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主　論　文　の　要　旨

論文題目 Cash holdings management by non-financial listed firms in Vietnam（ベトナムの非金融上場企業による現金保有管理）

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論　文　内　容　の　要　旨

1. Motivation and objectives

Efficient cash holdings management is essential in all businesses because cash holdings ensure liquidity for firms. Firms may go bankruptcy-even those are large companies-when they do not have enough cash to pay their bills. Apart from financing daily operations, Cruz et al. (2019) state that cash holdings can be seen as financing choices because cash holdings can be used to seize profitable investment opportunities, to reduce the cost of assessing external funds, to service debt during economic difficulty, to protect firms against future shortfalls, cash flows volatility. Therefore, research on cash holdings plays an important part in financial literature.

Cash holdings can reveal many things about firms. For example, Opler et al. (1999) find that firms with more growth opportunities, less access to capital markets, higher business risk hold more cash. Bate et al. (2009) find out cash accumulation in US firms from 1980-2016. Specifically, the cash ratio has increased by 0.46 % per year because of the increase in firms' cash flow risk, the decrease in inventories and receivables. However, cash accumulation may show firms have agency problems. The agency cost view of corporate cash holdings suggests that managers who less act for shareholders' benefits accumulate cash and invest it in negative NPV projects or use it to overpay in acquisition (Dittmar et al., 2003).

When managers care about their benefits instead of shareholders' wealth, high cash balances can be found in those companies. I, therefore, am motivated to explore corporate cash holdings management in Vietnam, where the majority of listed firms in the economy were equitized from 100% state-owned firms-a fertile ground for agency problems-to see whether state ownership has a positive impact on cash holdings. How do cash holdings management change after equitization?

Besides, under the development of technology, the costs to converse short-term financial assets into cash are low, and the time to process the transaction is faster than before. These bring about the chance for managers to invest idle cash in short-term financial investments to reduce the cost of carrying liquid assets. Besides, short-term financial investment management in a developed country like the US is far different from a developing country. Hence, I am keen on researching short-term financial investments in relation to cash holdings and comparing the two styles of liquid assets management.

With these motivations, the objective of the thesis is to discover the cash holdings management of firms in Vietnam, focusing on analyzing the agency problems in Vietnam and the changes in cash holdings after equitization. First, the author aims at figuring out the factors that influence cash holdings, especially verifying the positive effect of state ownership on cash holdings and the impact of exposure to the market by the time. Second, the author would like to look deep into liquid assets management to the extent of how much cash holdings are held for short-term transaction purposes and how do firms manage the rest of the liquid assets.

2. Outlines and main contents

This doctoral thesis includes five chapters: Chapter 1: Introduction; Chapter 2: A literature review on corporate cash holdings management; Chapter 3: Corporate cash holdings and agency problem: Evidence from Vietnam; Chapter 4: What do short-term financial assets explain the corporate cash holdings changes in Vietnam; and Chapter 5: Conclusion. The flow of the thesis is that: based on the literature review in Chapter 2 and the unique setting of Vietnam, I develop hypotheses for Chapter 3 and Chapter 4 and do some empirical tests.

In the following, I briefly introduce the content of three main parts of my thesis: Chapter 2, Chapter 3, and Chapter 4.

Chapter 2 provides a profound knowledge of corporate cash holdings and short-term financial investments that will be used in Chapters 3 and 4. This Chapter analyses factors that affect cash holdings as the predictions of theories. The main theories that predict factors affect cash holdings are trade-off theory, pecking-order theory, and agency theory. The trade-off theory was developed based on equating the cost of raising capital and the benefit of holding cash. The higher the possibility of being in a cash shortage, the higher the cost of raising capital for firms is (Opler et al. 1999). The pecking-order theory for cash holdings management was inferred from Myers and Majluf (1984)'s points of view that raising capital from outside is always more expensive than using internal funds due to the information asymmetry between outsiders and managers. Accordingly, factors that increase information asymmetry, such as firms with more R&D costs, more investment opportunities, urge managers retained higher internal funds leading to a higher cash holdings level. The agency theory considers that managers may have incentives to retain cash to hunt their objectives at shareholder expense (Opler et al., 1999). This problem is likely to happen in firms that can generate substantial free cash flows (Jensen 1986), big firms with higher shareholder dispersion, poor investment opportunities (Opler et al. 1999), firms that have state ownership (Chen et al. 2018). Apart from the three main theories, Megginson et al. (2014) applied the soft-budget constraint (SBC) theory to explain the negative effect of state ownership on corporate cash holdings in China. Based on the SBC theory, firms with high state ownership are easier to get funds from state-owned banks; thus, they hold less cash. Besides, by systematizing prior empirical studies with new findings on the determinants of cash holdings, this part provides information about the investigations into internal and external determinants of corporate cash holdings until now.

Similar to the development of research on determinants of cash holdings, research on cash holdings management models also has been much developed. For example, if the seminal models by Baumol (1952), Miller and Orr (1966) only consider determining an optimal real cash level for firms, Duchin et al. (2017) developed a model that works for the new situation. Duchin et al. (2017)'s model allows firms to invest in a range of financial assets, including liquid and illiquid assets, as well as safe and risky assets.

Chapter 3 examines the effects of state ownership, age after equitization, and the interaction term between state ownership and age after equitization on corporate cash holdings of listed firms on Vietnamese stock exchanges from 2010 to 2017. Financial information and state ownership ratios of non-financial listed firms on the Ho Chi Minh Stock Exchange (HOSE) and the Hanoi Stock Exchange (HNX) over eight years (2010-2017) are used for analysis. I use both univariate analysis and OLS regression models to check the effect of state ownership, age after equitization (AGE), and cross-term between state ownership and age on cash holdings. The test results provide strong evidence that state ownership is positively associated with cash holdings, which is consistent with the prediction of the agency theory and confirms the finding by Chen et al. (2018). Analysis based on state ownership ranges also shows that firms belong to the highest state ownership ratio range have the highest mean and median of cash holdings.

I further investigate that the coefficients of AGE and the cross-term between AGE and STATE are negative and significant. As time passes after being equitized, firms would have a better reputation and an improvement in the amount of information the market has about such firms. These would help to reduce the marginal benefit of holding cash as well as agency problems, leading to a decrease in cash holdings of listed firms in Vietnam. Besides, Chapter 3 delivers the significant negative coefficients of the interaction term between bank debt and state ownership. Another contribution of this Chapter is the finding that firms with high state ownership hold more cash, suggesting SOEs need to have a good governance practice to mitigate the agency problems.

Chapter 4 is also an empirical study that shows the relation between cash holdings and short-term financial investments and investigates the determinants of short-term financial investments of listed firms in Vietnam. Many studies consider cash holdings, including all short-term financial assets (short-term financial investments interchangeably used) (Duchin et al., 2017). This makes the cash ratio does not fully reflex the cash policy of firms. Short-term financial investments (STFIs) can be used as tools to keep cash within firms rather than return to shareholders. When firms allocate more liquid assets to STFIs, the cash and cash equivalents to total assets ratio (cash ratio for short) would be smaller than they do not. Investing in STFIs helps to reduce the cost of holding liquid assets because STFIs have higher rates of return than cash and cash equivalents. Thus, in this Chapter, cash holdings are studied in relation to short-term financial assets (SFAs) to fulfill the knowledge about the cash holdings policy of listed firms in Vietnam.

The sample of Chapter 4 includes non-financial Vietnamese listed firms covering five years from 2014 to 2018, leading to an aggregate sample of 2924 firm-year observations. The data shows that Vietnamese listed firms almost keep their liquid assets under the two traditional types as cash and cash equivalents. Besides, managers invest most firms' idle cash in held to maturity accounts. Finally, I use both univariate and regression models to examine factors that affect the short-term financial investment ratio.

In more detail, Chapter 4 show that firms hold yearly14-15% of their assets under liquid assets. However, financial managers in Vietnam become more skillful at managing firms' liquid assets portfolio when they tend to keep real cash levels at around 5%, yearly reduce the proportion of cash equivalents, at the same time increase the proportion of (STFIs).

After showing the fact that managers in Vietnamese listed firms tend to reduce the proportion of cash holdings and to increase the proportion of STFIs, I look deep into the short-term financial assets compositions. It is found that almost all short-term financial assets are held-to-maturity investments, which are safe investments with periodical returns. In particular, 73% of STFIs are held-to-maturity investments with periodical profits. This is different from liquid assets management in the US. Duchin et al. (2017) show that industrial firms in the US invest heavily in noncash securities that are both risky and illiquid.

This Chapter also examines the internal factors that make firms invest more or less in STFIs. It is found that larger firms, older firms tend to have a higher proportion of STFIs because of having more experience in managing liquid assets portfolio. By contrast, firms with larger sales growth rates are likely to have lower short-term financial investment ratios. Especially, the age from equitization has positive coefficients significant at the 1% level using OLS and fixed-effects models. This proves the good effect of equitization to the extent that managers are better at managing liquid assets by yearly investing more cash holdings in STFIs with higher return rates.

3. Conclusion

As a whole, my thesis provides a picture of cash holdings management of non-financial listed firms in Vietnam. First, in Chapter 3, Figure 3.2. illustrates that both cash holdings and state ownership have a downtrend from 2010-2017. Next, the univariate test shows the monotonic relation between cash holdings and state ownership as firms with higher cash ratios are the firms with high state ownership ratios in terms of both mean and median values. Finally, as expected, the regression results deliver significant negative coefficients of age and the interaction term between age and state ownership. These results indicate the positive effect of state ownership on cash holdings diminished as time passed after equitization.

Besides, instead of holding liquid assets under cash and cash equivalents, firms may keep them in types of short-term financial investments likes stocks, bonds, certificate of deposits. Therefore, in Chapter 4, I look into the trend of cash holdings simultaneously with short-term financial investments and the total liquid assets. It was found that the proportion of short-term financial investments increase annually, while the cash and cash equivalents ratio decline annually. Specifically, managers became more adept at managing liquid assets portfolio when they moved cash equivalents to invest in short-term financial investments to reduce the cost of holding liquid assets. Moreover, this action makes cash and cash equivalents to total assets ratio smaller. It also somewhat is a way to keep money under the control of management rather than return it to shareholders.