

**Cash holding,
Corporate governance mechanisms
and Firm value
in transition economies:
A study of listed corporations
in Vietnam**

Do Thi Thanh Nhan, Ph.D.

Doctoral Thesis Summary

Doctoral Thesis

**Cash holding, Corporate governance mechanisms
and Firm value in transition economies: A study of
listed corporations in Vietnam**

**Držba hotovosti, mechanismy řízení podniku a hodnota firmy v
tranzitních ekonomikách: Studie kótovaných podniků ve
Vietnamu**

Author: **Do Thi Thanh Nhan, Ph.D.**

Degree programme: P6202 Economic Policy and Administration

Degree course: 6202V010 Finance

Supervisor: prof. Dr. Ing. Drahomíra Pavelková

Consultant: Dr. Pham Ha

Examiners: prof. Ing. Pavel Ondrčka, CSc.

prof. Ing. Juraj Sipko, PhD. MBA

Zlín, April, 2018

© Do, T.T.N.

Published by Tomas Bata University in Zlin in 2018

Keywords: Corporate cash holding, firm value, state ownership, the board of directors, listing requirements, corporate governance mechanism, transition economy.

Klíčová slova: Držba hotovosti v podniku, hodnota firmy, státní vlastnictví, představenstvo, požadavky pro kótování, mechanismus řízení podniku, tranzitní ekonomika

The doctoral thesis can be found in the library of Tomas Bata University in Zlin.

ISBN 978-80-7454-749-2

ABSTRACT

This study is conducted with the main aim to clarify the impact of the corporate governance mechanisms on the corporate cash holdings to improve the firm value in the Vietnamese context, investigating the sample of 610 listed firms on the Vietnamese Stock Exchanges including Hochiminh and Hanoi stock exchange for the period 2007-2015. Firstly, to achieve the main objective, the study affirms the impact of cash holding on firm value by the quantitative method to confirm the vital role of cash in the businesses. Secondly, the study reviews the literature and Vietnamese economy to define the components of corporate governance mechanisms which affect the cash holding level. The state ownership, some characteristics of the board of directors and listing requirements of Vietnamese stock exchange are considered as the important corporate governance mechanism factors which can affect the corporate cash holding level. The influence of these components on cash holding is tested by the quantitative method.

The results demonstrate that the cash holding has an impact on firm value in an inverted U-shaped form. This confirms that corporate cash holding level affect the firm value. Then, the firms with the right level of cash reserve can increase their value. In order to keep the suitable amount level of cash, the firms need to understand whether the components of the corporate governance mechanisms influence the corporate cash holding. The findings indicate that state ownership has a negative relationship with the corporate cash holding. The firms who have a high percentage of the state ownership because they can easily to borrow money based on their political connections. Moreover, some characteristics of the board of directors (BOD) have the impact on the corporate cash holding. In detail, the corporate cash holding is higher when the chairman and manager are the same people. Meanwhile, the board ownership is negatively related to the corporate cash holding. The firms can consider these factors when they want to adjust the level of cash reserve.

Besides that, the listing requirements of the stock exchange are one of the external components of the corporate governance mechanisms which affect the corporate cash holding level. The firms listed on the different listing requirements keep the different level of cash holding.

The thesis contributes as a reference resource for corporate finance executives. The corporate governance mechanisms should be considered as the factors which affect the cash management. When the managers and the owners understand more about these relationships, they can decide better financial strategy which can improve their firm value.

ABSTRAKT

Hlavním cílem této práce je objasnit vliv mechanismů řízení podniku na podnikovou držbu hotovosti pro zvýšení hodnoty firem ve Vietnamu s využitím studia vzorku 610 kótovaných společností na vietnamských akciových burzách za období 2007-2015. K dosažení hlavního cíle předložená studie nejdříve potvrzuje vliv držby hotovosti na hodnotu firmy za použití kvantitativní metody, aby se potvrdila zásadní role hotovosti v podnicích. Dále je provedena rešerše literárních zdrojů a charakteristika země k identifikaci složek mechanismů řízení podniku, které ovlivňují výši držby hotovosti v podniku. Státní vlastnictví, některé charakteristiky představenstva podniku a kótační požadavky byly identifikovány jako významné faktory mechanismu řízení podniku, jenž mohou ovlivnit výši držby podnikové hotovosti. V další fázi je zkoumán vliv těchto komponent na držbu hotovosti za použití kvantitativních metod.

Zjištěné výsledky ukazují, že držba hotovosti má vliv na hodnotu firmy ve formě obrácené „U“-křivky. To potvrzuje, že držba podnikové hotovosti ovlivňuje hodnotu firmy. Dále pak, že firmy se správnou úrovní hotovostní rezervy mohou zvýšit svoji hodnotu. K držení té správné výše hotovosti firmy potřebují znát, zda komponenty mechanismů podnikového řízení mají vliv na držbu podnikové hotovosti. Výsledky naznačují, že mezi státním vlastnictvím a držbou podnikové hotovosti existuje negativní vazba. Firmy s vysokým procentem státního vlastnictví si mohou jednoduše zapůjčit peněžní prostředky na základě svých politických vazeb. Navíc mají dopad na držbu podnikové hotovosti také některé charakteristiky představenstva firmy. Konkrétně, držba hotovosti v podniku je vyšší, pokud je předseda a manažer v podniku jednou osobou. Zatímco vlastnictví představenstva firmy je negativně spojeno s držením hotovosti podniku. Firmy mohou tyto faktory zvážit při úpravách výše hotovostní rezervy. Kromě toho jsou kótační požadavky akciové burzy jednou z vnějších komponent mechanismu podnikového řízení, které mají vliv na úroveň držení hotovosti v podnikové sféře. Firmy jsou kótovány na akciových burzách podle rozdílných kótačních požadavků, a proto s rozdílnou úrovní držení hotovosti.

Na základě předložených výsledků tvoří dizertační práce referenční zdroj pro finanční manažery v podnikové sféře. Ti by měli chápat mechanismus řízení podniku jako faktor, který ovlivňuje řízení hotovosti. Když manažeři a vlastníci porozumí více těmto vazbám, mohou se lépe rozhodovat v rámci finanční strategie a mohou zvýšit hodnotu firmy.

CONTENTS

ABSTRACT.....	2
ABSTRAKT.....	3
1. INTRODUCTION.....	6
2. LITERATURE REVIEW.....	9
2.1 Theories of Cash Holdings.....	9
2.3 The determinants impact the corporate cash holding level.....	10
2.4 Corporate governance mechanisms.....	10
2.5 Relationship between corporate governance mechanism and the corporate cash holding level.....	11
2.5.1 Relationship between ownership structure (state ownership) and the corporate cash holding.....	11
2.5.2 Relationship between the board of directors (BOD) and corporate cash holding.....	11
2.5.3 Relationship between listing requirements and cash holding.....	12
2.6 Summary of the literature review.....	13
3. RESEARCH PROBLEM AND MAIN OBJECTIVE OF RESEARCH..	14
3.1. Vietnamese economy.....	14
3.2. Research problem and the main objective of the research.....	14
4. RESEARCH METHODOLOGY.....	18
4.1. Research design.....	18
4.2. Conceptual Framework.....	19
4.3. Research stages.....	20
4.4. Sampling and data collection.....	20
4.5. Data processing.....	21
4.6. Models for testing the hypotheses.....	21
5. FINDINGS AND DISCUSSIONS.....	24
5.1 The influence of corporate cash holding on the firm value.....	24
5.2 The impact of the state ownership on the corporate cash holding level....	25

5.3 The influence of BOD on the corporate cash holding level	26
5.4 The impact of the listing requirements of Vietnamese stock exchanges on the corporate cash holding level	28
6. LIMITATIONS OF RESEARCH	30
7. CONTRIBUTIONS	31
7.1. Contribution to theory	31
7.2. Contribution to practice.....	31
8. CONCLUSION	32
BIBLIOGRAPHY	33
LIST OF PUBLICATIONS	39
AUTHOR’S PROFESSIONAL CURRICULUM VITAE	40

1. INTRODUCTION

Managing cash and cash equivalents have recently been an important decision for managers who use them for all operating activities in the corporations (Megginson et al., 2014). Controlling cash has provided many challenges for all kind of businesses because the free cash should be invested to be more profitable but the firms also have to ensure they can reserve cash for their needs in the future. Likewise, the companies have low cash level which cannot cope with all emergency situation. Then, according to (Martínez-Sola et al., 2013), the firm value can be reduced because the firms have to suffer from losing affordability. However, stockpiling too much cash can cause some contrary consequences. Harford (1999), Oler and Picconi (2014) examined that the excess cash affects the future stock returns and the firm value. Particularly, there is also the conflict between managers and shareholders in decisions on the level of cash holding because of the agency problem (Shleifer and Vishny, 1997, Megginson and Netter, 2001). Therefore, the task of the manager is to seek the right level of cash holding that helps the firms to balance between profitability and cost to improve the value for the company (Martínez-Sola et al., 2013).

Recently, there have been some studies which have indicated the determinants affect the cash holding such as firm size, net working capital, leverage, inventories, growth opportunities, financial distress, cash flow, and dividend payment (Uyar and Kuzey, 2014, Ogundipe et al., 2012, Megginson et al., 2014). However, the way of management and structures of the executive leadership are essential in operating the corporations, especially the liquidity management (Lien and Li, 2013). Besides this, Klapper and Love (2004) state that a better legal environment relates to better operating performance and market valuation in emerging countries. Hence, the corporations recently should seriously consider the connection between cash holding and corporate governance mechanism to improve the firm value.

Corporate governance mechanism defines the rights and the responsibilities (obligations) among the participants in the corporation including external and internal factors (Azim, 2012). Turnbull (1997) prove that the internal mechanisms are the compensation policy, the board of directors, and the shareholders while the external mechanisms are the regulations, the market, government, external audit, and creditors. Furthermore, the monitoring of actions, policies, practices, and decisions of corporations, their agents, and the stakeholders are the components of governance mechanisms (Babatunde and Olaniran, 2009). Hence, corporate governance mechanisms play an important role in businesses as well as a vital element of corporate finance. Over the past decades, this has attracted the interest of practitioners and researchers around the world (Claessens and Yurtoglu, 2013). Moreover, corporate governance mechanisms are essential in managing the performance of the firms (Goh and Rasli, 2014). In the emerging

economies, the firms tend to be more sensitive with the corporate governance mechanisms (Lien and Li, 2013).

The relation between cash holding, corporate governance, and firm value is becoming an exciting issue for research. Ammann et al. (2011) and Harford et al. (2008) present that the level of governance impacts the level of cash holding. Considering the corporate governance mechanisms is a critical characteristic for the managers and the shareholders of firms because they affect the operating activities as well as the cash management in the corporations (Lee et al., 2011) and (Kusnadi, 2011). There have many challenges for businesses to control corporate governance mechanisms and the level of cash in creating more value for shareholders as well as improving the firm value.

After reforming the economy, the Vietnamese government has privatized some state-owned corporations, which increased private and listed corporations in the country (Mishra, 2012). The number of listed firms has increased sharply, but the controlling of corporate governance mechanisms is not good enough to take all advantages of the emerging market as well as manage the difficulties. Besides this, the short funds of banks, bubbles in the stock market and the financial crisis around the world impact the Vietnamese economy. As a result, Vietnamese corporations have recently faced the liquidity problems. Also, the rising interest rates and the growth of the number of corporations led to the upward trend in capital demand, but it is hard to obtain funds from the banks or investors. These reasons caused unexpected adverse consequences for the corporations in Vietnam due to the high cost of borrowing. Hence, the corporations tend to balance the cash holdings to be more active in the operating of their businesses that are matters of concern. In order to keep the suitable amount of cash, the firms should understand the determinants which impact the corporate cash holding level. In the prior studies, the papers indicate a lot of the determinants. And, the corporate governance mechanism is one of the vital factors which influence the firm operations as well the firm's liquidity (Kusnadi, 2011 and Megginson et al., 2014). Especially, in Vietnam the corporate governance mechanism has limited studies on this issue. This research focuses on the relationship between cash holding, corporate governance, and firm value in the Vietnamese context which is expected to fill the gap.

The dissertation uses the financial accounting information that is provided on financial statements of non-financial corporations listed on Vietnamese stock exchange from 2007 to 2015. The dissertation uses the items in a financial statement such as cash and cash equivalents, short-term assets, borrowings, profits, cash flow, capital expenditure, etc. and other information disclosure on the stock exchange as trading volume and the number of shares. Financial institutions (banks, credit institutions, insurance corporations, etc.) are excluded in the study due to the fact that the characteristics of business operations are

relatively different from non-financial corporations which can cause various implications on the results of the research.

The main objective of the dissertation is to find out the impact of corporate governance mechanism on the corporate cash holding level to improve the firm value. To achieve this aim, seven questions and six hypotheses are formulated in the dissertation. After testing the hypotheses, the dissertation finds out that there is an inverted U-shaped relationship between cash holding and firm value. This means that the firms keep the right level of cash holding can increase the firm level. Next part is to indicate the connection between some components of corporate governance mechanisms which affect the corporate cash holding level. The finding suggests the negative relationship between cash holding and state ownership. Also, the characteristics of the board of directors including CEO duality and board ownership have an impact on the corporate cash holding level, but board compensation is not significantly related to the corporate cash holding level. Besides that, the external corporate governance mechanism as listing requirements of the stock exchange affects the corporate cash holding.

The remainder of the dissertation is divided into eight chapters as follow. The first chapter is the introduction which presents the research background, the motivation for selecting the research topics and the scope of the study. Chapter 2 focuses on the theoretical underpinnings of cash management as well as the corporate governance mechanisms. Also, the dissertation reviews the previous studies on the corporate cash holding level and corporate governance mechanisms. Moreover, the earlier studies about the relationship between the corporate cash holding level and the corporate governance mechanisms are presented. Based on the theoretical and the previous studies, the dissertation points out the gap in the research. Next chapter is the brief introduction of Vietnamese economy and indicates the research problem. Chapter 4 includes methodology introducing the research problem, research questions, research objectives, research hypotheses and research stages. The quantitative approach is applied and the hypotheses are tested. Chapter 5 presents the findings and discussions of all results. Chapter 6 points out some limitation of research. Chapters 7 and 8 proposes the contributions to theory and practice, conclusion and proposal for future research.

2. LITERATURE REVIEW

This part aims to review the literature on corporate governance mechanisms, cash holding, and firm value. Notably, the dissertation focuses on the impact of corporate governance mechanism and the corporate cash holding level; and the importance of the corporate cash holding level on the firm value.

2.1 Theories of Cash Holdings

In 1936, after the publication of Keynes (1936): “The General Theory of Employment, Interest, and Money,” the concept of this treatise has greatly influenced the monetary policies of many countries. At that time, the theory of monetary demand was called the “Liquidity Preference Theory.” In this book, Keynes discusses the factors which has an impact on the decisions for keeping cash or whether the cash holding is essential in the firms. And, Keynes also indicate that there are three main reasons for holding cash such as *transaction, precautionary, and speculative motives*.

Moreover, the effect of corporate cash holding on the firm value is discussed in some previous studies. In most papers, the impact of the corporate cash holding level on firm value is explained by trade-off theory (Myers, 1977), the pecking order theory (Myers and Majluf, 1984), and the free cash flow theory (Jensen, 1986).

Firstly, *the trade-off theory* (Myers, 1977) suggests the optimal cash holding is the trade-off between the costs and benefits of cash holding. Then, the firms should maintain a reasonable amount of cash to avoid seeking money from external parties as debt increases which have an impact on financial distress costs as well as the firm performance. Moreover, this theory confirms that the optimal level of corporate cash holdings is established by the balancing of the marginal cost and the marginal benefit of keeping cash (Martínez-Sola et al., 2013). Secondly, *the pecking order theory* of Myers and Majluf (1984) suggest that the firms should keep the cash reserve to minimize the cost of issuing new equities due to asymmetric information. This theory represents that the internal funding as cash is the most preferred, and next priority is debt, and the last one is to issue the new shares. Thirdly, *free cash flow theory* (Jensen, 1986) reveals that managers have an incentive to store cash to accelerate the volume of assets under their control and to take full advantages of the firm’ investment decision. Therefore, the managers have to balance the cash holding level in the company to reduce this agency problem.

2.2 The impact of corporate cash holding level on firm value

For all businesses, cash is a critical account that reflects the status and structure of assets on a balance sheet, meaning it is the current asset with the highest liquidity. Besides, Martínez-Sola et al. (2013) reveal that one of the essential determinants that have an impact on the firm value is the level of cash

holding. Moreover, the decision on cash holding which is vital to business operations is the most vital factor in company's health and their value (Lee and Powell, 2011). Ferreira and Vilela (2004) confirm that the cash holding plays an important role in the daily operations of a firm because they sometimes need money to solve the financial problems immediately. In Vietnam, the level of cash holding also increases to 10% out of the total asset which is higher than some other countries (Do and Ha, 2016). But there is a limited study on this topic in the Vietnamese context.

2.3 The determinants impact the corporate cash holding level

The previous studies document that the determinants impact the corporate cash holding level which concentrate on these factors such as net working capital, leverage, inventories, growth opportunities, financial distress, cash flow, dividend payments, cash flow, leverage, firm size, and etc. (Ferreira and Vilela, 2004, Saddour, 2006, Opler et al., 1999, Harford et al., 2008, Martínez-Sola et al., 2013, Megginson and Wei, 2010). The firms can keep the right amount of cash reserve which depends on the situations of firms (Martínez-Sola et al., 2013). But the results are mixed in different studies. Ferreira and Vilela (2004) indicate the investment opportunities and cash flow have positive connections, but it negatively impacts on asset liquidity, leverage and firm size.

Currently, the growing number of literature attempted to explain how the corporate governance mechanisms influence the development of the companies as well as firm performance. Furthermore, the several papers begin to examine the connection between the cash holding level and corporate governance in some countries as China (Megginson et al., 2014). To understand more about the corporate governance mechanism, the dissertation provides the related literature.

2.4 Corporate governance mechanisms

Gillan (2006), Monks and Nell (2011) also categorize the components of corporate governance mechanisms into two groups: internal and external factors. In detail, the internal corporate governance mechanism indicates the shareholders choose the firm managers, and the managers decide to invest in the asset, liabilities, and equity. These relations represent the responsibility of BOD to hire, fire and compensate the managers of the firms which impact on the firm's operations. The external corporate governance mechanism mentions the providers as well the regulations for raising the capital. Besides that, the other previous papers state that the internal factors include the ownership structure, the board of directors, CEO duality, and board compensation which influence the firm's operating (Adams and Mehran, 2012; Germain et al., 2014; Kumar and Singh, 2013). Moreover, internal corporate governance manages the activities to achieve the company's goals. Meanwhile, external corporate governance mechanisms

include the regulations, external environment and external auditing which can impact the agency cost (Al-Najjar and Clark, 2017).

2.5 Relationship between corporate governance mechanism and the corporate cash holding level

Fan et al. (2007) and Gillan (2006) represent that the corporate governance mechanisms include the internal and external factors. According to Germain et al. (2014); Kumar and Singh (2013), some internal corporate governance mechanisms are the ownership structure, board of directors, CEO duality and board compensation which can strongly affect the firm's operating. Considering external corporate governance is one of the critical characteristics of the managers and the shareholders of firms because they affect the operating activities as well as the cash management in the corporations (Kusnadi, 2011). Additionally, Turnbull (1997) defines that the external factors which include the regulations, the market, government, audit, and creditors. The listing regulations of the stock exchange are considered as one of the external corporate governance components.

2.5.1 Relationship between ownership structure (state ownership) and the corporate cash holding

The relationship between the state ownership and corporate cash holding level is a matter of concern for researchers and company managers (Megginson et al., 2014). However, the research results are not consistent. Le and Chizema (2011) claim the managers do not exert any effort to create more value for the shareholders or maximize the value of assets, so they prefer hoarding more cash. In the same way, state ownership leads to the rise of cash holding level because the firms can take advantages of the help from the government to seek the good investment opportunity (Yu, 2013). However, some studies indicate the negative connection between corporate cash holding level and being state-owned. Shleifer and Vishny (1997) suggest that there is the helping hand from the government for raising the capital for the state-owned firms. In this case, the companies tend to have a smaller amount of cash reserve. The influence of the state on the corporate cash holding level has different findings in the previous studies. And, the Vietnamese firms with the state ownership have still the main shareholder who can impact the firm management (Nguyen et al., 2015a). Thus, the impact of state ownership on the corporate cash holding level need to investigate.

2.5.2 Relationship between the board of directors (BOD) and corporate cash holding

According to Gillan (2006), the characteristics of the board of directors (BOD) is one of the internal corporate governance mechanisms.

➤ *Relationship between CEO duality and corporate cash holding*

On the one hand, the different person between CEO and chairman can achieve less fraud in financial statement (Beasley et al., 2000). In this case, the firms keep less cash holding level because the cost of borrowing debt is lower (Anderson et al., 2004). Equally, higher board independence which is measured by the separation power between CEO and chairman is related to higher efficient managing and firm performance (Lee and Lee, 2009). Thus, the firms hold a lower level of cash reserve when the board is more independence. On the other hand, when CEO and chairman are the same person (CEO duality) who has high power and this issue leads to more frauds in financial reporting (Dunn, 2004). Consequently, the firms need to keep more cash because of the higher cost of borrowing. Hence, the separation of CEO and chairman have mixed results for corporate cash holding level.

➤ ***The relationship between board compensation and cash holding***

Hermalin and Weisbach (1998) document that the board receiving high compensation packages is connected positively with the shareholder's wealth. Thus, BOD with a high level of compensation improves the firm value which does not keep a high level of cash reserve. This is because the firm with a higher performance can easily borrow money from external sources (Lee and Lee, 2009). Nevertheless, Brick et al. (2006) point out that excess compensation can cause the underperformance of the firms. Similarly, Barontini and Bozzi (2011) confirm a negative correlation between excess of board compensation and firm performance because BOD does not want to take all investment opportunities to have a high level of cash reserve to get more compensation. For these reasons above, the compensation of BOD has mixed results in improve firm performance as well as the decision of holding cash.

➤ ***Relationship between board ownership and corporate cash holding level***

The board ownership means that the percentage of shares is owned by the BOD. Having the managers hold the company's shares give the motivation for managers to be more efficient in operating their businesses (Brickley et al., 1997). Thus, the firms are getting higher performance when BOD hold more firm's shares. To support this argument, Elsilä et al. (2013) indicate that the shareholding ratio is positively related to the firm performance. Then, the firms do not keep the high cash reserve level because they can use the internal source as profit when the firms need money (Myers and Majluf, 1984). Moreover, the firms with higher firm performance who can easily to raise funds with cheaper cost (Ozkan and Ozkan, 2004). Additionally, the BOD with higher share-owned wants to pay more dividend (Bathala and Rao, 1995). In this case, the firms hold less level of cash holding because they can easier get capital from the shareholders.

2.5.3 Relationship between listing requirements and cash holding

Turnbull (1997) confirms that the listing requirements of the stock market are one of the factors of external corporate governance. Also, Al-Najjar and Clark (2017) suggest that the listing conditions should be considered as an essential factor which impacts on liquidity management as well as the operation of the businesses. Particularly, there is the external corporate governance which influences the activities of the firms such as raising the capital (Jensen, 1993). Moreover, La Porta et al. (2000) argue that the listed firms have to satisfy all standard which results to mitigate the information asymmetry, then this can increase the protection for investors. Equally, Avramov et al. (2006) document that the firms listed on the different stock exchanges have different cost of supplying the liquidity. Consequently, the listed firms on the different stock exchanges have the dissimilar opportunities to raise funds because of the different prestige (Cetorelli and Peristiani, 2010). Moreover, investors believe that these firms are listed on the stock exchange with stricter listing requirements can gain higher protection for minority shareholders (Stulz, 1999, Doidge et al., 2004). This can explain why listed firms have to follow all requirements of the market to stay listing. Therefore, Doidge et al. (2004) indicate that the firms are more accessible to raise capital after listing on the US stock exchange.

2.6 Summary of the literature review

The internal factors of corporate governance influence the corporate cash holding level such as ownership structure which was studied in emerging countries as China (Megginson et al., 2014). Meanwhile, the study about the effect of ownership in Vietnamese context has not attracted any researchers. This paper examines the structure of ownership whether it has an impact on cash holding in Vietnamese listed corporations. In addition, several types of research have concentrated on aspects of BOD, but there are not many studies that fully examine the effect of BOD on the corporate cash holding level.

Moreover, the connection between external factors of corporate governance mechanisms and the corporate cash holding level has not been studied in developing countries in the previous papers. The listed firms are the objects of this research, then, the listing requirements of the stock exchanges are on the factor need to study.

3. RESEARCH PROBLEM AND MAIN OBJECTIVE OF RESEARCH

After the literature review, the brief of Vietnamese economy is presented to clarify the research context, then the research problem and main objective are identified.

3.1. Vietnamese economy

Firstly, with the market-oriented economy and the effort to shorten the gap on the world economy, the Vietnamese financial market had been required to set up the stock market. Vietnamese stock market was established in 2000 which is also part of *Doi Moi* policy. The aim was to support raising the capital for the industrialization and modernization of the country. Over the period, the stock market has grown in capitalization as well as a number of listed firms. The stock exchange promotes saving and delivery of capital to the firms. In addition, the stock market with 35 percent of GDP in 2016 is very important and sensitive to economic activity, which is a measure of the efficiency of economic activity (Phung and Mishra, 2016). However, the financial market remained under the government's umbrella, and the state ownership played a critical role in the financial market. This arrangement reflected unbalance on the economy which caused some trouble to access funds for some listed firms (Nguyen et al., 2015a).

Vietnamese corporations can raise funds by issuing the shares on the stock market or by issuing the bonds, but these markets are not favorable. Thus, Vietnamese firms prefer borrowing money from the banks than other channels to obtain more funds, but the interest rate has increased significantly from 2007 which caused the difficulty for the firms. The interest rate reached the peak at 16% in 2008 and 17% per year in 2011. That is the reason that the firms have increased the cash holding level in the firms. Under these circumstances, the corporations should have strategies for capital and cash reserves effectively. Hence, the companies tend to balance the cash holdings to be more active in the operations of their businesses that are matters of concern, especially in the condition of the Vietnamese economy.

3.2. Research problem and the main objective of the research

As an emerging country, Vietnam has many opportunities and challenges to develop its economy in which the number of new and young enterprises has increased dramatically after reforming the economy from centrally-planned to a market-oriented economy. Those enterprises are facing many issues that the enterprises have not experienced to maximize shareholder value. Thus, they need capital as well as the management skills to manage the operations of enterprises efficiency. Furthermore, Vietnamese firms cope with a shortage of funds from banks, bubbles in real estate market and stock exchange as well as the financial

crisis around the world. From the point of views of the investors, banks, and financial executives, the firms maintain enough cash for the firm's operation which plays a significant role in getting higher firm value in the current situation. This is because the Vietnamese corporation has more difficulties to borrow money or to raise capital. Then, holding more cash reserve increase the liquidity of Vietnamese corporations and their flexibility in doing businesses. The firms should have the suitable amount of cash which maintain their operations and take the good investment opportunities in this period.

Besides, there are two ways that the firms can raise their funds when they need more money for their activities. The first way, the bank is their consideration for borrowing money. However, in the period the interest rate is high with 17% per year as well as the shortage of lending funds (Nguyen et al., 2016). Consequently, the firms had to face the difficulties of raising fund. Secondly, the stock exchange is another channel that the firms can raise their capital. But in the year 2007 and 2008, the Vietnamese stock exchange is the same situation with other markets around the world. The market fell quickly, and the investors run out of the market. In this period, there is very difficult to raise funds from the stock exchange. As a result, cash is becoming more important in doing business in Vietnam. Currently, the Vietnamese corporations maintain the amount of cash reserve is almost based on the experience of the chief accountant or the other simple methods (Nguyen et al., 2015b). Thus, investigating the factors affect the cash holding level of Vietnamese firms is necessary, which can be a reference for the manager in making cash reserve decisions. This topic has been mainly implemented in developed countries for decades, but this has not been fully researched in the Vietnamese context. Over the period, Vietnamese enterprises have grown stronger in quantity, but the competitiveness is weak. One of the primary reasons is management skills, especially corporate governance which is very weak (Nguyen et al., 2016). Based on this issue, the dissertation analyses the current situations of corporate governance in Vietnamese enterprises in many aspects: legal framework, ownership structure, and board of directors of the enterprise to give general suggestions to be more effective in their management. In the emerging countries, the corporate governance mechanism is essential in managing the firms (Bhagat and Bolton, 2008, Klapper and Love, 2004). Good corporate governance enhances the firms to easily access external capital, increase corporate value, and sustainable development (Al-Najjar and Clark, 2017). However, Boubakri et al. (2005) observe that the operating performance of corporations in emerging economies is adversely affected by weak corporate governance mechanisms. Thus, corporate governance mechanism is considered as an important factor which affects strongly on Vietnamese firms' operation.

Moreover, the corporate governance mechanism includes the connection between the managers and the outside investors such as banks, another creditor, and potential investors. They also may provide the capital with the different cost.

And, the cost of raising capital is impacted by the agency cost. Moreover, the agency cost is the conflict between the managers and other investors so that the agency costs can influence cash holdings indirectly. The agency cost can be reduced when the firms are managed more useful owing to the better corporate governance mechanisms. Thus, there may be a connection between corporate governance mechanism and cash holding level; then the question is raised for this issue “Does the corporate governance mechanism have any effect on the corporate cash holding level?”. In the development of the research, most of the studies that investigated the impact of corporate governance mechanisms on cash holding were concerned with corporations in the US, Western Europe and China (Megginson et al., 2014, Al-Najjar and Clark, 2017). This relationship needs to be conducted in more transition or emerging economies like Vietnam.

In particular, Agrawal and Knoeber (1996) argue that ownership structure plays an important role which influence on firm performance and the major shareholders can take advantages for their benefit the interests of small shareholders. In Vietnam, state ownership still holds a large proportion of the equitized firms after the economy is transformed from a centrally planned economy (Nguyen et al., 2016). State-owned corporations tend to have more advantages to access financial resources at lower costs than private firms due to the government protection. Therefore, state-owned corporations can access capital from state banks. As a result, the ownership structure of Vietnamese corporations influences the cash reserve level; especially capital structure is dominated by state ownership. Therefore, the ownership structure of Vietnamese firms should be considered when the dissertation investigates the corporate governance mechanisms.

Moreover, the corporate governance is still weak. Because the organized structure is very simple regarding family management and there is no clear distinction between the rights and obligations of the board of directors, managers, the board of supervisors and employees. The board of director of Vietnamese corporation has limitations and simple which affect the growth of the businesses (Nguyen et al., 2016). The theory of corporate governance suggests that board characteristics affect strategic choices, investment decisions (Campbell and Mínguez-Vera, 2008). Then, the characteristics of the board of directors need to consider in the study of the corporate governance mechanism in Vietnam.

Especially, in Vietnam the external control corporate governance mechanisms have not been developed and efficiently operated. The external governance mechanisms as legal requirements should be considered as important factors in studying of the corporate governance mechanisms issue. The listing regulation of the stock exchange is chosen for research because the sample of the study focuses on the listed firms and the listing requirements of the Vietnamese stock exchange are important for the listed firms. The regulations can impact the firm operations as well as the firm’s liquidity.

This dissertation examines whether the right level of cash stockpiling can help corporations to take advantage of having a quicker capital turnover and improve the firm value. Moreover, the corporate governance mechanisms including the ownership structure, the board of directors and legal requirements of the stock exchanges can influence the corporate cash holding level. The dissertation could inform the Vietnamese policymakers about paying attention to the corporate governance mechanisms to support the listed firms in managing cash holdings to improve the firm value. By examining the influence of corporate governance mechanisms on cash holding, the study highlights the agency problem and trade-off theory to contribute to the literature in the transition economy. The relationship between corporate governance mechanisms and cash holding are unexplored in Vietnamese listed firms.

The main aim of the research is *to find out the impact of corporate governance mechanisms on the corporate cash holding level in order to improve the firm value in the Vietnamese context*. The findings can be the references for Vietnamese firms to maintain the right level of cash in Vietnamese corporate governance conditions to improve their firm value.

4. RESEARCH METHODOLOGY

This chapter begins with the research design after that data collection is presented, and all main variables are defined. The thesis indicates the methods for data processing and final section explains all models to test hypotheses and answer research questions.

4.1. Research design

To be able to fulfill the main research objective, the key research questions, the corresponding objectives, and hypotheses are formulated.

➤ Research question 1: Does the cash holding level impact the firm value in Vietnamese context?

Objective 1: Examine the impact of the level of cash holding on the firm value in the Vietnamese context (RO1).

Hypothesis 1: The amount of corporate cash holding has an influence on the firm value in the Vietnamese context.

➤ Research question 2: What are the important components of corporate governance mechanisms which affect corporate cash holding of Vietnamese listed firms?

Objective 2: Identify the components of corporate governance mechanism which are important in relation to the corporate cash holding (RO2).

➤ Research question 3: Does the state ownership of Vietnamese listed corporations affect the corporate cash holding decisions?

Objective 3: Examine how the state ownership affects the decisions of the corporate cash holding (RO3).

Hypothesis 2: The state ownership is negatively associated with the corporate cash holding level.

➤ Research question 4: Does the board of director (BOD) affect the corporate cash holding decisions of Vietnamese listed firms?

Objective 4a: Test whether CEO duality influences the corporate cash holding decisions of Vietnamese listed corporations (RO4).

Hypothesis 3: The CEO duality is positively associated with the corporate cash holding level.

Objective 4b: Test whether BOD ownership has an influence on the corporate cash holding decisions of Vietnamese listed corporations (RO5).

Hypothesis 4: BOD ownership is negatively correlated with the corporate cash holding level.

Objective 4c: Test whether BOD compensation has an influence on the corporate cash holding decisions of Vietnamese listed corporations (RO6).

Hypothesis 5: BOD compensation is positively associated with the corporate cash holding level.

➤ Research question 5: Do the different listing requirements of the stock exchanges impact the level of the corporate cash holding of Vietnamese listed firms?

Objective 5: Verify whether the levels of corporate cash holding differ under different listing requirements on the stock exchange (RO7).

Hypothesis 6: The stricter listing requirements on the stock exchanges leads to lower corporate cash holding level.

4.2. Conceptual Framework

The conceptual framework is summarized in Fig. 4.1.

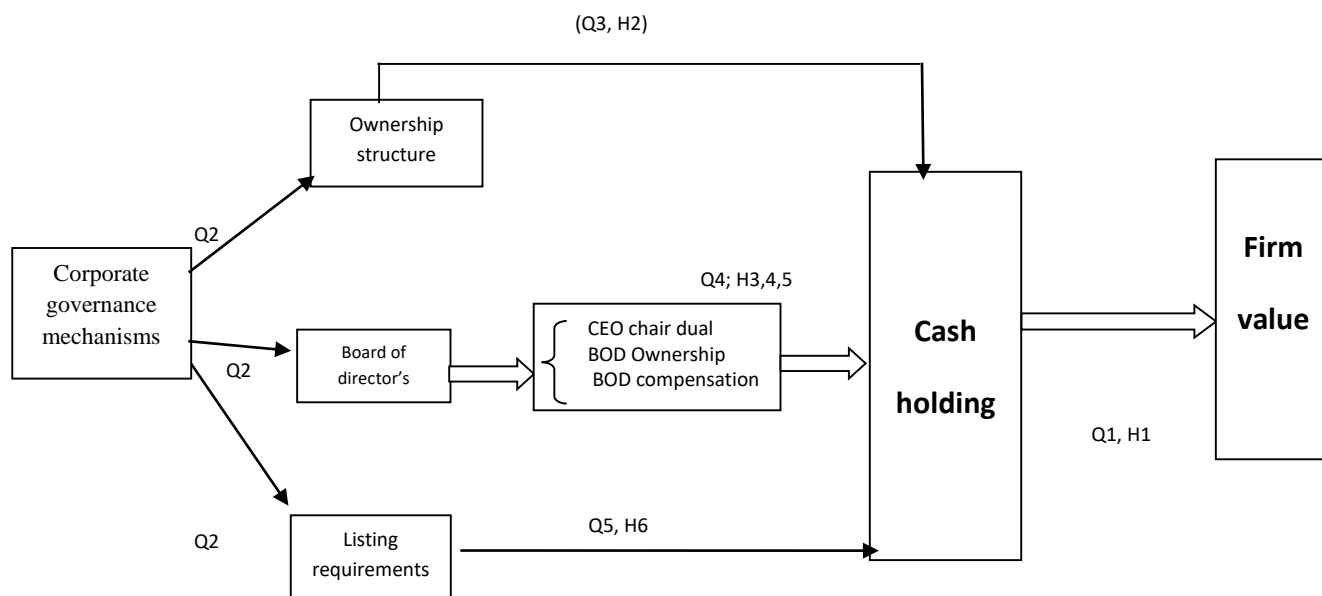


Fig. 4.1: The research framework. Source: Own processing

To answer the research questions and test the research hypotheses, the dissertation begins with testing whether cash holding impacts firm value to answer the first question and first hypothesis by applying the quantitative method. Next step, the dissertation focuses on the theories and current studies which relate to the topics and answer the second question. The literature review and hypotheses are presented in detail as a result of this stage.

4.3. Research stages

To carry out the research, the research stages of the dissertation are shown in Fig. 4.2.

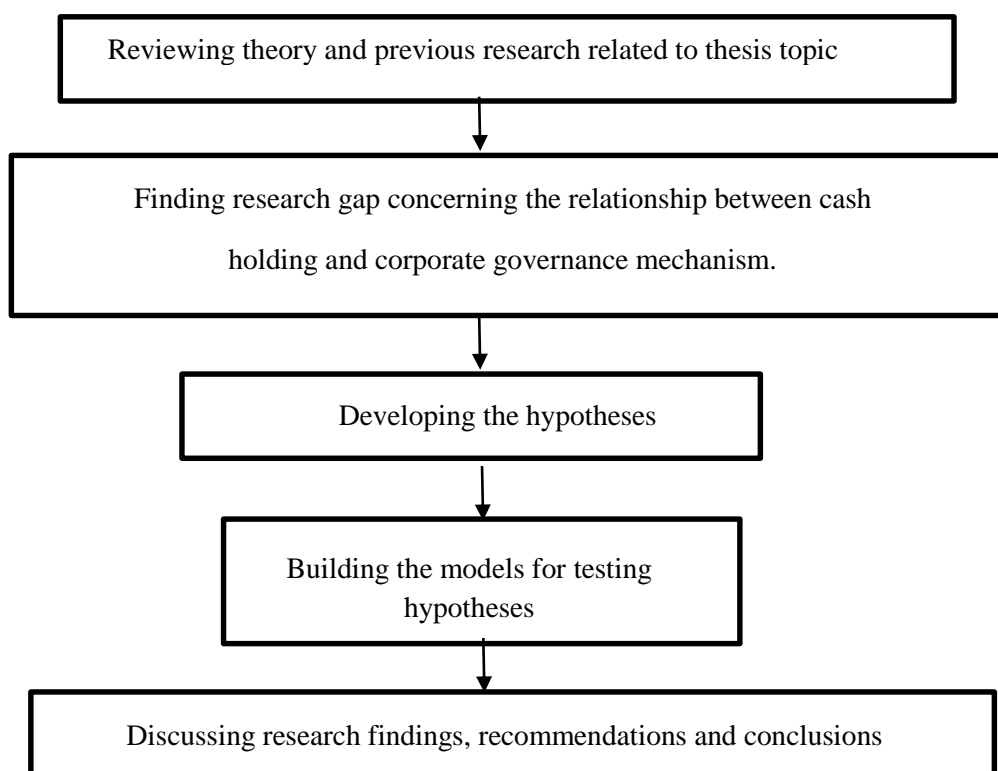


Fig. 4.2: The stages of the research. Source: Own processing

4.4. Sampling and data collection

Both stock exchanges have risen significantly in market capitalization and the number of listed firms. And, the law of stock exchange was issued in 2007 to strengthen the public information of listed firms, then the financial information published is more accurate. Additionally, the number of listed corporations in the Vietnamese stock market in 2007 increase very fast because of the preferential exemptions, but at the same time, the economy was also experiencing an unstable situation as the interest rate increased. Consequently, the Vietnamese corporations intended to keep more cash to obtain all the opportunities as well as avoid the high cost of borrowing. Due to that, researchers of this study selected the Vietnamese stock exchanges including Hochiminh and Hanoi stock exchange for the period 2007 to 2015.

According to data collected by Stoxplus, the dissertation uses data of 610 non-financial listed firms on HOSE and HNX between 2007 and 2015 which exclude the financial institutions. The raw data is winsorized to handle outlier variables with endogenous, exogenous and managing control variables. And, if an individual is missed some observations that could be dropped from the cleaning

process. After all procedures, there causes an unbalanced data for each model in the dissertation.

4.5. Data processing

The stages for processing data are demonstrated in Fig. 4.3.

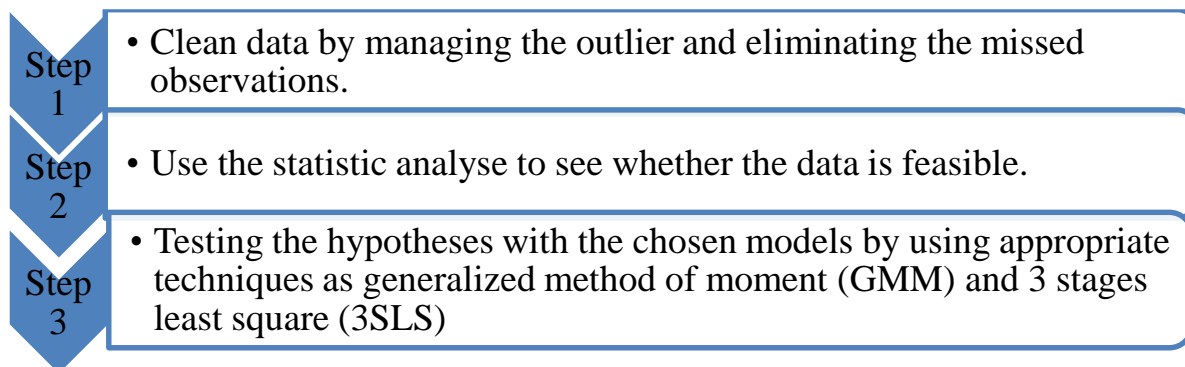


Fig. 4.3: The stages of processing data. Source: own processing

The main variables

Table 4.1: The main variables used for the study

Variables	Definitions of main variables
CASH	Cash holding is cash and cash equivalent divided by total assets
TOBINQ	Firm value equal a firm's market value to total book value
STATE	State ownership is the percentage of a total number of shares that the state hold
CEODUAL	CEO duality chairman of the Board and the CEO are the same person
COMP	BOD compensation is the salary with other payments
MAN	BOD ownership is defined as the percentage of share held by BOD
LISTED	A dummy variable with a value of 0 if the firms are listed in HOSE; number 1 for listed firms in HNX and the listed firms were canceled is number 2

4.6. Models for testing the hypotheses

This part focuses on the models which are applied to test the hypotheses

- **Hypothesis 1: The amount of corporate cash holding has an influence on the firm value in the Vietnamese context.**

The model is used to test the nonlinear relationship between the cash holding level and firm value in Vietnamese context is used as follows:

$$TOBINQ(V_{it}) = \beta_0 + \beta_1(CASH_{it}) + \beta_2(CASH2_{it}) + \alpha_i Z_{it} + \eta_i + \lambda_t + \varepsilon_{it} \quad (3)$$

where i is the accumulation of firms; t is time; CASH2 is the square of CASH, Z_{it} is other control variables including PROF, LEV, GROWTH. η is individual effect; λ is dummy variable with the time effect and equal for all firms which eliminate the macro factors; ε is the error term.

Based on the methods of Arellano and Bond (1991), generalized method of moments (GMM) is used. The technique helps to model to avoid some possible shocks and unobservable factors which have impacts on firm value as well as other independent variables. It is expected the positive sign is expected for variable CASH and a negative for CASH2.

- **Hypothesis 2: The state ownership is negatively associated with the corporate cash holding level.**

According to the previous studies from Megginson et al. (2014) and Harford et al. (2008), the model is conducted to test hypothesis 2 is presented as follows:

$$CASH_{it} = \beta_1(STATE_{it}) + \alpha_i Z_{it} + \eta_i + \lambda_t + \varepsilon_{it} \quad (4)$$

where i is the accumulation of firms; t is time for the end of the year; η is individual effect; λ is dummy variable with the time effect and equal for all firms which eliminate the macro factors; ε is the error term. Z_{it} is other control variables including INST, CF, AGE, NWC, SIZE, DEBT, DIV, GROWTH, NDL; α_i are coefficients of the control variables.

In this model, difference GMM (D-GMM) method is applied to test whether the state ownership impacts the cash holding level is owing to the dynamic of the model. Additionally, the dissertation employs the difference GMM method to avoid the results of regression coefficients are wrong because the lack of important factors significant impact on the firm value and cash holding level. The dissertation is forecasted that there is the negative relationship between corporate cash holding and state ownership. Based on the previous related researches and theory, the dissertation adds the control variables to control the deviation problem. .

- **Hypothesis 3: The CEO duality is positively associated with cash holding level.**
- **Hypothesis 4: BOD ownership is negatively correlated with the cash holding level.**

level.

➤ **Hypothesis 5: BOD compensation is positively associated with the corporate cash holding level.**

The model is given for analyzing the impact of BOD on the corporate cash holding level:

$$CASH_{it} = \beta_1 CASH_{it-1} + \beta_2 (CEODUAL_{it}) + \beta_3 (COMP_{it}) + \beta_4 (MAN_{it}) + \alpha_j Z_{it} + \eta_i + \lambda_t + \varepsilon_{it} \quad (5)$$

where i is the accumulation of firms; t is time for the end of the year; η is an individual effect; λ is a dummy variable with the time effect and equal for all firms which eliminate the macro factors; ε is the error term; α_i are coefficients of the explanatory variables. Z is other control variables including CAPEX, SIZE, LEV, CF, BANKD, LIQ.

To analyze the board's influence on the corporate cash holding level of listed firms on the stock market, a regression analysis model is used. It is noticeable that the endogenous problem may lead to the bias in the results. In order to solve this problem, Arellano and Bover (1995) introduced GMM method.

➤ **Hypothesis 6: The stricter listing requirements on the stock exchanges leads to the lower corporate cash holding level**

$$CASH_{it} = \beta_0 + \beta_1 LISTED_{it} + \alpha_i Z_{it} + \mu_{it} \quad (6)$$

where i is the accumulation of firms; t is time; CASH is the dependent variable equal cash plus cash equivalent divided by total asset; LISTED is a dummy variable; Z is the control vector of model including ROE, SIZE, LIQSX, MB, DIV, PROF, AGE, CAPEX; μ is the error; α are coefficients of the control variables.

Because the model has some variables that affect the cash holding level as well as the listing requirements on the stock exchange, the interaction between variables is called simultaneousness. According to Zellner and Theil (1962), the dissertation uses 3-stage least square method. This approach can solve endogenous problems that occur in regression of independent variables in the model.

5. FINDINGS AND DISCUSSIONS

The chapter represents the findings as well as discussion about the results of the research.

5.1 The influence of corporate cash holding on the firm value

Table 5.1 shows the result of the effect of cash holding level on firm value after managing for unobserved heterogeneity.

Table 5.1: The results of cash holding and firm value

TOBINQ	Model 3 for testing CASH and TOBINQ	Robustness testing for CASH and TOBINQ
CASH	28.26407*** (3.40)	22.4675*** (2.61)
CASH2	-59.5209* (-1.72)	-41.3419** (-2.23)
PROF	14.76374** (2.79)	11.5284** (1.85)
GROWTH	2.294532** (2.09)	
CF		3.74015 (1.01)
LEV	-1.126536 (-1.25)	-0.98613 (-1.07)
Hansen	8.42	15.05
<i>p-value</i>	<i>0.209</i>	<i>0.135</i>
AR (1)	-3.60	-3.28
<i>p-value</i>	<i>0.000</i>	<i>0.001</i>
AR(2)	-0.93	-1.46
<i>p-value</i>	<i>0.351</i>	<i>0.144</i>
N	3335	3335

Note: TOBINQ = market value / book value; CASH= (cash + cash equivalent)/total asset; CASH2= Cash square; LEV= Total debt/total assets; GROWTH= Ln (Total assets/Total assets t-1); PROF= (Net profit + depreciation)/Total assets; AR(#): autocorrelation tests in 1 and 2 order, p-value in italics. Standard errors are in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Source: own processing

The result shows that there exists a nonlinear relationship between the corporate cash holding level and firm value. The result indicates that the CASH coefficient is positive while the CASH2 coefficient is negative. The finding is similar to Martínez-Sola et al. (2013) in the US. As a result, the paper concludes that there is an influence of cash holding level on the firm value. The invert U-shaped relationship between cash holding and firm value implies that keeping the right level of cash holding leads to the rising of corporate value but at the turning point the firm value will decrease if the firms hold too much cash.

Furthermore, the robustness testing for model 3 is applied to check the stability of the results.

5.2 The impact of the state ownership on the corporate cash holding level

Table 5.2 presents the result of the effect of the state ownership on the corporate cash holding level after managing for unobserved heterogeneity:

Table 5.2: The results of cash holding and state ownership

CASH	Model for CASH and STATE	Robustness for CASH and STATE
STATE	-0.0033*** (-3.18)	-0.003*** (-3.17)
INST	-0.0041** (-2.43)	-0.0041** (-2.43)
SIZE	-.1454*** (-8.67)	-.1454*** (-8.67)
AGE	0.0369*** (3.68)	0.0370*** (3.68)
DEBT	-0.2973*** (-8.17)	-0.2953*** (-8.16)
NDL	-0.3459*** (-11.08)	-0.3468*** (-11.08)
CAPEX	0.1670*** (5.71)	0.1657*** (5.62)
GROW	0.0080 (1.32)	0.0080 (1.32)
DIV	-0.0025 (-0.78)	-0.0025 (-0.79)
CF	0.0638*** (4.22)	0.0629*** (4.14)
NWC	-0.2876*** (-11.19)	-0.2877*** (-11.20)
BANKD		-0.037*** (-0.87)
_Cons	0.9999*** (11.25)	1.001*** (11.25)
N	3484	3484
AR(1)	-8.8017	-8.7998
<i>p-value</i>	0.000	0.000
AR(2)	0.2917	0.2954
<i>p-value</i>	0.7705	0.7677

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. CASH= (cash + marketability)/Net assets. STATE is the fraction of shares owned by the state. INST is the fraction of shares owned by the institutions. SIZE is the logarithm of total assets. DIV is 1 if the firm pays a dividend, zero otherwise. CF= (EBITDA - interests, taxes, and dividends)/ total assets. DEBT is the sum of interest-bearing short-term debt and long-term debt, scaled

by net assets. $NWC = (\text{current assets} - \text{current liabilities}) / \text{net assets}$. AGE is the number of years since a firm is listed. $NDL = (\text{total liabilities} - \text{short and long term debts}) / \text{total assets}$. $CAPEX$ is the ratio of capital expenditures to total assets. $GROW = \ln(\text{Total assets}/\text{Total assets } t-1)$. $BANKD$ is the ratio of total bank borrowings to total debt.

From the table 5.2, the state ownership has a negative sign with the cash holding at 1%. The clear inference is that the higher level of the state ownership leads to hoard less cash reserve in the listed firms. This finding is consistent with the paper from Megginson et al. (2014) for Chinese context where the government supports the raising capital process. In detail, the state-owned firms can easier borrow money from the state bank or private bank with lower interest rate because of the political connection (Sapienza, 2004, Kusnadi et al., 2015).

5.3 The influence of BOD on the corporate cash holding level

As discussed in the methodology section, the results show the impact of the BOD on the corporate cash holding by using GMM method as follows:

Table 5.3: The results of cash holding and BOD

CASH	Model for testing CASH and BOD	Robustness testing CASH and BOD
CASH _{t-1}	0.5622*** (7.01)	0.658*** (8.49)
CEODUAL	0.0322* (1.73)	0.0386** (2.04)
MAN	-0.1769** (-2.18)	-0.2326** (-2.43)
COMP	-0.0316 (-0.39)	-0.0057 (0.07)
LIQ	-0.2151*** (-12.49)	-0.2086*** (-11.58)
BANKD	-.0225** (-2.07)	
SIZE	-0.0031 (-1.25)	-0.0048*** (-1.70)
CF	0.1513*** (5.91)	0.1422*** (5.14)
LEV	-0.0939*** (-5.78)	-0.0852*** (-4.69)
CAPEX	-0.2903*** (-9.98)	-0.3034*** (-9.90)
Cons	0.1809*** (3.59)	0.1850*** (3.39)
Hansen test	12.49	14.81
<i>p-value</i>	0.641	0.539
AR (1)	-6.99	-6.87
<i>p-value</i>	0.000	0.000

AR(2)	0.94	0.98
<i>p-value</i>	0.348	0.317
N	3349	3349

Note: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$. CASH equal cash and cash equivalent out of total asset. CEODUAL is a chairman duality and this is represented as a dummy variable which takes a value of 1 if the positions of CEO and the chairman are held by the same individual and 0 otherwise, MAN is the variable which is the percentage of equity ownership by the BOD, COMP is the compensation for the BOD such as the sum of salary, bonus and all other payments. CF is the ratio of pre-tax profit plus depreciation to total assets. LIQ is the ratio of current assets minus current liabilities and total cash to total assets. BANKD is the ratio of total bank borrowings to total debt. SIZE is the logarithm of total assets. LEV is measured as total debt is divided by shareholder equity. CAPEX is the ratio of capital expenditures to total assets.

Source: own processing

As regards the first, CEODUAL has a positive impact on the corporate cash holding level at 10%. This finding is in line with the paper from Boubaker et al. (2015). Having a firm with the same person for the chairman and CEO position can cause the increase of asymmetric information because the information is not crossing check by the board and managers (Anderson et al., 2004). Then, the cost of borrowing will be more expensive from the external source. Besides, Nguyen (2010) argues that the BOD and CEO have less experience in firm management in Vietnam. Thus, Vietnamese corporations try to hold a high level of cash reserve to be more safe and independent in making the decision. As the results, the firms need to keep more cash reserve for precautionary reasons, that is, in case of emergencies with which the firms require to address (Nguyen, 2010).

The negative impact of board ownership (MAN) on the corporate cash holding is significant at 5%. It can be explained that the higher board ownership leads to the lower level of holding. The fourth hypothesis is confirmed. This is similar to the expectation and the previous studies from Kuan et al. (2011) and Kusnadi (2011). The firms with higher board ownership tend to pay more dividend which has less level of cash reserve (Opler et al., 1999). In Vietnam, the managers have less managing experience. Thus, the shareholders do not have trust in the managers. In this case, to mitigate the agency problem, Vietnamese corporations keep a lower level of cash. Therefore, Vietnamese firms with higher board ownership maintain a lower level of cash reserve.

The results illustrate that the compensation of the BOD (COMP) is positively related to the dependent variable (CASH), but it is not statistically significant which is inconsistent with the fifth hypothesis. The difference of the result because the BOD of Vietnamese corporations lack management skills so that the compensation of BOD does not impact the firm performance (Nguyen, 2010). Besides, the Vietnamese corporations have not paid attention to the compensation of BOD (Nguyen et al., 2016). Consequently, the compensation of BOD have not impacted the level of corporate cash holding. The robustness testing model provides the same results on the main independent variables.

5.4 The impact of the listing requirements of Vietnamese stock exchanges on the corporate cash holding level

The results of the model are given below in Table 5.4.

Table 5.4: The results of cash holding and listing requirements

Dependent variable: CASH	Model for testing CASH and LISTED	Robustness testing CASH and LISTED
LISTED	-0.1000 *** (-6.09)	-0.1000 *** (-6.15)
DIV	0.0176*** (4.27)	0.0156*** (3.78)
CAPEX	0.0055* (1.65)	0.0069** (2.02)
PROF	0.0173*** (6.39)	0.0166*** (6.07)
AGE		0.0250*** (4.10)
LIQSX	-0.7218*** (-3.18)	-0.572** (-2.49)
ROE	0.1171*** (4.38)	0.1390*** (4.98)
MB	0.0110 (1.12)	0.0159 (1.38)
_CONS	-0.0597** (-2.58)	-0.0738** (-3.24)
LISTED		
SIZE	0.3550*** (2.49)	0.3531*** (2.34)
PROF	0.0400*** (7.45)	0.0406*** (7.45)
_CONS	-1.697** (-2.47)	-1.6978*** (-2.34)

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

CASH equal cash and cash equivalent out of total asset; *LISTED* is a dummy variable with a value of 0 if the firms are listed in HOSE, number 1 for listed firms in HNX and the listed firms were cancelled is number 2; *PROF* is a dummy variable with a value of 1 if the corporations have profit and 0 otherwise; *SIZE* is the logarithm of total assets; *DIV* is the payment for the shareholders in cash; *LIQSX* equal to the trading volume and the outstanding number of shares; *ROE* is the ratio of equity by the net profit; *MB* is dummy variable 1 means the listed firms announce the information on time according to the regulations and otherwise is 0; *AGE* is the number of years since a firm is listed; *CAPEX* is ratio of capital expenditures to total assets.

Source: own processing

The results from the model indicate the negative impact of the LISTED variable is as expected. The corporate cash holding in the stock exchange with stricter requirements has less cash reserve level. According to the literature review, the higher standards of listing conditions in HOSE lead to a lower cash reserve of the listed firms owing to the higher reputation which is easier for the firms to raise their capital with lower cost (Opler et al., 1999, Bianconi et al., 2013). Huang et al. (2013) suggest the cross-listing correlates enhancing the firm value because the cross-listed firms have to adopt more requirements such as the analyst coverage and forecast accuracy. Additionally, Cetorelli and Peristiani (2010) argue that the listed firms have to accept more demanding information disclosure and accounting principles. Therefore, the listed firms on HOSE have higher performance or healthier finance which help them to raise capital easily, and then they do not need to have high cash level.

6. LIMITATIONS OF RESEARCH

The dissertation has achieved to answer all research questions. The research provides enough evidence to conclude that the corporate governance mechanisms impact the corporate cash holding level in the typical transition economy. However, the study still has some limitations as followed.

Firstly, the data is collected within 2007-2015 which does not include the period before the global economic crisis. Therefore, the results do not reflect whether there is any difference between before and after the crisis about the impact of corporate governance mechanisms and the corporate cash holding level. The first reason, the majority of firms has started to be listed on the Vietnamese stock exchange in 2007. The second reason is that before 2007, it was hard to collect the financial statements of these firms, and the accuracy of the information was not high for studying. Thus, there is difficult to research the period before the financial crisis 2007-2008. Then, the study can be done when Vietnamese financial market repeats the crisis circle in the future. At that time, the data is enough for applying the models for testing the difference between the periods.

Secondly, the sample includes all listed corporations excluding the financial institutions. The sample does not separate the industry. However, the different sectors may have a different characteristic of the corporate governance mechanisms which are interesting issues for future studies. Furthermore, the models of this dissertation can be adjusted and applied for testing the determinants which can impact the corporate cash holding in the different industries.

Thirdly, the research explores the firm-specific factor and the information used to study is the accounting information provided in the financial statements. The research does not include macroeconomic factors such as exchange rates, inflation rates, interest rate, etc. This information may affect the cash reserve level from business activities of businesses.

Finally, the research concentrates only on Vietnamese listed firms which cannot be representative of all transition economies. The next research can study in other countries to have a general conclusion for the transition economies. Moreover, this dissertation only centralizes and research deeply about Vietnamese economy. Thus, it cannot generalize these findings to other countries. However, the models can be adjusted to test this relationship in the different contexts.

7. CONTRIBUTIONS

This part indicates the contribution to theory and practice of the study as follows.

7.1. Contribution to theory

The important contribution is to fulfill the contextual gap. The study enriches the literature in exploring the relationship between the corporate governance mechanisms and the corporate cash holding in the Vietnamese context which can represent one of the cases of the transition economy.

The trade-off theory (Myers, 1977) suggest the right level of cash holding can balance the cost and benefit of keeping cash to improve the firm value. The paper from Martínez-Sola et al. (2013) confirms this theory in US context which represents the developed economy. The result of this study supports the trade-off theory in Vietnamese context which is representative of the transition economy to fill the gap.

The result confirms that the external of corporate governance mechanism influence the ability to raise funds for the firms. The research extends the literature on the corporate governance mechanism issue.

7.2. Contribution to practice

The results give the recommendations on the connection between the state ownership and the corporate cash holding level. The Vietnamese government still support the firms with high state ownership in their business (Nguyen et al., 2015a). Then, the Vietnamese state-owned corporation can rely on the connection with the state bank to get capital with cheaper cost.

The findings give the reference for the firms in keeping cash which depend on the characteristics of BOD. In the case of CEO duality, the firms intend to keep more cash as the findings of this research, but the firms should consider the agency problem in this case. Besides, when BOD owns too many shares of the firms, they incentive to hold less cash because the BOD want to pay more dividend for themselves (Kuan et al., 2011). Consequently, the firms should balance the amount of cash to reduce these issues.

The listed firm should consider the different level of cash reserve when they are listed in different stock exchanges. In detail, the firms have listed on the stock exchange with stricter listing requirements have higher prestige as well as the financial healthier. As a result, the firms do not keep the high level of cash reserve because they can raise capital from the investors with cheaper cost. Based on the findings of the different regulations on two stock exchanges, the policymakers should take this issue into the regulation considerations.

8. CONCLUSION

Cash management plays the vital role in the firm operations as well as daily activities for doing businesses. Especially, the financial crisis in 2008 cause the difficulties for the firms to raise their funds. Likewise, the interest rate is high at 17%, and the marketability of the securities on the stock exchange is low. Thus, cash holding has become an important issue which needs to be considered by the managers. In this case, having enough cash reserve helps the firms to maintain and grow their businesses. Moreover, understanding the determinants influencing the corporate cash holding helps the firms keep the suitable amount of cash to improve their value.

The first finding confirms an impact of the corporate cash holding level on the firm value. This means that the corporate cash holding is one important factor to determine the firm value. Then, keeping the right level of cash, the Vietnamese firms can increase the firm value. In addition, the results indicate that the increase in share of the state ownership has linkage with the lower level of cash holding in listed firms. This can be explained that the state shareholders can take advantage of their political connections to get the capital with lower cost because they receive the support from the government. Moreover, CEO duality leads to the higher level of corporate cash holding because the asymmetric information may increase. This leads to the suspicion for the accounting information, then the firms have difficulties with borrowing money from an external source. Besides, the board ownership is negatively related to the corporate cash holding level. This is because the separation between the owners (public) and the representative for the shareholders leads to the agency problems, then the firms should keep less level of cash reserve. One of the interesting findings is that the listing requirements of the stock exchanges impact the corporate cash reserve level. In particular, the stricter listing requirements of the stock exchange leads to the lower level of cash holding because the listed firms with more listing requirements have a higher reputation and they can get the capital easier.

This research still has some limitation as mentioned above and the future research can expand investigation in some other aspects. The next research can study this topic by sectors because they may be the difference of each industry for the determinants on the corporate cash holding level. However, the research can adjust and employ the model to test. The next study also can apply to other countries in order to compare and derive the unique determinants of the impact on the corporate cash holding level in different economies. Besides that, more characteristics of BOD as the genders, the experience, the age, the education, etc. can be modified to fill the gap for this topic. Additionally, the study can add more macroeconomics factors as interest rate, inflation, etc. to expand the literature on the issue of the corporate governance mechanisms and the corporate cash holding level.

BIBLIOGRAPHY

- [1] ADAMS, Renee B. and Hamid MEHRAN. Bank board structure and performance: Evidence for large bank holding companies. *Journal of Financial Intermediation*. 2012, vol. 21, no. 02, pp. 243-267. ISSN 1042-9573.
- [2] AGRAWAL, Anup and Charles R. KNOEBER. Firm performance and mechanisms to control agency problems between managers and shareholders. *The Journal of Financial and Quantitative analysis*. 1996, vol. 31, no. 3, pp. 377-397. ISSN 1756-6916.
- [3] AL-NAJJAR, Basil and Ephraim CLARK. Corporate governance and cash holdings in MENA: Evidence from internal and external governance practices. *Research in International Business and Finance*. 2017, vol. 39, pp. 1-12. ISSN 0275-5319.
- [4] AMMANN, Manuel, David OESCH and Markus M. SCHMID. Corporate governance and firm value: International evidence. *Journal of Empirical Finance*. 2011, vol. 18, no. 1, pp. 36-55. ISSN 0927-5398.
- [5] ANDERSON, Ronald C., Sattar A. MANSI and David M. REEB. Board characteristics, accounting report integrity, and the cost of debt. *Journal of accounting and economics*. 2004, vol. 37, no. 3, pp. 315-342. ISSN 0165-4101.
- [6] ARELLANO, Manuel and Olympia BOVER. Another look at the instrumental variable estimation of error-components models. *The review of economic studies*. 1995, vol. 68, no. 1, pp. 29-51. ISSN 0304-4076.
- [7] ARELLANO, Manuel and Stephen BOND. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Journal of Econometrics*. 1991, vol. 58, no.2, pp. 277-297. ISSN 1467-937X.
- [8] AVRAMOV, Doron, Tarun CHORDIA and Amit GOYAL. Liquidity and autocorrelations in individual stock returns. *The Journal of finance*. 2006, vol. 61, no. 5, pp. 2365-2394. ISSN 1540-6261.
- [9] AZIM, Mohammad I. Corporate governance mechanisms and their impact on company performance: A structural equation model analysis. *Australian Journal of management*. 2012, vol. 37, no. 3, pp. 481-505. ISSN 0312-8962.
- [10] BABATUNDE, M. Adetunji and Olawoye OLANIRAN. The effects of internal and external mechanism on governance and performance of corporate firms in Nigeria. *Corporate ownership & control*. 2009, vol. 7, no. 2, pp. 330-344.
- [11] BARONTINI, Roberto and Stefano BOZZI. Board compensation and ownership structure: empirical evidence for Italian listed companies. *Journal of Management & Governance*. 2011, vol. 15, no. 1, pp. 59-89. ISSN 1385-3457.

- [12] BATHALA, Chenchuramaiah T. and Ramesh P. RAO. The determinants of board composition: An agency theory perspective. *Managerial and decision economics*. 1995, vol. 16, no. 1, pp. 59-69. ISSN 1099-1468.
- [13] BEASLEY, Mark S. et al. Fraudulent financial reporting: Consideration of industry traits and corporate governance mechanisms. *Accounting Horizons*. 2000, vol. 14, no. 4, pp. 441-454. ISSN 0888-7993.
- [14] BIANCONI, Marcelo, Joe A. YOSHINO and De Sousa, Mariana O Machado. BRIC and the US financial crisis: An empirical investigation of stock and bond markets. *Emerging Markets Review*. 2013, vol. 14, pp. 76-109. ISSN 1566-0141.
- [15] BOUBAKER, Sabri, Imen DEROUICHE and Duc Khuong NGUYEN. Does the board of directors affect cash holdings? A study of French listed firms. *Journal of Management & Governance*. 2015, vol. 19, no. 2, pp. 341-370. ISSN 1385-3457.
- [16] BRICK, Ivan E., Oded PALMON and John K. WALD. CEO compensation, director compensation, and firm performance: Evidence of cronyism? *Journal of Corporate Finance* [online]. 2006, vol. 12, iss. 3, pp. 403-423 [cit. 2017-04-10]. ISSN 0929-1199. Available from: <https://doi.org/10.1016/j.jcorpfin.2005.08.005>
- [17] BRICKLEY, James A., Jeffrey L. COLES and Gregg JARRELL. Leadership structure: Separating the CEO and chairman of the board. *Journal of corporate Finance*. 1997, vol. 3, no. 3, pp. 189-220. ISSN 0929-1199.
- [18] CAMPBELL, Kevin and Antonio MÍNGUEZ-VERA. Gender diversity in the boardroom and firm financial performance. *Journal of business ethics*. 2008, vol. 83, no. 3, pp. 435-451. ISSN 0167-4544.
- [19] CETORELLI, Nicola and Stavros PERISTIANI. Firm value and cross-listings: The impact of stock market prestige. *The Journal of Risk and Financial Management*. 2010, vol. 8, iss. 1, pp 150-180 [cit. 2017-03-11]. ISSN 1911-8074. Available from: [10.3390/jrfm8010150](https://doi.org/10.3390/jrfm8010150)
- [20] CLAESSENS, Stijn and B. Burcin YURTOGLU. Corporate governance in emerging markets: A survey. *Emerging markets review* [online]. 2013, vol. 15, pp. 1-33 [cit. 2017-03-12]. ISSN 1566-0141. Available from: <https://doi.org/10.1016/j.ememar.2012.03.002>
- [21] DO, Thi Thanh Nhan and Pham HA. Cash holding, state ownership and firm value: The case of Vietnam. *International Journal of Economics and Financial Issues*. 2016, vol. 6, no. 6, pp. 110-115. ISSN 2146-4138.
- [22] DOIDGE, Craig, G. Andrew KAROLYI and Rene M. STULZ. Why are foreign firms listed in the US worth more? *Journal of financial economics*. 2004, vol. 71, no. 2, pp. 205-238. ISSN 0304-405X.
- [23] DUNN, Paul. The impact of insider power on fraudulent financial reporting. *Journal of management*. 2004, vol. 30, no. 3, pp. 397-412. ISSN 0149-2063.

- [24] ELSILÃ, Anna et al. CEO personal wealth, equity incentives and firm performance. *Corporate Governance: An International Review*. 2013, vol. 21, no. 1, pp. 26-41. ISSN 1467-8683.
- [25] FAN, Joseph PH, Tak Jun WONG and Tianyu ZHANG. Politically connected CEOs, corporate governance, and Post-IPO performance of China's newly partially privatized firms. *Journal of financial economics*. 2007, vol. 84, no. 2, pp. 330-357. ISSN 0304-405X.
- [26] FERREIRA, Miguel A. and Antonio S. VILELA. Why do firms hold cash? Evidence from EMU countries. *European Financial Management*. 2004, vol. 10, no. 2, pp. 295-319. ISSN 1468-036X.
- [27] GERMAIN, Laurent, Nadine GALY and Wanling LEE. Corporate governance reform in Malaysia: Board size, independence and monitoring. *Journal of Economics and Business*. 2014, vol. 75, pp. 126-162. ISSN 0148-6195.
- [28] GILLAN, Stuart L. Recent developments in corporate governance: An overview. *Journal of corporate finance*. 2006, vol. 12, no. 3, pp. 381-402. ISSN 0929-1199.
- [29] GOH, Chin Fei and Amran RASLI. CEO duality, board independence, corporate governance and firm performance in family firms: Evidence from the manufacturing industry in Malaysia. *Asian Business & Management*. 2014, vol. 13, no. 3, pp. 333-357. ISSN 1472-4782.
- [30] HARFORD, Jarrad, Sattar A. MANSI and William F. MAXWELL. Corporate governance and firm cash holdings in the US. *Journal of Financial Economics*. 2008, vol. 87, no. 3, pp. 107-138. ISSN 0304-405X.
- [31] HARFORD, Jarrad. Corporate Cash Reserves and Acquisitions. *The Journal of Finance*. 1999, vol. 54, no. 6, pp. 1969-1997. ISSN 1540-6261.
- [32] HERMALIN, Benjamin E. and Michael S. WEISBACH. Endogenously chosen boards of directors and their monitoring of the CEO. *American Economic Review*. 1998, vol. 88, no. 1, pp. 96-118. ISSN 0002-8282.
- [33] HUANG, Ying, Susan ELKINAWY and Pankaj K. JAIN. Investor protection and cash holdings: Evidence from US cross-listing. *Journal of Banking & Finance*. 2013, vol. 37, no. 3, pp. 937-951. ISSN 0378-4266.
- [34] JENSEN, Michael C. Agency costs of free cash flow, corporate finance, and takeovers. *The American economic review*. 1986, vol. 76, no. 2, pp. 323-329. ISSN 0002-8282.
- [35] JENSEN, Michael C. and Kevin J. MURPHY. Performance pay and top-management incentives. *Journal of political economy*. 1990, vol. 98, no. 2, pp. 225-264. ISSN 0022-3808.
- [36] KEYNES, John Maynard. *The general theory of money, interest and employment*. New York, 1936, pp 102-115. Chapter 13 The general theory of the rate of interest. ISSN 978-0-230-00476.

- [37] KLAPPER, Leora F. and Inessa LOVE. Corporate governance, investor protection, and performance in emerging markets. *Journal of Corporate Finance*. 2004, vol. 10, no. 5, pp. 703-728. ISSN 0929-1199.
- [38] KUAN, Tsung-Han, Chu-Shiu LI and Shin-Herng CHU. Cash holdings and corporate governance in family-controlled firms. *Journal of Business Research*. 2011, vol. 64, no. 7, pp. 757-764. ISSN 0148-2963.
- [39] KUMAR, Naveen and JP SINGH. Effect of board size and promoter ownership on firm value: some empirical findings from India. *The international journal of business in society*. 2013, vol. 13, no. 1, pp. 88-98. ISSN 1472-0701.
- [40] KUSNADI, Yuanto, Zhifeng YANG and Yuxiao ZHOU. Institutional development, state ownership, and corporate cash holdings: Evidence from China. *Journal of Business Research* [online]. 2015, vol. 68, iss. 2, pp. 351-359 [cit. 2016-04-10]. ISSN 0148-2963. Available from: <https://doi.org/10.1016/j.jbusres.2014.06.023>
- [41] KUSNADI, Yuanto. Do corporate governance mechanisms matter for cash holdings and firm value? *Pacific-Basin Finance Journal*. 2011, vol. 19, no. 5, pp. 554-570. ISSN 0927-538X.
- [42] LA PORTA, Rafael et al. Investor protection and corporate governance. *Journal of financial economics*. 2000, vol. 58, no. 1, pp. 3-27. ISSN 0304-405X.
- [43] LE, Trien Vinh and Amon CHIZEMA. State ownership and firm performance: Evidence from Chinese listed firms. *Organizations & Markets in Emerging Economies*. 2011, vol. 2, no. 2, pp.72-90. ISSN 2029-4581.
- [44] LEE, Edward and Ronan POWELL. Excess cash holdings and shareholder value. *Accounting & Finance*. 2011, vol. 51, no. 2, pp. 549-574. ISSN 1467-629X.
- [45] LEE, Kin-Wai and Cheng-Few LEE. Cash holdings, corporate governance structure and firm valuation. *Review of Pacific Basin Financial Markets and Policies*. 2009, vol. 12, no. 3, pp. 475-508. ISSN 0219-0915.
- [46] LEE, Shih-Cheng, Chien-Ting LIN and Pei-Ting CHANG. An Ohlson valuation framework for valuing corporate governance: The case of Taiwan. *Pacific-Basin Finance Journal* [online]. 2011, vol. 19, iss. 4, pp. 420-434 [cit. 2017-05-10]. ISSN 0927-538X. Available from: <https://doi.org/10.1016/j.pacfin.2011.03.003>
- [47] LIEN, Yung-Chih and Shaomin LI. Does diversification add firm value in emerging economies? Effect of corporate governance. *Journal of Business Research* [online]. 2013, vol. 66, iss. 12, pp. 2425-2430 [cit. 2017-03-14]. ISSN 0148-2963. Available from: <https://doi.org/10.1016/j.jbusres.2013.05.030>
- [48] Listing regulation of Government. Article 54 of Circular 58/2012/ND-CP dated 20/07/2012 [viewd 2018-04-15]. Available from:

- <http://hethongphapluatvietnam.net/decision-no-58-2012-nd-cp-of-july-20-2012-stipulating-in-detail-and-guiding-the-implementation-of-a-number-of-articles-of-the-securities-law-and-the-law-amending-and-supplementing-a-number-of-articles-of-securities-law.html>
- [49] Listing summary. *Hanoi Stock Exchange*. [online]. © 2018 [viewd 2018-04-15]. Available from: <https://www.hnx.vn/en-gb/cophieu-etfs/chung-khoan-ny.html>.
- [50] Listing summary. *Hochiminh Stock Exchange* [online]. © 2018 [viewd 2018-04-15]. Available from: <https://www.hsx.vn/Modules/Listed/Web/ListingSummary/153?fid=a1b28509a59441f28d508074c0a72aad>
- [51] MARTÍNEZ-SOLA, Cristina, Pedro J. GARCÍA-TERUEL and Pedro MARTÍNEZ-SOLANO. Corporate cash holding and firm value. *Applied Economics* [online]. 2013, vol. 45, iss. 2, pp. 161-170 [cit. 2017-03-12]. ISSN 0003-6846. Available from: <http://dx.doi.org/10.1080/00036846.2011.595696>
- [52] MEGGINSON, William L. and Jeffry M. NETTER. From State to Market: A Survey of Empirical Studies on Privatization. *Journal of Economic Literature*. 2001, vol. 39, no. 2, pp. 321-389. ISSN 00220515.
- [53] MEGGINSON, William L. and Zuobao WEI. Determinants and value of cash holdings: Evidence from China's privatized firms. *23rd Australasian Finance and Banking Conference*, 2010, pp. 1-48. ISSN 978-0-9873127-2-3.
- [54] MEGGINSON, William L., Barkat ULLAH and Zuobao WEI. State ownership, soft-budget constraints, and cash holdings: Evidence from China's privatized firms. *Journal of Banking & Finance* [online]. 2014, vol. 48, pp. 276-291 [cit. 2017-03-01]. ISBN 0378-4266. Available from: <https://doi.org/10.1016/j.jbankfin.2014.06.011>
- [55] MISHRA, Deepak. Vietnam development report 2012: Market economy for a middle-income Vietnam. *Washington DC: The World bank*, 2012, pp. 1-90. Available from: <http://documents.worldbank.org/curated/en/495721468327934602/Vietnam-development-report-2012-market-economy-for-a-middle-income-Vietnam>
- [56] MYERS, Stewart C. and Raghuram G. RAJAN. The paradox of liquidity [online]. 1998, vol. 113, pp. 733-771. ISSN 1531-4650.
- [57] MYERS, Stewart C. Determinants of corporate borrowing. *Journal of Financial Economics*. 1977, vol. 5, no. 2, pp. 147-175. ISSN 0304-405X.
- [58] NGUYEN, Thanh Hien et al. Corporate governance and capital structure - The listed firms on Vietnamese stock exchanges. *Open University Journal*. 2016, vol. 50, no. 5, pp. 25-41.
- [59] NGUYEN, Thi Thuy Hoa, Le Ngan Trang NGUYEN and Thi Phuong Vy LE. The nonlinear relationship between corporate cash holding level and

- firm value: Vietnamese listed firms. *Research & Exchange journal*. 2015, vol. 22, no. 2, pp. 58-65.
- [60] NGUYEN, Truong Son. Corporate governance in Vietnamese enterprises. *Science and Technology Journal*. 2010, vol. 5, no. 4, pp. 234-244.
- [61] NGUYEN, Tuan, Stuart LOCKE and Krishna REDDY. Ownership concentration and corporate performance from a dynamic perspective: Does national governance quality matter? *International Review of Financial Analysis*. 2015, vol. 41, no. 1, pp. 148-161. ISSN 1057-5219.
- [62] OGUNDIPE, Lawrencia Olatunde, Sunday Emmanuel OGUNDIPE and Samuel Kehinde AJAO. Cash holding and firm characteristics: Evidence from Nigerian Emerging Market. *Journal of Business, Economics and Finance*. 2012, vol. 1, no. 2, pp. 45-58. ISSN 2146-7943.
- [63] OLER, Derek K. and Marc P. PICCONI. Implications of Insufficient and Excess Cash for Future Performance. *Contemporary Accounting Research* [online]. 2014, vol. 31, iss. 1, pp. 253-283 [cit. 2017-03-18]. ISSN 1911-3846. Available from: <http://dx.doi.org/10.1111/1911-3846.12012>
- [64] OPLER, Tim et al. The determinants and implications of corporate cash holdings. *Journal of financial economics*. 1999, vol. 52, no. 1, pp. 3-46. ISSN 0304-405X.
- [65] OZKAN, Aydin and Neslihan OZKAN. Corporate cash holdings: An empirical investigation of UK companies. *Journal of Banking & Finance* [online]. 2004, vol. 28, iss. 9, pp. 2103-2134 [cit. 2017-03-02]. ISSN 0378-4266. Available from: <https://doi.org/10.1016/j.jbankfin.2003.08.003>
- [66] PHUNG, Duc Nam and Anil V. MISHRA. Ownership structure and firm performance: evidence from Vietnamese listed firms. *Australian Economic Papers*. 2016, vol. 55, no. 1, pp. 63-98. ISSN 1467-8454.
- [67] ROSE, Caspar. Does female board representation influence firm performance? The Danish evidence. *Corporate Governance: An International Review*. 2007, vol. 15, no. 2, pp. 404-413. ISSN 1467-8683.
- [68] SADDOUR, Khaoula. The Determinants and the Value of Cash Holdings: Evidence from French firms. *Journal of risk and control*. 2006, vol. 2, no. 1, pp. 19-43. ISSN 1465-1211.
- [69] SAPIENZA, Paola. The effects of government ownership on bank lending. *Journal of Financial Economics* [online]. 2004, vol. 72, iss. 2, pp. 357-384 [cit. 2017-07-28]. ISSN 0304-405X. Available from: <https://doi.org/10.1016/j.jfineco.2002.10.002>
- [70] SHLEIFER, Andrei and Robert W. VISHNY. A Survey of Corporate Governance. *The Journal of Finance*. 1997, vol. 52, no. 2, pp. 737-783. ISSN 1540-6261.
- [71] STULZ, Rene M. Globalization, corporate finance, and the cost of capital. *Journal of applied corporate finance*. 1999, vol. 12, no. 3, pp. 8-25. ISSN 1745-6622.

- [72]TURNBULL, Shann. Stakeholder governance: A cybernetic and property rights analysis. *Corporate Governance: An International Review*. 1997, vol. 5, no. 1, pp. 11-23. ISSN 1467-8683.
- [73]UYAR, Ali and Cemil KUZZEY. Determinants of corporate cash holdings: evidence from the emerging market of Turkey. *Applied Economics* [online]. 2014, vol. 46, iss. 9, pp. 1035-1048 [cit. 2017-03-09]. ISSN 0003-6846. Available from: <http://dx.doi.org/10.1080/00036846.2013.866203>
- [74]YU, Mei. State ownership and firm performance: Empirical evidence from Chinese listed companies. *China Journal of Accounting Research*. 2013, vol. 6, no. 2 pp. 75-87. ISSN 1755-3091.
- [75]ZELLNER, Arnold and Henri THEIL. Three-stage least squares: simultaneous estimation of simultaneous equations. *Econometrica: Journal of the Econometric Society*. 1962, pp. 54-78. ISSN 0012-9682.

LIST OF PUBLICATIONS

- [1]DO, Thi Thanh Nhan, NGO, Minh Vu, PHAM, Ha and DRAHOMIRA, Pavelková. The prestige of stock exchanges and corporate cash holding in transitional economies: A study on Vietnamese listed firms. *Investment Management and Financial Innovations*, 2017, vol. 14, no. 3, pp. 199-209. ISBN 1812-9358.
- [2]LE, Tuan Bach, Drahomira, Pavelková, Do, Thi Thanh Nhan and NGO, Minh Vu. Does Foreign Ownership Impact Accounting Conservatism Adoption in Vietnam? *Business and Economic Horizons*, vol. 13, no. 3, pp 287-294. ISBN 18045006.
- [3]DO, Thi Thanh Nhan and PHAM, Ha. Cash holding, state ownership and firm value: The case of Vietnam. *International Journal of Economics and Financial Issues*. 2016, vol.6, no. 6 pp. 110-115, ISBN 2146-4138.
- [4]DO, Thi Thanh Nhan, PHAM, Ha and NGO, Kim Thanh. Whether the ownership structure effects on cash holding: An evidence from Vietnamese stock exchange. *The 3rd International Conference on Finance and Economics*. 2016, pp. 581-539. ISBN 978-80-7454-598-6.
- [5]DO, Thi Thanh Nhan. The determinants impact on cash holding: Evidence from the Vietnamese stock market. *DOKBAT 12th Annual International Bata Conference*. 2016, pp. 105-111. ISBN 978-80-7454-592-4.
- [6]DO, Thi Thanh Nhan, LE, Tuan Bach and NGUYEN, Thanh Trung. Stock-market efficiency in emerging markets: Evidence from Vietnamese stock market. *International Conference of Finance and Performance of Firm in Science, Education and Practice*. 2015, pp. 204-2016. ISBN 978-80-7454-482-8.
- [7]DO, Thi Thanh Nhan. The Optimal Capital Structure for Small and Medium Enterprises (SMEs). *DOKBAT 11th Annual International Bata Conference*. 2015, pp. 435-441. ISBN: 978-80-7454-475-0.

- [8]DO, Thi Thanh Nhan. The relationship between cash holding and firm value for Vietnam's listed firms: A literature review. *DOKBAT 11th Annual International Bata Conference*. 2015, pp. 442-450. ISBN: 978-80-7454-475-0.
- [9]DO, Thi Thanh Nhan and FELIX, Kombo. A Case Study of Corporate Social Responsibility in Vietnamese and Kenyan Economies. *DOKBAT 11th Annual International Bata Conference*. 2015, pp. 161-168. ISBN: 978-80-7454-475-0.

AUTHOR'S PROFESSIONAL CURRICULUM VITAE

➤ October 2010 to current

Ton Duc Thang University; Hoa Sen University; FPT university; NTT International College

- Be responsible for teaching some subjects in English: Financial market; International finance; Multinational corporation; Corporate finance; Money and banking; Intermediate Accounting 1 and 2 for FTMS program; Analyse financial report and Commercial banking.
- Developed and implemented various lesson plans and successfully achieved student participation by connecting the lesson with practical.
- Support English and Financial Club.
- Precept students, facilitating small-group case discussions.

March 2010 to Oct 2013

An Internal auditor in the Board for Tuy Hoa sugar company

Jan 2010 to October 2010

The investment department in Viet Kingdom Investment Corporation

Do Thi Thanh Nhan, Ph.D.

**Cash holding, Corporate governance mechanisms and Firm value
in transition economies: A study of listed corporations in Vietnam**

Držba hotovosti, mechanismy řízení podniku a hodnota firmy v tranzitních
ekonomikách: Studie kótovaných podniků ve Vietnamu

Doctoral Thesis Summary

Published by: Tomas Bata University in Zlín

nám. T. G. Masaryka 5555, 760 01 Zlín

Number of copies: issued in electronic version

1st edition

Typesetting by: Do Thi Thanh Nhan

This publication underwent no proof reading or editorial review

Publication year: 2018

ISBN 978-80-7454-749-2

