

**MINISTRY OF FINANCE
UNIVERSITY OF FINANCE - MARKETING**

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**THE RELATIONSHIP BETWEEN
CONSUMER CONFIDENCE AND STOCK MARKET INDEX
IN MIDDLE-INCOME COUNTRIES.**

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SUMMARY OF DOCTORAL THESIS IN ECONOMICS

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CHAPTER 1: OVERVIEW

Keywords: consumer confidence, stock market index, public administration.

1. Reasons for choosing the research topic

From 1875 to 1913, the world stock market was at its peak, and the economy was expanding rapidly. However, between 1929 and 1939, the stock market saw a series of crises, including the terrible collapse of Wall Street and the gloomy Monday of 1987. In 2008, the financial crisis occurred; nevertheless, in 2007, the stock market in Vietnam was so "hot" that the server system of the Ho Chi Minh City stock market had to halt trading on the morning of February 2, 2007. So, what was the cause? Is it due to a lack of knowledge or an abundance of information that causes investors to modify their investment objectives, boosting crowd infection and the herd effect in investment? This condition creates market imbalance in the long run. For example, the Conference Board recently announced that the US consumer confidence index in October 2021 was 113.8 points, up from 109.8 points in September 2021, owing to a decrease in concerns about the spread of the Delta variant of the Covid 19 pandemic, and an increase in the rate of consumers willing to spend money on large purchases in October 2021. This demonstrates that consumer spending will drive growth. Because consumer confidence is a critical indicator for the US economy in general, and the stock market specifically. People are secure in their future income, therefore they will spend more, contributing to economic growth. Even though the Omicron variety spread swiftly at that time, American consumers remained optimistic about the economy in the short term, allowing the Conference Board's US consumer confidence index to rise to 115.8 points in December 2021. Mirae Asset Vietnam Securities Co., Ltd. reported that following a significant decrease in the third quarter of 2021, the Vietnamese economy initially recovered in October 2021 as provinces gradually loosened social separation and the COVID-19 immunization program was accelerated. Analysts from VNDIRECT Securities Joint Stock Company agreed, stating that stock market confidence improved in October 2021 as social separation eased in Hanoi and Ho Chi Minh City. Ho Chi Minh City, and at the same time, the government announced a fresh economic stimulus plan, boosting investor confidence in the Vietnamese stock market. Indeed, the stock market is vitally important to each country's economic progress. The stock market attracts enormous amounts of long-term money for the economy as a whole, as well as providing people with more investing opportunities. Historically, the stock market has varied in response to economic shocks, as evidenced by investor behavior during the recent Covid-19 outbreak. For example, in September 2022, because to fears about epidemic prevention measures under China's Zero Covid policy, international investors withdrew capital from China's listed equities in large numbers. Investor sentiment in the Chinese stock market improved by November 2022 as the Chinese government started to loosen its Covid-19 prevention measures and tensions between the US and China also decreased. By December 5, 2022, the Chinese stock market had experienced a significant upswing. In the meantime, investor optimism in India rose in September 2021 as the nation's Covid-19 vaccine campaign picked up speed, which caused the Indian stock market index to soar. The

S&P BSE Sensex index increased and crossed the 60,000-point threshold by the end of September. However, INR 2,170 billion in capital outflows from the Indian market occurred in the first half of 2022, resulting in a 17% decline in the Indian stock index from the end of 2021. Nevertheless, the Indian stock market was only depressed during the first half of 2022. By July 2022, however, the market had slightly recovered, foreign investors had started to net buy Indian equities, and by the end of September, the Indian stock index had risen by 14.5%. On December 22, 2021, Vietnam's VN-Index hit 1,528.57 points, up 35.9% from the end of 2020. But at the end of 2022, the HNX-Index closed at 205.31 points, and the VN-Index fell precipitously to 1,007.09 points. According to studies by Lilia Karnizova (2015), Jansen, W. J. & Nahuis, N. J. (2003), Chih-Chiang Hsu, Hung-Yu Lin & Jyun-Yi Wu (2011), and Koy Ayben and Akkaya Murat (2017), this disparity may be caused by the law of supply and demand, the impact of technology, or even consumer confidence. This demonstrates the growing number of studies and advancements in the securities industry aimed at assisting customers in making the most sensible investing choices. Customers will make poor decisions if they lack the mental stability to select reliable information. For consumers to make wise stock market investments, they must be sensitive to market swings. As a result, it is becoming more and more crucial to research how consumer confidence and stock market indices interact in order to establish stability and long-term growth for the stock market. Furthermore, a lot of research has been done on consumer confidence and stock market indexes lately, but little has been done to examine how public administration affects the relationship between CCI and SMI, particularly in middle-income nations like Vietnam. According to a study by Schmeling, M. (2009), institutional quality is a component of public governance, and cultural characteristics have a significant influence on the correlation between stock market index and consumer confidence. Does the standard of public governance have an effect on SMI and CCI at the same time that the government's involvement grows? Six constituent variables: voice and accountability, political stability, government efficacy, legal quality, rule of law, and corruption control combine to form public governance. In light of this, the thesis determines that it is necessary to examine the relationship between CCI and SMI in the context of national public governance in order to explain how changes in the quality of national public governance will affect consumer confidence, the stock market index as mentioned above, and whether these effects will be positive or negative. The thesis also looks at groups of nations with varying incomes to show that investing psychology similarly affects nations with varying incomes, since income influences investors' purchasing decisions according to behavioral theory. The thesis also addresses the question of whether public governance influences the relationship between CCI and SMI, but whether or not the research findings differ in nations with varying income levels. Generally speaking, nations with middle-class or lower-class citizens will not play a significant role since they tend to have lesser levels of education, income, and market investment, and investors are less concerned with state controls on the stock market and prefer to invest in herds, which are unregulated. However, middle-income nations are frequently vulnerable to the middle-income trap, hence a stable political climate is required. In order to help consumers make the most informed investment decisions, the thesis investigates the

research gap and, at the same time, suggests implications based on the findings to assist the government in modifying public administration to support the growth of the stock market. Furthermore, the author draws upon two primary studies: Vichet Sum (2014) and Jansen, W. J., & Nahuis, N. J. (2003). Both investigations come to the same conclusion: CCI and SMI are related. Specifically, the Schmeling, M. (2009) study confirms that cultural factors are powerful predictors of the association between CCI and SMI and that institutional quality is a component of public administration. The author chose the topic "THE RELATIONSHIP BETWEEN CONSUMER CONFIDENCE AND STOCK MARKET INDEX IN MIDDLE-INCOME COUNTRIES" in order to investigate and respond to the questions posed.

2. Research objectives

2.1. Overall objectives

Analyzing the relationship between middle-income nations' stock market index and consumer confidence under the influence of public governance is the main goal of the thesis. In order to support the steady and sustainable growth of Vietnam's stock market, the research findings will have policy implications for public governance, the consumer confidence index, and the stock market index generally and Vietnam specifically.

2.2. Specific objectives

The thesis outlines the following particular goals based on the overarching goals:

- (1) Examine the connection between consumer confidence and the stock market index in both lower- and upper-middle-income nations while taking public governance into consideration.
- (2) Research the connection between Vietnam's stock market index and consumer confidence.
- (3) Based on the findings of the study, the thesis will make suggestions for middle-income nations, including Vietnam specifically, regarding public governance, consumer confidence, and stock market indices in order to support the steady and long-term growth of the Vietnamese stock market.

3. Research data

The World Bank has divided the world's economies into four income-level categories for the fiscal year 2020–2021. Group 1: nations with low incomes. The GNI per capita for this category is less than 1.035 USD. Group 2: economies in the lower middle class, whose GNI per capita ranges from 1.035 to 4.045 USD. Group 3: economies in the upper middle class, whose GNI per capita ranges from 4.045 to 12.535 USD. High-income economies in Group 4 have a GNI per capita of more than \$12.535 USD. Vietnam falls under the category of economies with lower middle incomes based on this classification. And for the first time in 2020, Vietnam is at the top of the lower middle-income group, according to the World Intellectual Property Organization (WIPO). Every year on July 1st, this classification list will be revised according to GNI per capita. The following factors led the theory to focus on middle-income nations:

- According to Khadija Khartit (2023), middle-income nations, which have a combined population of over 5 billion people, make up roughly 75% of the world's population and provide roughly one-third of its GDP.

-Many middle-income countries' economic growth, both before and after globalization, will benefit less than that of developed nations, according to Eeckhout Jan & Javanovic Boyan (2007). The reason for this is that middle-income nations lack a competitive advantage in terms of technology and capital. In order to attain greater income levels, middle-income nations - particularly lower-middle-income nations must overcome this obstacle.

-The main engine and significant contributor to the expansion of the world economy are middle-income nations. The globe will benefit from middle-income nations' sustainable growth and development.

-Establishing a stable political environment is essential because middle-income nations are frequently vulnerable to the middle-income trap.

-The World Bank categorizes middle-income nations into two groups: upper-middle-income nations and lower-middle-income nations. Vietnam became a member of the lower-middle-income economy in 2009 after breaking through the low-income threshold. Vietnam went from being an impoverished nation to the first-ever leader of the lower-middle-income group by 2020, and it climbed to 37th place among the nations with the highest GDP in the world by 2022. Given its present per capita income, Vietnam is probably going to soon become one of the upper-middle-income nations. Therefore, the State and Government must be concerned with the issue of income if Vietnam is to progressively become wealthier and more developed. But as of right now, only 19 average-income nations: China, South Africa, Thailand, Costa Rica, Bulgaria, Brazil, Colombia, Malaysia, Mexico, Albania, Turkey, Georgia, Vietnam, India, Philippines, Morocco, Indonesia, Pakistan, and Egypt have released consumer confidence index data on the OECD's metadata, national statistical services as well as a few other international bodies. As a result, the thesis will gather information on the stock market index, consumer confidence index, and six public governance variable components in the following three scenarios:

- + Situation 1: Of the 19 nations with average incomes published by the CCI index, three have high average incomes (China, Thailand, and Malaysia), and the other seven have low average incomes (Vietnam, India, Philippines, Indonesia, Egypt, Morocco, and Pakistan). These three upper middle-income nations were selected for the thesis because they are all in Asia and share many traits with Vietnam, which is at the top of the lower middle-income group and is progressively moving up into the middle-income group. so Vietnam can learn some important lessons.

- + Situation 2: Based on nations that use the same amplification method to calculate the CCI index, this study includes four low-income nations (Vietnam, India, Indonesia, and Egypt) and six high-income nations (China, Malaysia, Brazil, Mexico, Costa Rica, and Turkey). Since the majority of nations in the globe, including Vietnam, now utilize the amplification approach to calculate the CCI index, the thesis selects nations that employ the same methodology. This approach simultaneously makes use of consumer survey data on past, present, and future expectations. According to the meaning of the notion of consumer confidence that the thesis selects, these are also the topics that the thesis wishes to pursue.

- + Situation 3: Using a 12-month reference period, this group consists of three low-income nations (Egypt, Vietnam, Philippines) and nine high-income countries (South Africa, Bulgaria, Brazil,

Colombia, Turkey, Georgia, Mexico, Albania, and Costa Rica). The thesis selects nations with a 12-month reference period because, in accordance with UNSD and Nielsen's guidelines, each nation's CCI index should have a 12-month reference period to guarantee cross-country comparisons. + In order to verify the consistency of the data, the thesis then proceeds to encode data for every country using three distinct methods for computing the CCI index (weighting, relative, and amplification).

The OECD, Nielsen, World Bank, country-specific statistics agencies, statistical yearbooks, and papers published in both local and international publications will all provide secondary data for the author to gather. CCI data is released by lower middle-income nations from 2012 to 2021 and by upper middle-income countries from 2005 to 2021. However, some nations report quarterly statistics, while others publish annual data due to data heterogeneity. Therefore, the thesis will employ yearly data for all groupings of nations from 2012 to 2021 in order to harmonize the data. However, the thesis conducted statistics on the average GNI of 19 countries from 2012 to 2021 to ensure that the countries in the dataset used for the thesis are reliable and that these 19 countries have average income throughout the research period. The results demonstrated that all of these countries have actually joined the group of middle-income countries during the research period. This guarantees the accuracy and consistency of the data that the thesis choose to examine. Consumer opinion survey data, or CCI data, is released yearly by the OECD, Nielsen, national statistics agencies, and a few other international organizations.

Every year, Investing publishes SMI data, and the World Bank gathers data on six public governance variable components. The author will use the following two samples to carry out the aforementioned research:

- + A selection of nations with high average incomes
- + Low-middle income nations are included in the sample.

4. Research method

According to the goals, topics, and extent of the study, the thesis is completed as follows:

- The thesis has gathered and synthesized secondary data from the World Bank, OECD, Nielsen, and several other international organizations, as well as from national statistical agencies, statistical yearbooks, and articles in both domestic and international magazines.
- These six component indexes voice and accountability, political stability, government effectiveness, legal quality, rule of law, and corruption control are based on consumer confidence data and the stock market index. The thesis analyzes data, synthesizes statistical findings, and presents data and findings using descriptive statistics like tables and graphs.
- Use six component factors to create a public governance index for each group of nations: political stability, government effectiveness, regulatory quality, rule of law, voice and accountability, and corruption control.
- To check the stability of the data, run a time series test. Next, investigate the link between the two variables (CCI and SMI) under the influence of public governance by running a P.VAR model between the consumer confidence index, stock market index, and public governance.

5. New contributions of the thesis

5.1. In terms of science:

Firstly, the thesis has organized, succinctly described, and clarified several theoretical and practical issues: In relation to the consumer confidence index, the stock market index, systematized public administration, the role of public administration in the relationship between consumer confidence and the stock market index, the method of measuring the consumer confidence index, the stock market index, public administration, and statistical analysis of prior studies, the fundamental theory foregrounds the thesis.

Secondly, a formula for the consumer confidence index is suggested by the thesis: Countries all around the globe have employed three different approaches to determine the consumer confidence index: the equilibrium value technique, the amplification method, and the relative value method. This serves as the foundation for creating measuring techniques for further research.

Thirdly, the thesis has examined and demonstrated that public administration significantly affects the correlation between the stock market index and consumer confidence in both high- and low-income nations. This makes the state's theoretical nature in economic management more clear.

5.2. In practice:

First, the thesis computes the consumer confidence index by grouping nations to undertake consumer confidence surveys. It standardizes consumer confidence statistics throughout the whole study sample at the same time. The thesis investigates aggregated public administration data. From there, it becomes clear how public governance influences the correlation between consumer confidence and the stock indexes of the nations under study.

Second, the link between CCI and SMI in middle-income countries has been examined via the lens of public governance factors, such as voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption. The type of public governance that influences the correlation between CCI and SMI in middle-income nations is then explained. The thesis has broken down the research samples by income, including three sampling cases. Each case is further subdivided into two sub-samples (a sample of low-middle-income countries and a sample of high-middle-income countries), which has not been done before and makes the nature of this relationship very evident. The thesis has demonstrated the robustness of the data and model it has examined by standardizing the data throughout the full study sample while taking into account the nature of public administration on the link between CCI and SMI (no other research has been undertaken).

Thirdly, a new finding of the thesis is that, under the influence of public administration during the survey period, consumer confidence had a strong impact on the stock market index. In contrast, the author has shown that, in the majority of cases, the impact of the stock market index on consumer confidence is still present but not significant. Shocks to the CCI and SMI values in the past, however, also have a significant impact on the current levels. This demonstrates how public administration influences state management, which in turn influences investor and consumer psychology.

Fourth, the thesis examines the relationship between consumer confidence and stock market indexes in Vietnam during the Covid-19 pandemic in addition to demonstrating that public administration influences this relationship in upper-middle-income and lower-middle-income countries. The relevant ramifications for Vietnam are then derived. In conclusion, using suitable and trustworthy research techniques based on data taken from esteemed organizations worldwide. The thesis will offer more suitable policy recommendations based on a trustworthy data set and the results of analysis and empirical research, giving government policymakers more options when creating laws and rules to enhance the public governance environment in the direction of openness and transparency.

CHAPTER 2: THEORETICAL OVERVIEW AND PREVIOUS RESEARCH

The theoretical concerns and a summary of research on the correlation between consumer confidence and the stock market index, as well as public governance factors, are presented in Chapter 2 of the thesis. The thesis specifically focuses on outlining the concepts, functions, and methods of calculating the stock market index, consumer confidence index, and public governance. It also discusses the factors that influence consumer confidence and explains how to calculate the public governance variable from six component variables: political stability, leadership effectiveness, voice and accountability, legal quality, rule of law, and corruption control. Next, the thesis provides an overview of earlier relevant research, including

2.1. Research on the impact of consumer confidence on stock market index

Vichet Sum (2014) based his work on monthly data analysis of 31 nations, whereas Chih-Chiang Hsu, Hung-Yu Lin, and Jyun-Yi Wu (2011) used data from 21 countries. Furthermore, Afshar et al. (2007) used data from Turkey, and Nitin Balwani et al. (2017) used data from India, two studies that have been conducted for a single independent nation.

All of them concluded that consumer confidence had a beneficial effect on the Indian stock market. Gaspar, Raquel M. and Jiaming, Xu (2023) also identified a positive bidirectional link between consumer confidence and stock market returns using data from China, the US, and Europe. Chinese stock returns can only be explained by the unidirectional influence of changes in the consumer confidence index in the Chinese market. These studies demonstrate that consumers are more likely to invest in the stock market when they have strong views and optimistic attitudes concerning future business or investment circumstances, trust their own judgment, and rely on optimistic predictions about future economic conditions. Specifically, Chih-Chiang Hsu, Hung-Yu Lin, and Jyun-Yi Wu's (2011) study solely looked at the immediate correlation between CCI and SMI. Similar to Koy, A. & Akkaya, M. (2017), the author conducted research during a bear market and discovered that stock returns are positively impacted by market pessimism. Furthermore, three Vietnamese studies Nguyen Kim Nam & Nguyen Thi Hang Nga (2016), Nguyen Trong Tai (2016), and Pham Ngoc Toan (2018) also confirmed that investor sentiment has a positive impact on the stability of the Vietnamese stock market, despite using different models and data. Specifically, Bannigidadmth, D. (2020) observed that the stock market of three industries: oil, gas, consumer goods, and consumer services—would be favorably predicted by lagged changes in consumer mood. This study only looked at nine industries in Indonesia. According to a 2003 research by Kemmeth L. Fisher and Meir Statman, CCI has a detrimental effect on the stock market index. Specifically, a research by Baker, M. & Wurgler, J. (2006) discovered that tiny stocks do not earn money when sentiment is strong, but they do when it is low. Furthermore, a research conducted in Vietnam by Tran Thi Van Anh (2020) examined data from the country's stock market during the COVID-19 epidemic and came to the conclusion that the stock market in Vietnam was negatively impacted by consumer attitude during the pandemic.

2.1. Research on the impact of stock market index on consumer confidence

The majority of research indicates that stock market indexes have a positive effect on consumer confidence. For example, Jansen, W. J. & Nahuis, N. J. (2003) used data from 11 European countries; Maria Ward Otoo (1999) used data from the United States; Bremmer, D. (2008) used data from the United States; and Willem Van Zandweghe (2019) used the S&P 500 index and the University of Michigan consumer sentiment index. Doan Anh Tuan et al. (2016) specifically investigated the situation where herd behavior is more strongly manifested during a downward market trend than during an upward one.

2.3. Research on the impact of variables belonging to public governance variables on stock market index and consumer confidence.

Studying how the elements of public governance such as voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption affect the correlation between consumer confidence and the stock market index is currently lacking. Nonetheless, there are some studies that use variables related to public governance in their research. For example, Vuchelen, J. (1995) used data from Belgium and found that unexpected elections had a positive effect on the consumer confidence index while government changes had a negative effect. In the meanwhile, De Boef, S. et al. (2004) found that politics influences consumer psychology and that consumer confidence influences politics. Schmeling (2009) found that the impact of active trading is lessened by high-quality market institutions, based on data from the United States, Japan, Australia, New Zealand, and 14 European nations. Consumer psychology and stock returns are strongly influenced by institutional quality and cultural variables.

Based on the underlying hypothesis and an analysis of earlier research on the connection between CCI and SMI, the thesis identifies the following research gaps:

First, because the nations performing consumer confidence surveys and determining the consumer confidence index by group have not been divided, the research's reach is still inadequate. In order to provide similar results in every situation, the studies have not split the research samples or standardized the consumer confidence data throughout the whole research sample.

Second, the correlation between Vietnamese stock market indices and consumer confidence has not been taken into account, particularly during atypical economic times like the Covid-19 epidemic.

Third, no research has examined the association between CCI and SMI in middle-income nations while taking into account the public governance variable, which includes: Voice and Resolution, Political Stability, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. Alternatively, the Schmeling, M. (2009) analysis only includes one institutional variable. The thesis has developed three relevant aims to fill the three research gaps mentioned above, which are as follows:

(1) Examine the connection between consumer confidence and the stock market index in high- and low-middle-income nations while taking public governance into account.

- (2) Research the connection between Vietnam's stock market index and consumer confidence.
- (3) Based on the findings of the study, the thesis will make suggestions for middle-income nations in general and Vietnam specifically regarding public administration, consumer confidence, and stock market indices in order to support the steady and long-term growth of the Vietnamese stock

CHAPTER 3: EMPIRICAL MODEL, METHOD AND RESEARCH DATA

Chapter 3 suggests a study procedure on the link between consumer confidence and stock market index under the influence of public administration. This is based on the theoretical underpinnings of consumer confidence, stock market index, and public administration as well as the gaps in earlier studies. The thesis then develops research hypotheses, suggests an empirical model, and suggests research methodologies.

The thesis employs suitable testing techniques to examine the relationship between consumer confidence and the stock market index of middle-income countries during the 2012–2021 period, using secondary data gathered from trustworthy sources like the World Bank, OECD, etc. The thesis employs estimate techniques for panel data (for middle-income nations) and time series data (for Vietnam only) in quantitative research approaches. In three scenarios, the thesis gathers information on the stock index, consumer confidence index, and six public governance variable components. The thesis then proceeds to encode data for every country using three distinct methods (weight method, relative method, and amplification technique) to calculate the CCI index in order to verify the data's consistency. Based on two research by Jansen, W. J. & Nahuis, N. J. (2003) and Vichet Sum (2014), the thesis intends to answer the following problems using the P.VAR model:

The study by Jansen, W. J., & Nahuis, N. J. (2003) studied 11 countries, the author used panel data and used Granger causality test in the study.

$$\Delta CC(t) = \alpha_c + \sum_{i=1}^k \beta_c(i) \Delta CC(t-i) + \sum_{i=1}^k \gamma_c(i) \Delta PS(t-i) + u_c(t) \quad (1)$$

$$\Delta PS(t) = \alpha_p + \sum_{i=1}^k \beta_p(i) \Delta PS(t-i) + \sum_{i=1}^k \gamma_p(i) \Delta CC(t-i) + u_p(t) \quad (2)$$

CC: represents consumer confidence

PS: stock price index,

u: is noise

k: maximum lag

Vichet Sum's (2014) study also studied for 31 countries, and the author uses the regression method to study.

$$RR_{it} = \alpha + \phi \Delta BC_{it} + \psi \Delta CC_{it} + \varepsilon_{it}$$

Rit: Stock market index of country i in month t

ΔBC_{it} : Change in business confidence index

ΔCC_{it} : Change in consumer confidence index

The Granger causality test and panel data are used in the two models above for data sets from several nations, whereas Jansen, W. J., & Nahuis, N. J. (2003)'s model additionally takes the data lag into consideration. The thesis inherits the two models mentioned above as it also makes use of a panel data set across time for several nations, applies the Granger causality test, and considers the lag of data. The public governance variable, which moderates the link between consumer confidence and the stock market index, is also a major emphasis of the argument. Furthermore, Vichet Sum (2014) employed a data set of 31 nations, some of which were lower middle-income, some of which were upper-middle-income, and some of which were high-income. It is appropriate for the thesis's inheritance and analysis of middle-income nations. As a result, the thesis suggests the following rough model:

$$SMI = \beta_0 + \beta_1 CCI_{it}^j + \beta_2 (CCI * GI)_{it}^j + \beta_3 SMI_{it}^j + \mu_i \quad (1)$$

$$\text{And } CCI = \beta_0 + \beta_1 SMI_{it}^j + \beta_2 (SMI * GI)_{it}^j + CCI_{it}^j + \mu_i \quad (2)$$

SMI: stock market index.

CCI: consumer confidence index.

GI: public governance index from 6 component variables.

μ_i : is the residual.

i: country

t: Time-based observation t

j: lag

In which: (1) Voice and accountability (VA); (2) Political stability and absence of violence/terrorism (PV); (3) Government effectiveness (GE); (4) Regulatory quality (Regulatory Quality); (5) Rule of law (Rule of Law); and (6) Control of corruption (Control of corruption) comprise the public governance (GI) variable, which is one of the six component variables of the aforementioned countries. It measures the influence on the relationship between the stock market index and consumer confidence. Therefore, using equations (1) and (2) for empirical research, the thesis evaluates the link between CCI and SMI for middle-income countries from 2012 to 2021. The following tests will be conducted by the thesis prior to empirical analysis:

Cross-sectional dependency test (Appendix 4)

Variable	Situation 1		Situation 2		Situation 3	
	Group 1A	Group 1B	Group 2A	Group 2B	Group 3A	Group 3B
CCI	No cross dependencies.	Cross dependence.	No cross dependencies.	Cross dependence.	Cross dependence.	No cross dependencies.
SMI	No cross dependencies.	Cross dependence.	No cross dependencies.	Cross dependence.	Cross dependence.	No cross dependencies.
CCI_GI	No cross dependencies.	Cross dependence.	No cross dependencies.	Cross dependence.	Cross dependence.	No cross dependencies.
SMI_GI	No cross dependencies.	Cross dependence.	No cross dependencies.	No cross dependencies.	Cross dependence.	No cross dependencies.

Testing the stationarity of the data series (Appendix 5)

Variable	Situation 1		Situation 2		Situation 3	
	Group 1A	Group 1B	Group 2A	Group 2B	Group 3A	Group 3B
CCI	Use ADF test. The data series is non-stationary.	Use CIPS test. Non-stationary data series.	Use ADF test. The data series is non-stationary.	Use CIPS test. Non-stationary data series.	Use CIPS test. Non-stationary data series.	Use ADF test. The data series is non-stationary.
SMI	Use ADF test.	Use CIPS test.	Use ADF test.	Use CIPS test.	Use CIPS test.	Use ADF test.

	The data series is non-stationary.	Non-stationary data series.	The data series is non-stationary.	Non-stationary data series.	Non-stationary data series.	The data series is non-stationary.
CCI_GI	Use ADF test. The data series is stationary.	Use CIPS test. Non-stationary data series.	Use ADF test. The data series is non-stationary.	Use CIPS test. Non-stationary data series.	Use CIPS test. Non-stationary data series.	Use ADF test. The data series is non-stationary..
SMI_GI	Use ADF test. The data series is non-stationary.	Use CIPS test. Non-stationary data series.	Use ADF test. The data series is non-stationary.	Use ADF test. The data series is non-stationary.	Use CIPS test. Non-stationary data series.	Use ADF test. The data series is non-stationary.

Nonstationary data series. The results of the differentiation and verification are shown in the following table (Appendix 6):

Contents	Situation 1		Situation 2		Situation 3	
	Group 1A	Group 1B	Group 2A	Group 2B	Group 3A	Group 3B
Differential degree	I(0): CCI_GI I(1): CCI, SMI, SMI_GI.	I(1): CCI, SMI, CCI_GI, SMI_GI.	I(1): CCI, SMI, CCI_GI, SMI_GI.	I(1): CCI, SMI, CCI_GI, SMI_GI.	I(1): CCI, SMI_GI. I(2): SMI, CCI_GI.	I(1): CCI, SMI, CCI_GI, SMI_GI.
Optimal lag Model	3	1	4	3	3	2

Panel cointegration test (appendix 7)

Contents	Situation 1		Situation 2		Situation 3	
	Group 1A	Group 1B	Group 2A	Group 2B	Group 3A	Group 3B
Method used	Pedroni và Kao.	Wesrelund.	Pedroni và Kao.	Westerlund.	Westerlund.	Pedroni and Kao.
Cointegration	No cointegration	No cointegration	No cointegration	No cointegration	No cointegration	No cointegration

Granger test (Appendix 8)

Group	Optimal lag Model	The Granger Test
1A	3	<p>There is a multiplicative relationship between the variables, except for the following cases:</p> <ul style="list-style-type: none"> - The variable DSMI_GI has no Granger relationship with DSMI. - The variable DSMI has no Granger relationship with DSMI_GI.
1B	1	<p>There is a multiplicative relationship between the variables:</p> <ul style="list-style-type: none"> - The variable DSMI_GI has no Granger relationship with DCCI_GI. - The variable DCCI_GI has no Granger relationship with DSMI_GI.
2A	4	<p>There is a multiplicative relationship between the variables, except for the following cases:</p> <ul style="list-style-type: none"> - The variable DSMI has no Granger relationship with DCCI_GI. - The variable DSMI has no Granger relationship with DSMI_GI.
2B	3	<p>There is a multiplicative relationship between the variables, except for the following cases:</p> <ul style="list-style-type: none"> - The variable DSMI has no Granger relationship with DSMI_GI.
3A	3	<p>There is a multiplicative relationship between the variables, except in the following cases:</p> <ul style="list-style-type: none"> - The variable DSMI_GI does not have a Granger relationship with DDSMI. - The variable DDSMI does not have a Granger relationship with DSMI_GI.
3B	2	<p>There is a multiplicative relationship between the variables, except in the following cases:</p> <ul style="list-style-type: none"> - The variable DSMI does not have a Granger relationship with DSMI_GI.

**CHAPTER 4: RELATIONSHIP BETWEEN CONSUMER CONFIDENCE AND STOCK
MARKET INDEX IN MIDDLE-INCOME COUNTRIES**

The study's findings are presented in Chapter 4 of the thesis, which is based on the predetermined goals. Goal 1: Examine the connection between middle-income nations' stock market index and consumer confidence in light of public governance.

In order to achieve this goal, the thesis employed the P.VAR model and performed tests on the data, including the Granger test (Appendix 8), panel cointegration test (Appendix 7), stationarity test (Appendix 5, 6), and cross-sectional dependency test (Appendix 4). The following are the findings of the study:

Situation		Optimal lag Model	The Model of SMI impact on CCI	The Model of CCI impact on SMI
Situation 1	1A	3	$DCCI = - 0,2627*DCCI(-1) - 0,4836*DCCI(-2) - 0,5277*DCCI(-3) + 0,0036*DSMI(-1) + 0,0030*DSMI(-2) - 0,0149*DSMI(-3) + 0,0073*DSMI_GI(-1) + 0,0023*DSMI_GI(-2) - 0,0031*DSMI_GI(-3) - 2,6696.$	$DSMI = - 0,8323*DSMI(-1) - 0,7726*DSMI(-2) - 0,3463*DSMI(-3) + 8,9086*DCCI(-1) + 3,0411*DCCI(-2) + 5,0119*DCCI(-3) - 1,1312*CCI_GI(-1) - 5,3069*CCI_GI(-2) + 4,4534*CCI_GI(-3) + 415,5178$
	1B	1	$DCCI = - 0,1740*DCCI(-1) + 0,0032*DSMI(-1) + 0,0024*DSMI_GI(-1) - 0,4249.$	$DSMI = 0,1698*DSMI(-1) - 8,9750*DCCI(-1) + 0,7647*DCCI_GI(-1) + 33,0147$
Situation 2	2A	4	$DCCI = - 0,5117*DCCI(-1) - 0,3568*DCCI(-2) - 0,2204*DCCI(-3) - 0,0134*DCCI(-4) - 0,0002*DSMI(-1) + 0,0002*DSMI(-2) - 0,0009*DSMI(-3) - 0,05*DSMI_GI(-1) - 0,0001*DSMI_GI(-2) - 0,0001*DSMI_GI(-3) + 0,0004*DSMI_GI(-4) + 2,2116.$	$DSMI = 0,3158*DSMI(-1) + 0,2416*DSMI(-2) - 0,6264*DSMI(-3) + 0,4389*DSMI(-4) - 210,7712*DCCI(-1) - 142,3184*DCCI(-2) + 77,2218*DCCI(-3) - 229,9100*DCCI(-4) - 1,7503*DCCI_GI(-1) + 14,1654*DCCI_GI(-2) - 12,0572*DCCI_GI(-3) - 0,3268*DCCI_GI(-4) + 778,6126.$
	2B	3	$DCCI = - 0,0366*DCCI(-1) + 0,0429*DCCI(-2) - 0,2899*DCCI(-3) + 0,0001*DSMI(-1) - 0,0004*DSMI(-2) + 0,0002*DSMI_GI(-1) - 1,1579.$	$DSMI = 0,8542*DSMI(-1) - 1,2181*DSMI(-2) + 0,5981*DSMI(-3) - 524,7035*DCCI(-1) + 1099,4991*DCCI(-2) - 1439,4215*DCCI(-3) + 107,5903*DCCI_GI(-1) - 93,4736*DCCI_GI(-2) - 55,1795*DCCI_GI(-3) + 5125,3876.$
Situation 3	3A	3	$DCCI = - 0,0840*DCCI(-1) - 0,1766*DCCI(-2) - 0,2492*DCCI(-3) + 0,0001*DSMI(-1) - 0,0004*DSMI(-2) + 0,0002*DSMI_GI(-1) - 1,1579.$	$DDSMI = - 0,7900*DDSMI(-1) - 0,2504*DDSMI(-2) - 1,5607*DDSMI(-3) - 135,4535*DCCI(-1) - 14,3735*DCCI(-2) +$

		$3) + 0,0003 * DDSMI(-2) - 0,0007 * DDSMI(-3) - 1,1672.$	$67,7195 * DCCI(-3) + 37,9631 * DDCCI_GI(-1) + 56,8789 * DDCCI_GI(-2) + 30,1706 * DDCCI_GI(-3) - 125,3756.$
3B	2	$DCCI = - 0,1941 * DCCI(-1) + 0,4774 * DCCI(-2) + 0,0001 * DSMI(-2) + 0,0001 * DSMI_GI(-2) - 1,5076.$	$DSMI = 0,3197 * DSMI(-1) - 0,7314 * DSMI(-2) - 491,1370 * DCCI(-1) + 213,5620 * DCCI(-2) + 124,1075 * DCCI_GI(-1) + 20,9020 * DCCI_GI(-2) + 1225,3740$

The thesis comes to the following conclusion for the case of middle-income nations after estimating the VAR model, studying the variance decomposition, assessing the impulse response function, and checking the model's stability using the circle unit:

- (1) Under the effect of public governance during the survey period, consumer confidence had a considerable impact on the stock market index; in contrast, the stock market index still had an impact on consumer confidence, although it was always negligible.
- (2) Past shocks to the CCI and SMI values have a significant impact on the current levels as well.
- (3) Generally, when consumer confidence is rising, the SMI index will follow suit. both positive and negative directions, in line with the idea that has been put forward.

According to the findings, public governance significantly affects the association between CCI and SMI in upper middle-income nations, up to 43.9% (case 2)—while public administration has a less important role in lower middle-income countries. Given that persons in middle-income nations often have (i) lower levels of education, this indicates that the results are in line with practice. (ii) reduced earnings and stock market investment. (iii) Government rules don't worry investors as much. This result further confirms the sustainability when the thesis has standardized CCI data for all research countries, and the results also coincide with the model proposed by the thesis (Appendix 11).

Results of the thesis in all three cases is similar to the research results of Jansen, W. J. & Nahuis, N. J. (2003); Afshar, T. (2007); Chih-Chiang Hsu, Hung-Yu Lin & Jyun-Yi Wu (2011); Vichet Sum (2014); Nguyen Kim Nam & Nguyen Thi Hang Nga (2016); Nguyen Trong Tai (2016); Koy, A. & Akkaya, M. (2017); Nitin Balwani et al. (2017); Pham Ngoc Toan (2018); Bannigidadmth, D. (2020); that consumer confidence positively affects stock market index. However, the thesis results are not in line with the studies of Kemmeth L. Fisher and Meir Statman (2003); Bremmer, D. (2008); Willem Van Zandweghe (2019) that consumer confidence has a positive impact on consumer spending. stock market, or no impact. This may be due to all three studies by Kemmeth L. Fisher and Meir Statman (2003); the study by Bremmer, D. (2008) and the study by Willem Van Zandweghe (2019) using stock index data of S&P 500, Small - Cap and Nasdaq, Dow Jones, S&P 500, NASDAQ, NASDAQ 100, S&P 100, Russell 1000, 2000 and 3000, Wilshire 5000, no using stock index data for each country.

With the opposite direction of the influence of stock index on consumer confidence, the results of the thesis still have this positive relationship similar to the study of Maria Ward Otoo (1999); Jansen,

W. J. & Nahuis, N. J. (2003); Bremmer, D. (2008); Willem Van Zandweghe (2019), but the impact is insignificant.

This further illustrates the findings of the study on the correlation between the index and consumer confidence and the stock markets of middle-income nations have the following innovations:

- (1) The theory has examined and shown that the link between consumer confidence and the stock market index is significantly influenced by public governance. Stock markets in both lower- and upper-middle-income nations.
- (2) In order to separate the research samples by income, the thesis included three sampling cases, each of which was further subdivided into two sub-samples (the sample of lower middle-income countries and the sample of upper middle-income countries). This was not done in any other study, and the results showed that the results were consistent across all cases. Furthermore, the data in the complete study sample has been normalized and regressed upon by the thesis (Appendix 11). The findings are consistent with the nations' original data, demonstrating the reliability of the data and the model the thesis examined.
- (3) The World Bank's six components of public governance: voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption—are all taken into account in the thesis, which also affirms that when using public governance variables in a study, there must be consistency among these six variables (Appendix 3). Schmeling (2009) found that prior research either did not include this variable or only included one institutional component as part of public governance. For the complete research data set, public governance has a considerable influence in the one-way association between consumer confidence and the stock market index in this study, but it plays a negligible role in the other direction.
- (4) The issue with national consumer confidence statistics is a unique novelty. Nations all around the globe have employed three different approaches to determine the consumer confidence index: the equilibrium value technique, the amplification method, and the relative value method. As a result, the thesis also takes into account each group of nations using various approaches to determining consumer confidence. In order to investigate the link between CCI and SMI under the influence of public administration, the thesis then computes and unifies the CCI data from the three approaches into a single data format. Nevertheless, the study findings remain unchanged whether treating each set of nations independently or standardized the data generally, demonstrating the sustainability of the paradigm the thesis employs.

Goal 2: Research how Vietnam's stock market index and consumer confidence are related. In order to address the second goal, the thesis tested the link between CCI and SMI in Vietnam between 2012Q1 and 2021Q4 using the VAR model. Consumer confidence and the Vietnamese stock market index throughout the survey period are causally related, according to the study's findings. Furthermore,

prior shocks to the CCI and SMI values have an impact on the current CCI and SMI values, and while consumer confidence is rising, the SMI index will follow suit, and vice versa. The thesis can verify that the use of the VAR model with lag 1 is reasonable and stable since the impulse response analysis and stability test findings indicate that all of the solutions fall inside the unit circle. The following is the model:

$$DCCI = -0.3344 * DCCI(-1) - 0.0221 * DSMI(-1) - 0.1502 * CCI(-1) + 0.0028 * SMI(-1) + 15.9797.$$

$$DSMI = -5.7093 * DCCI(-1) + 0.2909 * DSMI(-1) - 0.0199 * CCI(-1) + 0.0033 * SMI(-1) + 22.4987.$$

When the public governance variable has no effect, the model demonstrates that there is a two-way link between CCI and SMI in Vietnam. Conversely, the link between consumer confidence and the stock market index is unaffected by the public governance variable. The study's findings are in line with Vietnamese reality since (i) the country's stock market is still in its infancy. (ii) Business activities frequently pique the interest of Vietnamese investors more than governmental rules. Current CCI and SMI levels are also impacted by previous shocks to these metrics. The SMI index will rise in tandem with consumer confidence, and vice versa. Furthermore, the thesis examines the impact of the Covid-19 pandemic in Vietnam between 2019Q1 and 2021Q4, presenting the following findings:

(1) How consumer confidence is affected by the stock market index The CCI and SMI exhibit significant fluctuations between 2019Q1 and 2020Q4. The CCI rises in tandem with an increase in SMI, and the growth is larger than that of SMI, and vice versa. But starting with the first quarter of 2021, the SMI index tends to rise while the CCI index tends to fall.

(2) Consumer confidence tends to have a distinct effect on the stock market index; in 2020Q1, when consumer confidence was rising, the SMI index fell precipitously, and in 2020Q2, when consumer confidence was down, the SMI gained little. Nonetheless, the effect of CCI on the SMI was similar in 2020Q3 and 2020Q4. The SMI rose sharply in 2021 as consumer confidence declined; on April 20, 2021, the VN-Index reached a 20-year high of 1,268.28 points; by 2021Q4, when consumer confidence only marginally grew, the VN-Index hit 1,500.81 points on April 2. The highest in 21 years of operation was on May 11, 2021. Furthermore, there was a small but positive association between the two variables, CCI and SMI, during the COVID-19 pandemic.

The data sample for the Vietnamese market is comparable to the data sample of middle-income nations, which is consistent with the findings when middle-income countries are taken into account. Between 2012 and 2021, SMI and CCI data were gathered, and GI data was combined from six component factors. Similar findings were also obtained from the investigation. Additionally, the thesis's findings corroborate the findings of Jansen, W. J. & Nahuis, N. J. (2003); Afshar, T. (2007); Chih-Chiang Hsu, Hung-Yu Lin & Jyun-Yi Wu (2011); Vichet Sum (2014); Nguyen Kim Nam & Nguyen Thi Hang Nga (2016); Nguyen Trong Tai (2016); Koy, A. & Akkaya, M. (2017); Nitin Balwani & ctg (2017); Pham Ngoc Toan (2018); Bannigidadmth, D. (2020) but do not share the same view with the studies of Kemmeth L. Fisher and Meir Statman (2003); Bremmer, D. (2008); Willem Van Zandweghe (2019) that the stock market index is positively impacted by consumer confidence. Conversely, in the

Vietnamese market, there is still a positive correlation between the stock market index and consumer confidence, much as the research of Maria Ward Otoo (1999); Jansen, W. J. & Nahuis, N. J. (2003); Bremmer, D. (2008); Willem Van Zandweghe (2019). However, in the shock of the Covid-19 pandemic, the thesis's research showed different results, similar to the research of Tran Thi Van Anh, and the research of Gaspar, Raquel M. and Jiaming, Xu (2023) that consumer confidence during the Covid-19 pandemic had a negative impact on the Vietnamese stock market.

Thus, According to the research findings, public governance significantly affects the one-way link between consumer confidence and the stock market index for both the high-income and low-income nations. SMI influences CCI in the opposite direction, while the public governance variable has a negligible effect. In Vietnam, it demonstrates that, in the absence of the public governance variable's influence, there is a reciprocal link between CCI and SMI. Furthermore, there are no established guidelines for the link between CCI and SMI during the COVID-19 pandemic.

CHAPTER 5: SUMMARY AND POLICY SUGGESTIONS

5.1. Summary

The thesis examines the relationship between consumer confidence and the stock market index using data gathered from 2012 to 2021 from middle-income countries. A total of six component variables are used to measure public governance, including: (1) voice and accountability; (2) political stability; (3) government effectiveness; (4) regulatory quality; (5) rule of law; and (6) control of corruption. The thesis has addressed and resolved the following problems in accordance with the goals and research content:

(1) Elucidating theoretical concerns and providing a summary of domestic and foreign research on the correlation between public governance characteristics and consumer confidence and stock market index. The thesis focuses specifically on outlining the concepts, functions, and methods of calculating the stock market index, consumer confidence index, and public governance. It also discusses the factors that influence consumer confidence and how to determine the value of public governance using six components: voice and accountability, political stability, government effectiveness, legal quality, rule of law, and corruption control.

(2) The thesis provides an overview of earlier relevant research, including (i) studies on how consumer confidence affects the stock market index, (ii) studies on how the stock market index affects consumer confidence, and (iii) studies on how consumer confidence and the stock market index are connected. (iv) Studies on the effects of public governance factors on consumer confidence and the stock market index.

(3) The thesis highlights some research gaps by reviewing earlier studies on the connection between CCI and SMI, including: (i) In order to provide consistent results in every situation, prior research has not split the research samples or standardized consumer confidence data throughout the whole study sample. (ii) The correlation between Vietnam's stock market index and consumer confidence has not been examined, particularly during atypical economic times like the COVID-19 epidemic. (iii) In the link between CCI and SMI in middle-income countries, no research has taken the public governance variable into account. Alternatively, the Schmeling, M. (2009) analysis only includes one institutional variable.

(4) In order to close these gaps and offer sets of remedies to boost middle-income nations' consumer confidence, the thesis has defined three goals:

(i) Concerning study data: From 2012 to 2021, the thesis gathers data on the stock market index, consumer confidence index, and six public administration component variables. To assess the model's sustainability, compute six component variables into a composite public administration variable and standardize the consumer confidence variable that was determined using three alternative approaches. Furthermore, the thesis divides the study samples into three instances.

(ii) Data testing: The research hypotheses, empirical models, and research techniques are developed in the thesis. The thesis employs suitable testing techniques, including Granger testing, panel

cointegration testing, stationarity testing, and cross-sectional dependency testing, to examine the link between consumer confidence and the stock market index of middle-income nations over the 2012–2021 timeframe.

(iii) Complete the following three goals:

* **Goal 1:** Examine how consumer confidence and stock market index relate to governmental administration in middle-income nations. The thesis employed the P.VAR model and performed tests like the Granger test for data, panel cointegration test, stationarity test, and cross-sectional dependency test to achieve this goal.

* **Goal 2:** Examine how consumer confidence and the stock market index are related in Vietnam as a result of governmental management. In order to accomplish this goal, the thesis examined the impulse response and verified the VAR model's stability. It was found that all of the solutions fell inside the unit circle, confirming that using the VAR model with lag 1 is suitable and stable.

* **Goal 3:** Based on the research findings, the thesis will make suggestions for middle-income nations on public administration, consumer confidence, and stock market indices generally, and Vietnam specifically, in order to support the steady and long-term growth of the Vietnamese stock market.

5.2. Policy implications

5.2.1. For middle-income countries:

• *Regarding the issuing of policies:* Governments must be held more accountable to the public and investors for all of their actions and choices. Plan seminars to get views and input from groups, and arrange to gather viewpoints from those impacted by the policy. From the stage of policy proposal to the stages of policy drafting and policy issuance, an efficient policy communication plan is required. Closely adhere to the practical demands that investors are confronting, take practice as a measure and policy ideas must have a policy forecasting strategy. Before releasing rules generally, it is feasible to pilot on a small number of exchanges to allow investors to evaluate new concerns and eliminate barriers. Investor trust in stock market policies will rise as a result.

• *In terms of government management,* in order to protect the interests of all parties engaged in investment, the government must give special attention to and prioritize the examination of institutions, rules, and regulations that are closely related to international law. Steer clear of stock market manipulation, speculative activity, and detrimental effects on fair competition. Governments must also make extensive use of national datasets on the population, stock markets, etc. in order to establish e-government, encourage the growth of the digital economy and society, and instill consumer confidence in stock market development potential.

• *In terms of political security,* the global environment is constantly complex, and international economic rivalry is getting more intense. At the same time, safeguarding national economic security is made more difficult by the growing green and digital economies. Establishing a stable political climate and emphasizing peaceful conflict settlement are essential for middle-income nations that are vulnerable

to the middle-income trap. Activities that compromise the economic and national security of adversaries, safeguard internal political security, safeguard state secrets, and promote a positive business climate must also be prevented and stopped.

- *To combat corruption*, it is essential to improve the evaluation of each nation's legal system in order to address its inadequacies and constraints. Because a weak and overlapping legal system will make state administration less effective while also having an impact on the investment climate. The legal system's overlap, contradictions, and ambiguity will also make it simple for authorities to break the law and engage in corruption. The lack of focus on leadership, the document inspection system's failure to meet standards, and the loose cooperation between agencies during document review operations are some of the reasons why the legal system has flaws.

5.2.2. For Vietnam:

After operating for more than two decades, the Vietnamese stock market has developed into a long-term economic capital mobilization route that has helped to restructure the country's financial system. Recent years have seen several advancements in the Vietnamese stock market, such as the development of numerous solutions that have produced favorable outcomes including the market's expansion in size and its progressively ideal structure. Nevertheless, the following restrictions also apply to the Vietnamese stock market:

- (1) Publicity, openness, and timely organization, management, and monitoring of stock market information are still lacking. This raises the prospect of several hazards, including stock manipulation and insolvency. Consequently, adherence to the 2019 Securities Law's information disclosure provisions, the Government's Decree No. 155/2020/ND-CP dated December 31, 2020, which stipulates several articles of the Securities Law, and the Ministry of Finance's Circular No. 96/2020/TT-BTC dated November 16, 2020, which governs the disclosure of information on the stock market, are required. Additionally, international credit rating agencies advise Vietnam to make stock market data clear and widely available. Because Vietnam needs this in order to raise its standing in the near future. Due to a lack of data, the study findings regarding the influence of public governance on the link between CCI and SMI in Vietnam have not yet been established.

However, in order to provide the following implications for public governance in Vietnam at this time, the thesis will be based on research findings from the group of low-middle income countries, which includes Vietnam:

- (i) Keep refining the information disclosure law. Legal papers must explicitly and precisely outline the information disclosure requirements for the stock market.

- (ii) Strengthen the sanctions system for securities industry infractions. This aims to create a stable and transparent stock market while ensuring deterrence.

- (iii) To prevent inaccurate information from being missed, auditing firms should play a bigger part in matters pertaining to the caliber of information disclosed on the stock market.

Furthermore, the market's increasingly complex and sophisticated legal infractions continue to pose significant challenges to monitoring and inspection operations.

(2) The recent volatility of the VNindex index makes it evident that investors' trust in the stock market is still inconsistent and that the index varies widely.

(3) Infrastructure for information technology, technology, and facilities is still scarce.

(4) Professional securities trading capabilities are still absent within the company's senior team.

In addition to the aforementioned restrictions, the Vietnamese stock market has experienced the following issues recently:

(1) The Vietnamese stock market is extremely vulnerable to changes in the global financial market and the state of the economy.

(2) Individual investors outnumber institutional investors, and their psyche is susceptible to rumors without any regulations, which can impact stock market performance. According to the research findings, public governance has an influence on the association between CCI and SMI in high-income nations but not in low-income ones. This is also the case in Vietnam.

(3) In certain businesses, the quality of financial reporting is still restricted, and corporate governance is still of poor quality. At the moment, businesses merely take steps to comply with legislation; they are not actively working to improve governance quality in order to improve company operations and guarantee the best possible outcomes for shareholders.

(4) Due to the detrimental effects of the Covid-19 pandemic, the Vietnamese economy saw several challenges in late 2019 and early 2020. Economic development slowed, although the stock market swung in the other direction and continued to rise. This circumstance indicates that there could be possible stock market risks that could short-term destabilize the Vietnamese stock market and have a medium- and long-term impact on its growth.

(5) Short-term stock market threats may result from the COVID-19 pandemic's effects as well as global political unrest. Because of its weak resistance to shocks, the Vietnamese stock market is also impacted in terms of stability and sustainable growth.

• *With regard to policies:*

(1) These should include: (i) Using information technology to administer the stock market and arrange transactions; (ii) Modernizing facilities; and (iii) Reforming administrative processes for the stock market. (ii) Putting in place a system to guarantee network safety and security. (iii) Removing unnecessary licenses and administrative processes to support the stock market's healthy growth.

(2) To satisfy the demands of the stock market's sustainable development, policies should be in place to develop and enhance human resources. enhancing instruction in stock market organization, administration, and supervision. Participants in securities activities are created via training, giving them the necessary skills, managerial experience, and professional ethics to support the robust growth of Vietnam's securities market.

(3) In order to reduce knowledge asymmetry among individual investors, managers must have effective rules in place to safeguard them.

- *Regarding Market Management*

(1) At the moment, the stock market only discloses information that complies with regulations, and the quality of that information is restricted. Herd behavior is readily manipulated, and the market's individual investors' psyche is prone to swings. In order to give investors complete information to use when researching and making decisions, listed businesses must publish information in a clear, transparent, and comprehensive manner. This will boost consumer confidence and support the efficient operation of the stock market. Customers will be drawn to invest in the stock market as a result.

(2) Increase the level of oversight and inspection of market participants' operations. At the same time, offenses that use the media to give people, organizations, and companies inaccurate, partial, or distorted information must be sternly addressed.

(3) Perfect the concepts to support the stock market's sustainable growth in a transparent manner, as well as the legal framework governing stock trading. At the same time, swiftly revise and publish new rules pertaining to transactions, information disclosure, listing, and transaction registration. Additionally, enhance and optimize the processes in the most efficient manner.

(4) Despite the stock market's law of supply and demand, regularly purchased equities will often rise in value and vice versa.

- *About Enterprises*

(1) There needs to be a department to support consulting and provide complete information to investors so that they can increase their confidence when investing in the stock market.

(2) Enterprises need to publicly disclose the company's financial statements in a transparent manner so that investors can monitor and consider investing. Because this is the result of the business's operations, the company's business situation is developing well or declining, from which the stock price also tends to increase or decrease.

• *About Investors:* Institutional investors play an important role in the businesses they invest in through good monitoring and improving the business's production and business efficiency. Therefore, investors need to have:

(1) A well-defined approach to investing. must have a strong investing portfolio.

(2) Recognize how to take chances: Losses are possible because to the market's many volatility. Investors must thus be able to take risks.

(3) Psychology of investors: A very sensitive market is the stock market. Investors will make poor selections if their mindset is unstable enough to select appropriate facts. Furthermore, time and information are two crucial elements that affect achievement. Investors must thus be aware of changes in the market.

Therefore, the Vietnamese stock market's stability and long-term growth are becoming more and more significant to the country's economy. Thus, synchronized implementation of the suggested procedures is required to accomplish the aforementioned aim.

LIST OF RESEARCH WORKS PUBLISHED BY THE AUTHOR

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