

Table 7. Multicollinearity test.

Variable	VIF	1/VIF
CLP	3.60	0.277
DCB	3.08	0.325
BMG	1.73	0.577
INF	1.11	0.897
Mean VIF	2.38	0.519

Table 7 presents the results of the multicollinearity test, measured by the Variance Inflation Factor (VIF). The VIF values for all independent variables (CLP, DCB, BMG, INF) are less than 5, indicating a low level of multicollinearity among them. Therefore, the model does not exhibit significant multicollinearity, allowing for the retention of all independent variables for estimating purposes.

4.2.2. Heteroscedasticity Test

Heteroscedasticity, characterized by changing error variances, can render Ordinary Least Squares (OLS) estimates robust but inefficient, making regression coefficient tests unreliable. The hypothesis of constant error variance is tested using the Breusch-Pagan Lagrangian test, with the null hypothesis H0: No heteroscedasticity.

Table 8. Heteroscedasticity test.

Variable	Chi2 (7)	Prob > chi2
Breusch - Pagan test	0.08	0.3915

Table 8 presents the results of the Breusch-Pagan test for heteroscedasticity. The test statistic of 0.08 and a corresponding p-value of 0.3915 indicate that the null hypothesis of homoscedasticity cannot be rejected at the 5% significance level. Therefore, there is no evidence of heteroscedasticity in the model. However, in addition to the good impacts, if one or more portions of the financial system have issues or dangers, they will spread to other areas, causing hazards and harm to the global economy. The Asian financial crisis of 1997-1998, as well as the global financial crisis of 2008, are examples of this harmful influence. As a result, in order to ensure that financial development supports long-term economic growth, the financial system must be adequately managed to ensure healthy and effective development.

4.2.3. Autocorrelation Test

Error terms correlate to cause autocorrelation, which renders OLS estimates robust but inefficient and regression coefficients unreliable. The study conducts an autocorrelation test on panel data with the null hypothesis H0: No autocorrelation.

With a significance level of 5 percent, the test is insignificant (P = 0.3643). Therefore, the insignificant result leads to the null hypothesis H0 is not rejected. Consequently, the model does not experience autocorrelation. After the above tests, it is concluded that the model does not violate regression assumptions like autocorrelation, changing error variances, and multicollinearity. The Random Effects Model (REM) ensures robust and efficient estimation.

Based on the empirical findings derived from the research model, the authors will delve into discussions and provide insights regarding the ramifications of financial development on the economic growth of Southeast Asian countries. The study has contributed empirical evidence on the relationship between financial development and economic growth in selected ASEAN-5 countries and Vietnam. Compared to developed countries, the financial systems in developing countries have distinct characteristics such as smaller size, lower complexity, and poorer legal practice. Previous studies however, have not focused on and emphasized countries where the economy and the financial sector have a low level of development. The findings on the relationship between financial development and economic growth have essential implications for policymaking.

Using panel data of ASEAN-5 and Vietnam for the period 2000-2021, this study has shown that the impact of financial development on economic growth is statistically significant and ranges from 13% to 37%. Specifically, the capital demand of the private sector accounts for 37% of the economic growth of ASEAN-5 countries and Vietnam. This approach aligns well with the current circumstances, particularly considering that most of these nations are emerging markets where the non-state sector is predominant in driving economic growth. This sector operates dynamically and efficiently through market mechanisms, contributing significantly to the economy. Most of these countries rely on capital primarily from the banking system rather than the financial market, so the bank credit has a 27% impact on the economy's growth.

However, the study found that the development index of the financial industry does not have a statistically significant impact on economic growth. Furthermore, it is worth noting that the expansion of Broad Money also exerts a significant 13% influence on the economic growth of both ASEAN-5 nations and Vietnam. This outcome aligns with the notion that the rate of economic growth is contingent upon the extent of financial development. Financial system growth encompasses the expansion of the scale, effectiveness, and resilience of financial markets, as well as the improvement of accessibility to these markets, which yield various advantages for the economy. A strong financial market enables the transformation of funds allocated for capital-intensive endeavors, particularly in the private sector of the economy, into lucrative ventures. The reference is from Stiglitz (1993).

Financial systems support trading, diversification, hedging, and amelioration of risk. In addition to facilitating capital accumulation, they are critical financial development and growth factors. Furthermore, Shan (2005) has recently highlighted that the Asian economic crisis of 1997 has added to the skepticism surrounding financial development's role as a catalyst for economic growth. This skepticism arises from the observation that financial markets could not effectively direct substantial capital flows toward viable business projects during this crisis. Furthermore, the global financial crisis of 2008 starkly demonstrated the breakdown of financial markets. As a result, the inability of economies to effectively monitor and regulate the evolving financial markets, coupled with their struggle to keep up with financial innovation, and the research results are also consistent with developing countries-financial sectors with low growth, can hinder economic growth.

4.3. Research Discussion

Financial development is not sustainable; there are still many potential risks to both the credit institution system and the financial market. The management of bad debts remains incomplete, with challenges and associated with managing collateral assets. When post-COVID-19 support policies expire, the bad debt ratio may increase rapidly. Many countries in the region have applied Basel III standards, but the Basel II standards are based on the standard method, not the advanced method. The restructuring of credit institutions is still slow, especially at the three compulsory purchasing banks. In 2022 and 2023, the special control list will include a number of new banks, thereby

posing liquidity risks. Phenomena of price manipulation and price manipulation in the stock market and derivatives market, pushing up stock prices "artificially," not based on the operating situation of the enterprise. The awareness and understanding of many domestic investors is still limited; investor psychology is unstable, affecting the stability of the financial market in particular and financial security in general.

The financial system's infrastructure still faces many limitations. The market lacks diversity in products, and the quality of certain goods remains uncertain. In the stock market, the main commodities are stocks, bonds, and fund certificates. However, the number of listed companies in Vietnam is still small (750 listed companies, while the number of public companies is much larger, about 1,800 companies), so the quality of goods on the stock market did not meet expectations. The corporate bond market is still small in scale, with a small number of corporate bond codes and short bond terms. The market's investor structure is not yet diverse, with a focus on individual investors with limited awareness and understanding.

Domestic institutional investors are mainly investment funds, and their professionalism is not high. In the bond market, the main trading subjects are joint stock commercial banks and securities companies, with the trading proportion of commercial banks accounting for more than 80% of the total market trading value. Investor's outside commercial banks have not yet achieved the goal of increasing the proportion of government bond holdings to 50%. In addition, the accounting standards still have many differences and have not kept up with international accounting standards, creating loopholes for some organizations to take advantage of and mis-account the nature of transactions. The legal framework for market operations is not complete and has not kept up with market development. In addition, the level of information technology application in the financial system is still low and quite far apart compared to many countries in the region and around the world, not keeping up with the requirements of actual application and development of information technology.

The limitations mentioned above primarily stem from the following main reasons:

Firstly, the financial system's legal regulations are not yet complete and synchronized. Although these regulations are continuously reviewed, supplemented, and perfected, many positive results have been achieved, but some limitations still remain, such as not covering all socio-economic issues, a Some regulations are not really consistent with practical requirements, and some areas do not have timely guiding legal documents.

Second, there is no agency to fully supervise the financial system's operations. The current supervisory agencies are still fragmented and unspecialized. Vietnam's financial supervisory agencies (Banking Inspection and Supervision Agency; State Securities Commission; Department of Insurance Management and Supervision) perform supervisory functions for each part of the system. Each agency operates within the financial system, adhering to distinct legal regulations.

Third, many Vietnamese credit institution's risk management capacity is still weak. The risk management process of many banks is not strict and incomplete. Many banks have not built a complete and accurate database system to calculate capital adequacy ratios and assess risks according to Basel II standards. The quality of risk management human resources does not meet requirements.

Ultimately, information disclosure and financial market transparency continue to face numerous challenges. Information disclosure and transparency help protect the rights and strengthen investors' confidence, while ensuring the safety of market operations. However, the information disclosure of many businesses in Vietnam is still not timely, complete, and accurate. Fraudulent documents, improper use of capital according to the issuance plan, manipulation of stock prices continue to occur. Many businesses continue to provide low-quality information due to a lack of audits by reputable companies. Vietnam does not have many credit rating companies to evaluate the financial capacity and operations of businesses issuing and trading on the stock market. In the current credit rating market, there are only three businesses licensed to operate (Fiin Ratings, Saigon Ratings, and VIS Rating), with a limited number of rated businesses.

5. CONCLUSION AND RECOMMENDATIONS

5.1. Conclusion

Regarding policy direction, policymakers in developing nations like Vietnam, who aim to foster sustained economic growth, should prioritize the development of banking and financial markets. This involves facilitating the effective formulation and implementation of banking and financial policies that can contribute to long-term economic expansion. In a more detailed context, improving the financial sector elevates its importance and ensures monetary stability and security. Additionally, it plays a pivotal role in driving production development and economic growth. This is because the financial market holds a central position within the economy, having a significant impact on production efficiency and the actual growth of output in the economy.

Furthermore, the trajectory of financial development should aim to achieve harmony between the banking system and the financial market. This involves enhancing the efficiency of the financial market, with a particular emphasis on refining the stages of financial liberalization and international financial integration. Efforts should be directed toward promoting current financial products to cater to the market's progressively affluent and varied demands.

5.2. Recommendations

To complete the legal framework for the financial system for promulgating new legal documents that have the scope and content of the adjustment appropriate to emerging realities. Specifically:

First, the National Assembly considers and promulgates the Law on Handling Bad Debts of Credit Institutions, in order to create a legal basis for handling bad debts in the long term, and at the same time directs relevant agencies to submit to the National Assembly for consideration and promulgation of the Transaction Law. The Law on Handling Bad Debts of Credit Institutions Establishes a legal framework for the swift and convenient settlement of secured assets and the management of bad debts, particularly for credit institutions. By ensuring and resolving bad debts, credit institutions can enhance their reputation and competitiveness, gradually meeting the requirements, thereby improving reputation and competitiveness, gradually meeting the requirements of increasingly deep financial integration.

Next, fine-tune the model for keeping tabs on the financial system. Choosing the right financial system supervision model is becoming more critical as the risks of systemic risk increase as a result of the financial sector's spillover effects. The primary objectives of the system of financial supervision are the protection of consumers, the maintenance of sound business practices, and the assurance of a safe and sound operating environment.

Third, the State Bank needs to issue specific regulations and implementation methods, aiming for a full set of standards according to Basel II and moving towards Basel III so that credit institutions have a basis for implementation. Promote reform of the banking accounting system according to international standards, focusing on debt classification according to risk level, risk provisioning, and income and expense accounting. The State Bank needs to build a database on risks in the operations of credit institutions to serve as a basis for making appropriate policies and quickly stabilizing the system when unexpected risks occur. Strengthen the application of modern information technology and advanced analytical tools for the database reported by credit institutions to the State Bank to perform inspection, supervision, and risk warning.

Finally, enhance the caliber of information dissemination and promote transparency in the financial industry. Improve the regular and continuous processes of inspection, examination, and supervision. Assess the implementations of protocols for the disclosure of information as well as the responsibilities of public corporations in managing their operations. Coordinate to rigorously address instances of non-compliance with financial reporting. It is imperative to establish suitable legislative laws in order to provide a framework for effectively addressing infractions committed by organizations and people, particularly those involved in disseminating false information and engaging in securities manipulation.

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