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**CASH FLOW MANAGEMENT IN HANOI
HOUSING DEVELOPMENT AND INVESTMENT
JOINT - STOCK COMPANY**

Major : Finance - Banking

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SUMMARY OF DOCTORAL DISSERTATION IN ECONOMICS

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FOREWORD

1. The Urgency of Research

Cash flow management is a very important content in corporate financial management, when businesses want to maximize the owner's asset value, there is no other way to pay attention to cash flow management. An enterprise with poor cash flow management, leading to unstable and declining solvency, high probability of bankruptcy; expenses for financing large payment needs or losses when a high budget surplus reduces profits; thereby forcing the enterprise to change its business plan due to a budget deficit or surplus. Recognizing that importance, financial managers have recently paid more attention to cash flow management. Besides, good cash flow management helps enterprises to mobilize capital to ensure adequate and timely capital for business activities of enterprises and organizations to use capital economically and effectively; help closely monitor and control all aspects of production and business activities of enterprises.

Each business field has its own characteristics in business activities as well as in cash flow management. Hanoi Housing Development and Investment Joint - Stock Company (HANDICO) operates under the model of a parent company - a subsidiary. With the characteristics of an enterprise operating in the field of construction and home development, operating under the model of parent company - subsidiary, many subsidiaries and member companies, HANDICO's cash flow management will have peculiarity, HANDICO has not yet paid adequate attention to this issue. The content of cash flow management has been implemented by HANDICO such as management of receivables and payables, cash flow management, and cash flow forecasting. However, it can be seen that poor cash flow management has led to these companies being forced to change their business plans, such as the construction being delayed due to a lack of payment... In the case of a cash deficit, Subsidiaries need to raise more money. Raising money from outside faces many difficulties while some other subsidiaries have excess cash. The lack of a mechanism to transfer cash flow between subsidiaries and parent company leads to ineffective cash flow management of HANDICO. In addition, there is no dedicated cash flow management department at the parent company. Therefore, many times, HANDICO has difficulty in paying debts and financial obligations, investment projects are delayed in implementation...

Faced with that fact, a series of crucial questions arise: how is HANDICO's cash flow managed? How to manage HANDICO's cash flow? What factors affect HANDICO's cash flow management? How to strengthen HANDICO's cash flow management? These issues need to be resolved to ensure the goal of maximizing

the asset value of the owners, helping HANDICO to develop sustainably in the current volatile and competitive economic environment.

Contributing to meet that practical requirement, the topic: “*Cash flow management at Hanoi Housing Development and Investment Joint - Stock Company*” were selected for the study.

2. Objectives of the study

Based on the researcher's perspective, the study objective of the topic is to propose appropriate solutions to enhance cash flow management at Hanoi Housing Development and Investment Joint - Stock Company. To achieve this study objective, the topic focuses on solving the following study tasks:

- Clarify the theory of cash flow and cash flow management of the enterprise.
- Analyze and evaluate the current situation of cash flow management at Hanoi Housing Development and Investment Joint - Stock Company.
- Propose solutions to enhance cash flow management at Hanoi Housing Development and Investment Joint - Stock Company.

3. Object and scope of the study

3,1. Study subjects

The theory and practice of corporate cash flow management.

3,2. Study scope

- About time: period 2015-2020.
- About space: research at parent company and subsidiaries of Hanoi Housing Development and Investment Joint - Stock Company.

4. Overview of the study

The dissertation will review domestic and foreign research studies according to the following five contents: (1) The role of cash flow management; (2) Contents of cash flow management; (3) Factors affecting cash flow management; (4) Cash flow management model; (5) Impact of cash flow management on enterprises.

It can be seen that basic studies in the world as well as in the country give different approaches to cash flow management as well as assess the impact of cash flow management on businesses. However, there have been no studies assessing the impact of aggregate factors on corporate cash flow management. Therefore, it is necessary to conduct a comprehensive study on the content of cash flow management combining factors affecting cash flow management of enterprises. This suggests for this study in the following direction: (i) the content of cash flow management and building the cash flow management model of the enterprise; (ii) evaluate all factors affecting the cash flow management of the enterprise; (iii) which technique is used for cash flow management.

5. Research questions

1. What is enterprise cash flow management, including what content? What factors affect the cash flow management of the enterprise?
2. What factors affect the cash flow management of the enterprise?
3. What is the current status of HANDICO's cash flow management? What factors affect HANDICO's cash flow management?
4. Does HANDICO use the model in cash flow management?
5. Which cash flow management model and cash flow management apparatus are suitable for HANDICO?

6. Study methods

The dissertation approaches from the following perspectives: i) learn the basic content of cash flow management; (ii) analyze the current situation of cash flow management at the Hanoi Housing Development and Investment Joint - Stock Company; (iii) develop a system of solutions to enhance cash flow management at the Hanoi Housing Development and Investment Joint - Stock Company.

To be able to accomplish the above study tasks, the thesis implements the following study methods:

Approach the study problem

Data system

Methods of processing and analyzing data

7. Scientific and practical significance of the dissertation

The dissertation contributes to systematize the basic theory of cash flow and cash flow management of enterprises; evaluation criteria, factors affecting cash flow management, study the cash flow management experience of domestic enterprises and then draw lessons, propose viewpoints and solutions to strengthen cash flow management at the parent company and subsidiaries of the Hanoi Housing Development and Investment Joint - Stock Company in the coming time.

8. Dissertation Layout

The dissertation is structured into 3 chapters:

Chapter 1: The theory of cash flow and cash flow management of the enterprise.

Chapter 2: Current status of cash flow management at the Hanoi Housing Development and Investment Joint - Stock Company.

Chapter 3: Solutions to strengthen cash flow management at the Hanoi Housing Development and Investment Joint - Stock Company.

Chapter 1

CASH FLOW THEORY AND CASH FLOW MANAGEMENT OF THE ENTERPRISE

1.1. ENTERPRISE AND CASH FLOW OF ENTERPRISE

1.1.1. The enterprise and its financial activities

1.1.1.1. About the enterprise

Currently, theoretically, there are many definitions of an enterprise, depending on the aspect of approach.

- Enterprise is an economic organization that conducts business activities in accordance with the laws of the State. Each type of enterprise, each specific form of enterprise is structured according to the provisions of law.

- Enterprises have legal status, when participating in legal relations, they are independent subjects. At that time, the enterprise has the rights and obligations prescribed by law; The legal person's relationship with the law by the legal representative according to the regulations.

1.1.1.2. Financial activities of the enterprises

Finance can be understood in a general way as the movement of capital between actors in society and the economic relationships arising between subjects in the process of such movement. Activities associated with the movement of capital between entities are called financial activities. Thus, financial activities are activities associated with the movement and movement of capital in which capital can exist in the form of money, intangible or tangible assets.

Financial activities in the enterprise are organized according to the model of parent company - subsidiary company, including capital creation and capital use and after-tax profit distribution.

1.1.2. Cash flow of the enterprises

1.1.2.1. The concept and content of the business's cash flow

Cash flow of a business reflects the movement of money in and out arising from operations during a certain period. (Bui Van Van, Vu Van Ninh, 2013).

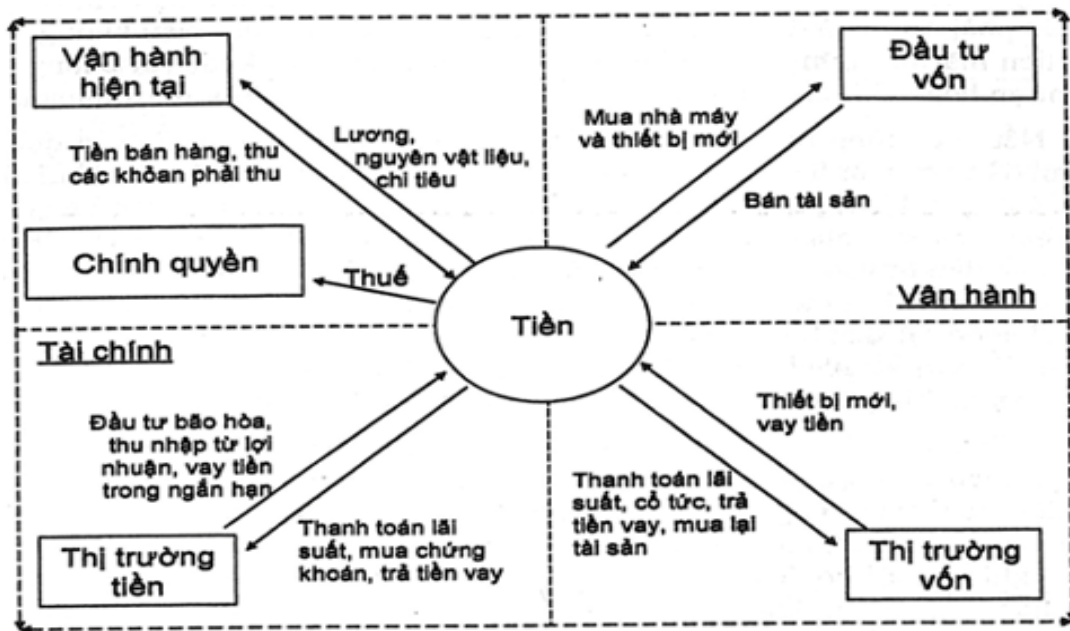


Figure 1.1: Cash flow of the enterprise

1.1.2.2. Cash flow process of the enterprise

The basic operating cash flow process in a enterprise operates on a continuous closed process of the conversion of short-term assets.

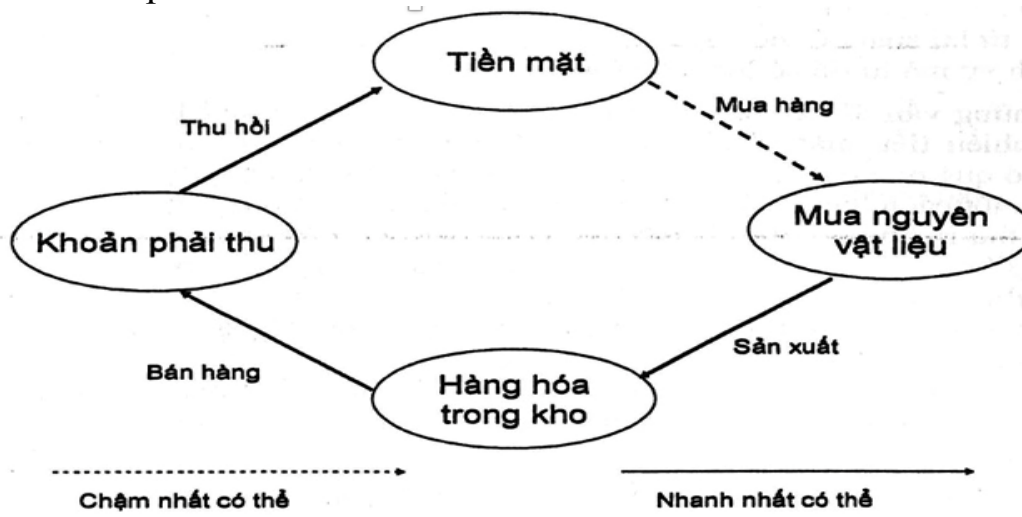


Figure 1.2: Money generation cycle

The amount of cash needed to maintain is not too much, not too little, just enough. How much is enough? There is no formula to determine but the enterprise should note: It is necessary to have enough money to pay bills, interest, service fees; to seize investment opportunities; to have enough money to hedge against possible risks.

1.1.2.3. Cash flow classification of the enterprise

According to the operating criteria, the cash flow of the enterprise includes:

- + Cash flow from business activities:
- + Cash flow from investing activities:

According to the ownership nature of cash flow, the cash flow of the enterprise is divided into:

+ Free Cash Flow to the Firm (FCFF):

+ Free Cash Flow to Equity (FCFE)

1.2. CASH FLOW MANAGEMENT IN THE ENTERPRISE

1.2.1. The concept and objectives of cash flow management in the enterprise

1.2.1.1. The concept of cash flow management

Cash flow management is the selection and decision-making of cash flows. It is making decisions about cash reserves, forecasting cash inflows and outflows, organizing the implementation and adjusting decisions to balance cash flows to maximize the market value of the business, a part of financial management, help enterprises to ensure solvency, ensure that money is collected correctly and fully, thereby increasing profitability.

1.2.1.2. The objectives of cash flow management

The general goal of cash flow management is that enterprises can control their cash so that the cash flow is smooth and balanced, ensuring solvency; improve profitability and thereby maximize the value of the enterprise.

1.2.2. Contents of enterprise cash flow management

1.2.2.1. Determine the optimal level of money reserve

The optimal cash reserve is the optimal amount of money needed to meet the cash expenditure needs of the enterprise.

1.2.2.2. Cash flow planning

Cash flow planning includes short term plans and long term plans. A enterprise's cash flow plan is usually prepared over a short period of time, showing detailed cash flow information. Long-term plans are often more general.

A cash flow plan can be prepared according to the following procedure:

Step 1: Prepare cash flow planning

Step 2: Cash flow forecast

1.2.2.3. Cash flow management and control

According to the cash flow cycle, money changes through the form of inventory, accounts receivable and then back to the form of cash. Therefore, in cash flow management, the enterprise also need to control cash inflow and outflow, including management of receivables, inventory and payables.

1.2.3. Criteria for assessing the situation of cash flow management in the enterprise

The groups of criteria reflect the ability to create money **such as Time to convert vn into money**, criteria reflecting solvency from cash flow, capital structure in cash, time to convert capital in cash, solvency ratio

1.2.4. Impact of cash flow management on enterprise operations

Impact on enterprise risk, enterprise value

1.2.5. Factors affecting cash flow management in enterprises

1.2.5.1. Objective factors

Characteristics of industries, business fields, Interest rates and economic criteria: macroeconomic situation, monetary and financial policies, financial markets and financial intermediaries.

1.2.5.2. Subjective factors

Financial decisions of enterprises: Information asymmetry, scale, development stage in the development life cycle of products and businesses, and corporate governance.

1.3. CASH FLOW MANAGEMENT EXPERIENCE OF SOME BUSINESSES AND LESSONS LEARNED FOR HANDICO

1.3.1. Experience in cash flow management of some enterprise

(1) Experience of Vinaconex:

(2) Experience of ABB Vietnam Co., Ltd.

1.3.2. Lessons learned for HANDICO

Some lessons for HANDICO in cash flow management as follows:

(1) All companies have a department responsible for cash flow management, located in the Finance Department.

(2) Cash flow planning: in order to be able to plan the cash flow of the whole company, it is necessary to have close coordination between departments in the company. The departments in the company send the plan of each department, the Finance department will base on the plan of each department together with the business plan of the company to plan the cash flow for the enterprise. Cash flow plans are made weekly, monthly, quarterly and annually. With such cash flow planning, it will help businesses be proactive in management, meet payment requirements and be profitable.

(3) Cash flow management: cash flow management is done centrally at the assigned department, there is a strict revenue and expenditure management mechanism, all cash receipts and payments are through the fund, fully invoices and vouchers. Cash flow management is closely related to debt collection and inventory management. Especially for a company specializing in construction and real estate, cash flow management is closely tied to debt collection and inventory management.

CONCLUSION OF CHAPTER 1

Chapter 1 has focused on clarifying the theoretical issues of cash flow and cash flow management in the enterprise, generalizing the cash flow of the enterprise. Besides, through the study and review of domestic and foreign researches, the thesis has presented the effects of cash flow management on enterprises and factors affecting cash flow management of enterprises. The dissertation has distilled the experience of several companies in cash flow management and lessons learned for HANDICO.

Chapter 2

THE CURRENT SITUATION OF MANAGEMENT IN THE HANOI HOUSING DEVELOPMENT AND INVESTMENT JOINT - STOCK COMPANY

2.1. OVERVIEW OF THE HANOI HOUSING DEVELOPMENT AND INVESTMENT JOINT - STOCK COMPANY

2.1.1. The establishment and development of the Hanoi Housing Development and Investment Joint - Stock Company

Hanoi Housing Development and Investment Joint - Stock Company is a state-owned enterprise with the organization and operation model as prescribed in Decision No. 90/TTg dated March 7, 1994 of the Prime Minister.

On January 17, 2007, the Hanoi People's Committee issued Decision No. 258/QD-UB on the transformation of Hanoi Housing Development and Investment Joint - Stock Company to operate under the model of Parent company - Subsidiary company. The relationship between the Corporation and its member units has changed from an administrative association with capital allocation and plan assignment to a key long-term financial investment mechanism.

2.1.2. Characteristics of the Corporation's business activities

2.1.2.1. Business fields

Project investment, housing and urban development and investment, construction and installation, design consultancy are the key business areas of HANDICO.

2.1.2.2. HANDICO's organizational model

The Office apparatus and the Departments, the Advisory Board are professional departments, performing the function of advising and assisting the Members' Council and the Board of Directors in various fields.

2.1.2.3. Advantages and disadvantages in the business process of HANDICO in the past time

The Corporation always receives the attention of leadership and direction from central and city agencies, the system of legal documents is quite complete to adjust policies. *However*, the Corporation's operations are affected by certain challenges and difficulties such as: slow recovery of the world economy and many risks; The quality of growth, the competitiveness of the domestic economy is still low, the time for site clearance, and the procedures for preparing investment projects are long, so the commencement and construction of a number of projects have been delayed and behind schedule...

2.1.3. Financial situation of the Hanoi Housing Development and Investment Joint - Stock Company

2.1.3.1. Changes in assets - capital source of the Hanoi Housing Development and Investment Joint - Stock Company

Compared with the size of the companies listed in the list of 40 largest construction enterprises in Vietnam according to the statistics of the Construction Report of the Construction Industry of Bloomberg FPT, TCT has the asset size among the top 10 enterprises. large construction if considering the size of the property.

The Corporation is tending to grow in size from the perspective of total assets and equity, but at the same time, the scale of revenue has tended to shrink in recent years due to the sales cycle in turn of projects that the Corporation implements is not uniform.

- Regarding short-term assets: there is a huge fluctuation in the proportion of items in short-term assets between capital in cash, receivables, and inventory. The Corporation's cash balance and bank deposits account for a large proportion.

-Long-term assets: The assets that contribute the most to the volatility of long-term assets are long-term unfinished assets.

The structure of the Corporation's production and business lines has changed in a positive direction, in line with the set orientation: investment in project development and construction and installation is the main production field and plays a key role; real estate leasing (offices, houses, hotels, industrial parks...) and management and operation after investment has an increasing proportion; production and trading of building materials, stable design consultancy; trading business, services, mining, hydropower, joint venture... although these are new fields, they account for a relatively high proportion, showing the dynamism in the development strategy and expansion of production and business of the company's units.

The Corporation's capital source is balanced between liabilities and equity of the Corporation. Compared to many other construction enterprises, this can be considered as a different and positive Debt and Equity structure for the Corporation. Many construction enterprises in the Vietnamese market have a debt-to-capital ratio of over 80% and the coefficient is increasingly negative over time, the debt ratio is increasing, but the Corporation has a debt ratio of only about 50% and decreasing, clearly showing the initiative of the Corporation in terms of its capital. According to the average statistics of the past 4 years, the ratio of Liabilities/Assets of the construction industry in Vietnam is more than 74%. The gap of 50% to 74% can be said to be quite a distance, enough to see the difference of the Corporation compared to the industry in general.

The Corporation also has a very small fee debt scale and decreases over the years. With a long operating time, real estate project have good location, price and

quality, and a trust in loyal customers and creditors, helping the Corporation to occupy more capital than other companies.

2.1.3.2. Business results of the Hanoi Housing Development and Investment Joint - Stock Company

Table 2.4: Business results of the Corporation

Unit: Million dong

Criteria	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020
DTT	590.871	528.991	1.240.320	672.454	708.900	1.151.939
EBIT	87.700	92.664	96.997	153.713	107.011	122.332
LNTT	80.114	65.738	88.363	86.505	88.971	110.642
LNST	77.457	65.738	81.640	86.505	88.971	110.642

2.1.3.3. Typical financial criteria

+ Group of solvency coefficients: The current solvency at times is always greater than one.

+ Group of capital and asset structure coefficients: debt ratios are higher than equity, mainly in the following items: payables to sellers, short-term financial leases and loans, and buyers' prepayments, short-term payables, loans and long-term finance lease liabilities.

The equity ratio is because the owner's invested capital contributes the most in equity.

+ Group of performance coefficients: Performance criteria mostly fell in 2016 and 2018. The efficiency of using fixed capital and other long-term capital is also low, which is because long-term unfinished assets (mainly due to construction in progress) account for a very large proportion, these are all works in progress. construction has not been completed, not yet handed over, leading to stagnant capital and reducing the efficiency of capital use of the Corporation.

+ Group of performance coefficients: The decline in profit after tax in 2016 was the cause of the decline in 2016 performance criteria. The Corporation has increased capital mobilization and increased investment in assets, but the efficiency of asset use is not really effective, so it will lead to low performance of the Corporation, especially in 2016 and 2018. when net revenue decreased, the turnover ratios of capital decreased, while interest on business loans increased sharply.

2.2. THE CURRENT SITUATION OF CASH FLOW AT HANOI HOUSING DEVELOPMENT AND INVESTMENT JOINT - STOCK COMPANY

2.2.1. Structure and movement of free cash flow of operations

Free cash flow from operating activities fluctuated and decreased in 2017 and 2019, especially in 2017 this indicator was negative at -76,442 million dong, resulting in a decrease of 1,517,692 million dong compared to 2016

Free cash flows from investing activities: The Corporation spends on procurement and investment in fixed assets and long-term assets, external investments such as capital contribution to other units, this indicator is positive in 2017, the remaining years are negative.

Free cash flows from financial activities: This indicator is negative in 2016 and 2019 and positive in the remaining years. The Corporation's financial activities are only related to short-term and long-term borrowing activities; principal repayment activities. Therefore, the negative net cash flow from financing activities is because the principal amount payable during the year is greater than the amount of short-term and long-term borrowings during the year.

Cash and cash equivalents at the beginning of the period increased at the rate of 248.4% each year; 7.5%; 7.5%; 61%. Cash and cash equivalents at the end of the period also fluctuated in an upward direction in the period 2015 - 2018, but decreased in 2019, the decrease was caused by the decrease in net cash flow in the period of 2019 and the cash flow of negative investment and financial activities.

2.2.2. Current status of free cash flow from business activities

The Corporation prepares Statements of cash flows by indirect method. Therefore, cash inflows and outflows from business activities are calculated by adjusting profit before tax T (which is depreciation of fixed assets; provisions; unrealized profit and loss on exchange rate differences); changes during the period in inventories, receivables and payables from operating activities and amounts for which the cash effect is cash flows from investing activities. The adjusted cash flow from operating activities continued with changes in working capital, long-term prepaid expenses and other revenues and expenses from operating activities.

2.2.3. Current status of free cash flow from investing activities

The Corporation has investment activities in subsidiaries including: 3 subsidiaries are hanoi construction consultant and urban development investment joint stock company (benefit rate is 51%); hanoi real estate service company limited (benefit rate is 100%); hanoi housing development and investment number 68 joint stock company (benefit rate is 65%).

Investment in joint venture (2 companies) including: West Lake Development Company Limited; Vietnam Stanley Electric Co., Ltd., the Corporation's interest rate in these two companies is 30%.

Invest in affiliates such as: Hanoi Housing Development and Investment JSC No. 22; Hong Ha Construction Investment And Urban Development Joint Stock Company; Investment, construction, trade and service joint stock company... and the Corporation have the benefit rate in the range from 22% to 49.38%. The free cash flow from investment activities is that the largest revenue in this indicator is dividends and distributed profits.

Expenses for purchase and construction of fixed assets and other current

assets, money spent in the implementation phase that have been capitalized into intangible fixed assets, money spent on construction in progress, real estate investment in the reporting period, the Corporation tends to reduce investment in fixed assets and collect profits from investments in subsidiaries, thus making the free cash flow from investment activities of the Corporation positive.

2.2.4. Current status of free cash flow from financial activities

Cash flows from financial activities arising from loans from banks and credit institutions are secured by mortgage contracts at the Bank and have been registered for fully secured transactions to raise real capital for project. Free cash flow from financial activities tends to decrease investment activities, projects are also completed and handed over to customers, therefore, the Corporation has reduced debt, mainly paying loan principal.

2.2.5. Current status of cash flow by ownership

Free Cash Flow to Equity (FCFE)

The Corporation's free cash flow is the cash flow generated from business activities belonging to investors, including creditors and owners, after deducting necessary investments (investment in fixed assets) and regular working capital) for future operations

The period 2015-2016 $FCFF < 0$ indicates that the operating cash flow generated was not enough to finance the need for new investment in fixed assets and net working capital increase. At that time, this deficit will need to be financed by mobilizing new capital sources or will have to adjust the capital investment policy of the Corporation in the direction of reducing investment needs. This is quite evident in the following years when the Corporation reduces the investment scale in working capital.

In 2017 - 2019, $FCFF > 0$ shows that the generated cash flow has satisfied investment needs and is still redundant. The reason for $FCFF > 0$ is the increase in profit before interest and after tax, and the decrease in working capital in the period 2017 - 2019. However, by 2020, due to the epidemic, a number of projects will be interrupted in construction, capital cannot be turned around, stagnation, the need for investment in working capital increases, thus making the FCFE flow negative.

Free Cash Flow to Equity (FCFE)

Free cash flow to equity is the cash flow for the period owned by shareholders after taking into account the cost of capital for the asset investment and principal repayment.

$FCFE = NI + \text{Depreciation} + \text{New loan amount} - (\text{new investment in fixed assets} + \text{change of working capital} + \text{repayment of principal}).$

$FCFE < 0$ excluding in 2017, that is, there is no cash flow for shareholders, so the shortfall in cash will not pay dividends on the one hand, and on the other

hand more capital will have been raised from other sources or the Corporation will have to adjust debt policy and investment policy.

The increase in after-tax profit in the period 2017 - 2019 is due to the completion and handover of construction works to customers, the Corporation's profit is mainly derived from real estate business and profit from financial activities, while construction and installation activities are insignificant or suffer a loss.

2.3. CURRENT STATUS OF CASH FLOW MANAGEMENT AT THE HANOI HOUSING DEVELOPMENT AND INVESTMENT JOINT - STOCK COMPANY

2.3.1. Actual situation of the organizational structure of the cash flow management apparatus of the Corporation

The Corporation does not have a separate department to manage cash flow, and there is no mechanism to transfer cash flow between subsidiaries and parent company when one of the subsidiaries has cash flow difficulties while others are abundant in cash flow.

2.3.2. Current status of cash flow management at the Hanoi Housing Development and Investment Joint - Stock Company

2.3.2.1. Current status of establishing the optimal level of reserve money

The determination of the current optimal level of reserves in the parent company, as well as in its subsidiaries, is based on empirical statistics, without using any scientific method in determining the optimal reserve level. The factor of management experience has a great impact on the cash balance. Cash balance is stored in two basic forms: cash at the company's safe and demand deposit at commercial banks. With the characteristics of real estate leasing and construction enterprise, the amount of cash is quite large, so non-cash payment activities through commercial banks often take place.

2.3.2.2. Current status of cash flow planning of HANDICO

The collection of cash flow information over the years is done quite well. Currently, all companies use accounting software to manage, so getting the company's historical data is relatively convenient and easy. In addition to information inside the enterprise, external information such as information on operating industries, factors belonging to input and output markets, financial markets, etc., serves for flow planning. Currently, the Corporation has not performed well

Cash flow planning for the Corporation's projects also revealed a number of shortcomings, the contents must be adjusted including investment costs; investment plan, depreciation expense. Regarding investment costs, the original plan did not follow the approved construction and equipment costs, so it had to be updated according to the signed contract and approved estimate. Regarding the

investment plan, we had to update the interest expenses and principal repayments according to actual data. Regarding the depreciation expense, the plan had to adjust the starting time of depreciation calculation in accordance with the actual construction progress, redefine the depreciation calculation time for each work item according to the regulations of the Ministry of Finance. The project's cash flow deviates greatly from the original plan.

The work of running cash flow is not focused, leading to the situation that HANDICO occasionally has excess money but there are times serious shortage of money happened, affecting HANDICO's solvency as well as making the money not yet fully profitable.

2.3.3. The actual status of building a mechanism for revenue and expenditure management and cash flow control

The dissertation examines each stage in the whole process of money circulation, HANDICO is applying a centralized payment system, all receipts or disbursements regardless of size will be made through the company's account. Receivables and payables are strictly controlled by the supplier's payment term as well as the due date of the output invoice. All businesses want to reduce the circulation time of money. The stages in the money circulation include accounts receivables, inventory, and payables.

2.4. CRITERIA FOR ASSESSING THE SITUATION OF CASH FLOW MANAGEMENT AT THE HANOI HOUSING DEVELOPMENT AND INVESTMENT JOINT - STOCK COMPANY

2.4.1. Criteria of time to convert to money

2.4.2. Criteria for assessing the cash flow situation of the Hanoi Housing Development and Investment Joint - Stock Company

2.5. EVALUATE THE CURRENT STATUS OF CASH FLOW MANAGEMENT OF HANDICO

2.5.1. Achievements

Firstly, the Corporation's business activities achieved many positive results compared to the plan set out by Hanoi City assigned to the Corporation.

Secondly, although cash flow management has not been paid much attention by HANDICO, HANDICO's enterprises have implemented some contents of cash flow management and implemented cash flow control such as management of receivables, goods and services. inventories, accounts payable, provision for bad debts, provision for devaluation of inventories.

Third, free cash flow in the period was continuously positive in the period 2015 - 2018. This is mainly due to the positive net cash flow from operating activities (except for 2017). On the other hand, financial investment activities at the Corporation bring significant profits every year, creating an important source of income for the Corporation.

Fourth, in project investment and development activities (accounting for 47.5% of the total value of production and business activities), the unit has dozens of projects throughout the city that have been put into operation, use. The management, preservation and development of state capital in member units and cash flow management are still relatively well done.

Fifth, post-investment operation management as well as cash flow management after implementation.

Sixth, the average time to convert into cash in the period 2015 - 2020 fluctuates in a decreasing direction, which shows that the Corporation has a short time to convert into cash, increasing capital occupation and reducing occupied capital.

Seventh, the Corporation applied a number of measures to control the cash conversion rate, manage receivables, manage capital in cash, and manage fixed assets. When the project is finished, it is also interested in organizing and implementing.

Eighth, although a reasonable amount of money reserve has not been determined, HANDICO enterprises have taken measures to deal with temporary excess or shortage of money.

2.5.2. Limitations and causes

2.5.2.1. Limitations in cash flow management of the Corporation

Firstly, the cash flow management criteria have all fluctuated and decreased in the past period, which shows that this time cash flow management situation is not really effective, both the coefficient of cash generation from business activities, ensure loan interest payment and debt payment coverage ratio are reduced, money conversion time is long. Short-term debt volatility increased, while cash flow from business activities decreased, free cash flow from business activities was negative and low in some years, thereby greatly affecting repayment of loan principal and interest.

Besides, the free cash flow to the firm and free cash flow to equity are not enough to carry out operations.

Second, companies under HANDICO have not yet focused on cash flow planning.

Third, HANDICO has not applied a model in determining suitable cash reserves. In practice, maintaining cash reserves is still being done empirically, so it is not appropriate.

Fourthly, in terms of receivables management, the Corporation has only applied some basic measures, which affects the efficiency of using working capital and the cash flow situation of the Corporation.

Fifth, about inventory management: inventory accounts for a large proportion of short-term assets, but HANDICO has not built an inventory management model suitable to the characteristics of its business.

Sixth, in terms of debt management, HANDICO has not yet built a payables management process to take advantage of the capital that is appropriated during times when the Corporation faces difficulties in cash flow.

2.5.2.2. The causes of the limitations

Objective causes

First, the volatility of the real estate market.

Second, the volatility of interest rates.

Third, the volatility of the economy

Fourth, products and services from financial markets and financial institutions are still limited

Fifth, debt management support services have not yet developed

Subjective causes

First, choose a non-synchronous cash flow management technique

Second, the ability to forecast cash flows is limited.

Third, the capacity to implement projects is still limited

Fourth, the role of the management department and the cash flow manager

HANDICO does not have a separate department in charge of cash flow management and has not been able to separate the roles of chief accountant and chief financial officer. The lack of separation and no direct management of cash flow will affect money creation in business activities, handling of situations when there is a money excess or shortage and the establishment of relationships with financial institutions.

Fifth, HANDICO is not really interested in financial policies in general, cash flow management in particular

Sixth, HANDICO has not used banking products and services and technical tools to support cash flow management.

CONCLUSION OF CHAPTER 2

Chapter 2 gave an overview of the Hanoi Housing Development and Investment Joint - Stock Company during the research period. Based on surveys and interviews, chapter 2 analyzed the current situation of cash flow and cash flow management of HANDICO in recent years. The biggest limitation of HANDICO in cash flow management is that it has not really paid attention to cash flow forecasting and planning, has not had a process in cash flow planning, has not really focused on and applied any model in determining the optimal amount of cash. The need for funds has not been determined suitable for the business of HANDICO. This will be the practical basis for the dissertation to propose solutions in chapter 3.

Chapter 3

SOLUTIONS TO STRENGTHEN CASH FLOW MANAGEMENT AT THE HANOI HOUSING DEVELOPMENT AND INVESTMENT JOINT - STOCK COMPANY

3.1. SOCIAL ECONOMIC BACKGROUND, DEVELOPMENT ORIENTATION OF HANOI HOUSING DEVELOPMENT AND INVESTMENT JOINT - STOCK COMPANY IN THE NEXT PERIOD

3.1.1. Social economic background

The situation in the world and in the region continues to be complicated and unpredictable, but peace, national independence, cooperation and development are still the big trends. The Covid-19 pandemic is currently the biggest threat to the world economy since the 2008 global financial crisis, seriously affecting the supply, demand and trade of goods and services around the world. Determined to strive by 2025, Hanoi city basically fulfills the criteria of industrialization - modernization; by 2030, to become a fully industrialized - modernized city; by 2045, becoming a developed city, towards civilization and modernity; is one of the leading localities and finishes early, contributing to the successful implementation of the goals set out by the 13th National Party Congress.

3.1.2. Development orientation of Hanoi Housing Development and Investment Joint - Stock Company in the next period

3.1.2.1. Forecast of the situation of Hanoi Housing Development and Investment Joint - Stock Company

The Corporation still maintains certain favorable factors. With the equitization of the parent company - the State-owned Corporation holds the dominant position from over 50% to less than 65% of the charter capital, the Corporation will continue to maintain stability in the roadmap for reorganizing the enterprise; innovation of management and administration mechanism, organization of production and business activities is not too sudden. Over the years, the Corporation has maintained a good connection between the activities and the internal market of the Corporation with its member units and among members; the staff and party members are united and dedicated to the cause, building and developing the Corporation more and more stably and sustainably.

3.1.2.2. The Corporation's development goals and orientation in the next period

- Continue to improve leadership capacity; building strong and excellent socio-political organizations; complete the equitization of the parent company - the corporation under the direction of the Government and the Hanoi People's Committee; promote production and business development in a sustainable way, develop brand values and corporate culture; improve the material and spiritual life of employees; continues to be one of the leading Corporations of the Capital.

- Continue to maintain investment in project development as the main field, increase the proportion of real estate products for rent, construction and installation contractors; focus on improving management and operation capacity after investment; application of advanced and modern construction technology in order to speed up the progress, reduce costs, and improve the competitiveness of products; effective application of information technology, especially 4.0 technology in management, administration and product sales

Building, fostering and improving the quality of human resources to meet the requirements of the new period.

- Orientation to develop multi-sector and multi-professional business activities with key products of investment in housing and urban development business, prioritizing the development and creation of a real estate fund for rent. Continue to review the effectiveness of projects; interested in implementing investment projects with advantages; finding and developing new projects and effectively exploiting current resources, ensuring concentrated investment, avoiding spreading; preserve and develop state capital.

3.2. OPINIONS IN PROPOSING SOLUTIONS TO INCREASE CASH FLOW MANAGEMENT AT HANDICO

First, manage cash flow on the basis of compliance with the policies, regimes and laws of the State and the development policies of the Corporation.

Second, cash flow management must be in sync with corporate financial management goals.

Third, cash flow management must be economical, efficient and feasible.

3.3. SOLUTIONS TO STRENGTHEN CASH FLOW MANAGEMENT AT THE HANOI HOUSING DEVELOPMENT AND INVESTMENT JOINT - STOCK COMPANY

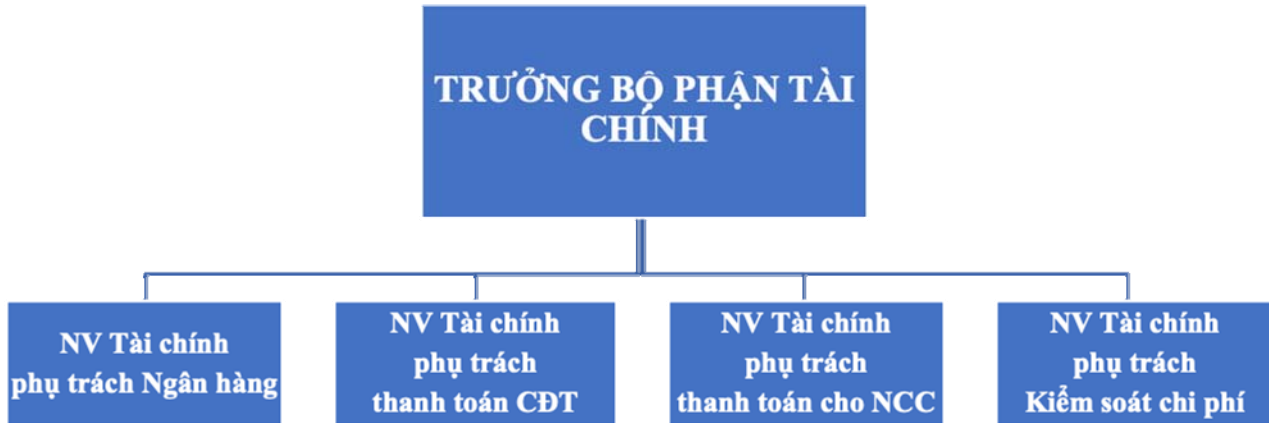
3.3.1. Building a cash flow management department for the Corporation

3.3.1.1. Functions and duties of the Finance department for the financial activities of the Corporation

There should be a finance department at the parent company and subsidiaries. The organizational structure of the financial management department at the parent company can be organized as shown in Figure 3.1, including the financial planning department, the capital management department, and the capital efficiency evaluation department. At a subsidiary, the financial management department depends on the size of the enterprise to build accordingly.

Building a separate financial management department at the parent company and subsidiaries. The number of staff in the financial management department will be based on the department's job duties. The Corporation needs to develop a table describing the position of each specific job. With a description the position of each specific job, it will help the management of the Corporation to be more effective.

3.3.1.2. Organizational structure of the finance department



It is necessary to build a separate financial management department at the parent company and subsidiaries. The number of staff in the financial management department will be based on the department's job duties. The Corporation needs to develop a table describing the position of each specific job. With a description the position of each specific job, it will help the management of the Corporation to be more effective by with job descriptions for each position.

3.3.2. Cash flow planning solutions

To be able to plan cash flow accurately, it is necessary to have the coordination of all departments in the company, the provision of information and timely reports from all departments of financial management department, general cash flow planning is very important.

When planning cash flow, the company should follow the principle:

- + Priority order of payments: depending on the financial situation at each time, the finance department establishes the order of payments.
- + Prioritize payment of salaries, worker subcontractors, banks, suppliers that cannot be delayed, other suppliers.
- + The finance department coordinates with the Materials Department, the project and project management committees to arrange the payment time for payments worth over 1 billion dong.

The planning and implementation of the cash flow plan includes: (i) cash flow planning; (ii) bank loan plan and follow up bank repayment; (iii) cost control; (iv) control the receipt process for each payment request; (v) follow up payments from the investor.

3.3.3. Determine the right cash reserves and perfect the appropriate fund management mechanism

3.3.3.1. Determine the right cash reserves

Applying the continuous cash flow management model including the Miller-Orr cash flow management model and the Stone cash flow management model. This model allows the Corporation to determine that the cash balance fluctuates

within a range, not a fixed one. This is consistent with the Corporation's activities in the field of construction, the cash flow is always fluctuating, different from the stable production and business activities. In addition, this model also allows the Corporation to determine the increase or decrease in cash balance, thereby allowing the Corporation to know when to add cash after reducing a certain amount of cash.

3.3.3.2. Complete the fund management mechanism

Complete the mechanism of treasury management in the financial management mechanism of the Corporation: Each enterprise has its own financial management mechanism to match the production and business characteristics of the enterprise. In the financial regulations of the Corporation, although there are regulations on treasury management, the regulations on financial management of the Corporation need to supplement provisions on treasury management such as content, methods and responsibilities of the implementer to create a favorable environment in the future

3.3.4. Debt management solutions

3.3.4.1. Develop the trade credit policy

The Corporation must consider the opportunity cost of using money during the credit period of the policy, implement a credit policy that causes receivables to appear, and the Corporation must arrange personnel to monitor the receivables collection to ensure the debt is paid

3.3.4.2. Analyze customer financial reputation

(1) *Check customer information:* Transparency about customers is paramount, so before deciding whether to implement a trade credit policy for customers, it is necessary to find out information about customers and perform credit checks based on reliable information. Collecting customer information but not analyzing the customer's financial situation, so it is necessary to take some measures such as meeting with customers, relationships between customers and banks: will prove the financial ability of customers in securing debts with banks, analyzing financial statements of customers: Corporations may consider using the bankruptcy risk factor Z-Score in the customer's bankruptcy risk analysis to review the client's current financial situation.

In addition, the Corporation may consider other factors such as: Customer's business location, customer's production and business process so far, etc. to serve for customer credit checking.

(2) *After-sales activities*

(3) *Credit insurance: Participating in credit insurance helps protect the Corporation from the impact of bad debts whether customers pay or do not pay.*

3.3.4.3. Debt management and collection

The Corporation needs to strengthen the inspection of regular transaction relationships with large receivable balances. The Corporation must clearly understand the list of receivables and have a clear debt collection plan, not to incur bad debts, and set a schedule in debt collection.

3.3.4.4. Completing regulations and means of supporting the Corporation's receivables management

Firstly, it is necessary to develop a Regulation on management of receivables in the Corporation to ensure compliance with payment discipline.

Secondly, application of information technology in management of receivables and debtors.

3.3.5. Debt management solutions

Firstly, regularly classify debts to have a suitable repayment plan.

Secondly, develop a suitable repayment plan

Thirdly, implement financial disclosure to prevent recurrence of overdue debt.

3.3.6. Inventory management solutions

Apply the right inventory management model, maintain a low inventory. Apply a “pull” system. Improve product quality.

3.3.7. Other solutions

3.3.7.1. Human resource solutions in the Corporation

Build and perfect a team of staff specialized in cash flow management. Accordingly, each specialized officer must have a solid foundation of specialized knowledge in finance in general and cash flow management in particular. Complete the internal control system, financial accounting apparatus, and management accounting in the enterprise, contributing to providing complete, accurate and timely financial and accounting information to help improve the quality of information sources. input for cash flow management in the enterprise. In addition, it is necessary to closely and synchronously coordinate with the above departments and the cash flow department to improve the quality and effectiveness of cash flow management.

3.3.7.2. Use banking products and services

Products and services such as automatic capital transfer service, superior revenue management package... Bank's automatic capital transfer service provides businesses with the service of automatically transferring money between payment accounts. of enterprises and other entities opened at a bank according to the credit statement of the account, according to the limit or percentage on the basis of the account balance, with a flexible transfer frequency. This product helps the parent company to accurately update the financial situation of the whole system, save management costs, collect data, and support the parent company to implement a centralized financial management policy

3.3.7.3. Increasing the use of management software in cash flow management

HANDICO needs to choose and build appropriate management software, combining the cash flow management and other parts of the accounting software. Upgrade accounting software by adding a module to track cash flow including receivables, payables, cash. The addition of a cash flow management module will help HANDICO monitor cash flow more frequently and effectively. This software helps businesses get regular reports on cash flow, based on which, managers can analyze and evaluate fluctuations between cash inflows and outflows, and at the same time make recommendations. suitable solutions to enhance the recovery of cash inflows and delay possible cash outflows.

3.4. REQUESTS

3.4.1. About the State

Firstly, complete the legal system related to business activities: Continue to perfect the legal system in a synchronous manner to be in line with international laws and practices: In order to create favorable conditions for business activities of enterprises and at the same time minimize the damage caused by risks, the promulgation and completion of legal documents is essential. The National Assembly needs to review, amend and supplement in a timely manner to keep pace with changes in the economy in the process of promulgating laws from drafting, discussing to widely promulgating.

Secondly, create a favorable business environment for enterprises: The stability of the macro-economy directly affects all actors in the economy, including enterprises. At that time, the capital mobilization and capital investment activities of enterprises take place more smoothly, contributing to increasing profits for enterprises and increasing the value of enterprises in the market.

Thirdly, improve the infrastructure of the economic information system: The State needs to take measures to improve the economic information system, regulate accounting and auditing policies in line with international standards, and improve transparency in information provision, especially financial position of the enterprise

Fourthly, debt management support services: It is necessary to create a legal corridor and favorable conditions for debt trading companies to form and operate, to help businesses handle backlog and clear cash flow.

3.4.2. About the Bank

For interest rate policy: Interest rate policy and exchange rate policy have a close relationship and have a direct impact on the activities of enterprises in general and the Corporation in particular. In recent years, the State Bank, with its

efforts to regulate interest rate policy in association with macro fluctuations of the market, has had a good impact on the operation of the economy. In addition, the State Bank has coordinated between operating interest rate and exchange rate policies towards ensuring the benefits of holding the domestic currency.

CONCLUSION OF CHAPTER 3

From the theoretical basis and current situation of cash flow management of the Hanoi Housing Development and Investment Joint - Stock Company, the dissertation has proposed a system of solutions to enhance HANDICO's cash flow management. The solutions given from the enterprise's cash flow foundation must be managed at all stages in the cash flow movement at the enterprise. The author has proposed 7 groups of solutions including: building a cash flow management system, cash flow planning, cash reserve determination, treasury management, receivable management, inventory management, inventory, debt management and other complementary solutions. These solutions are general and have certain principles. At the same time for the solutions to be effectively implemented, the author has proposed a few recommendations for the State and the bank.

CONCLUSIONS

The view "Money is king" is always the right opinion in all times. Cash availability determines the financial ability of the enterprise. Cash is the lifeblood of a enterprise's financial body. Even if the business has set lofty goals, the role of money in the process of achieving that goal cannot be ignored. The fact that enterprises strive to increase revenue, profit, increase dividends... but if the business lacks money or mobilizes money is not rhythmic, other measures for determining the efficiency of the business seem to be no longer reality, but only illusory measures. Thus, it can be seen that cash flow management is important in the operation of enterprise. Cash flow management helps businesses to plan, control and analyze cash flows to make appropriate cash handling decisions under the actual operating conditions of the business.

The dissertation "*Cash flow management in the Hanoi Housing Development and Investment Joint - Stock Company*" has accomplished the following contents:

Firstly, the dissertation has presented an overview of theoretical issues on cash flow and cash flow management of enterprises, including: concept, objectives, content, criteria for assessing cash flow management, factors affecting cash flow management and the impact of cash flow management on business operations.

Secondly, the dissertation presented a general overview of the Hanoi Housing Development and Investment Joint - Stock Company, and analyzed the current cash flow and cash flow management of HANDICO in the period 2015-2020; thereby showing the advantages, shortcomings and causes of in cash flow management of HANDICO during the research period.

Thirdly, on the basis of socio-economic context and development orientation of HANDICO, the dissertation has proposed cash flow management perspectives and proposed 7 groups of solutions to strengthen cash flow management at the Hanoi Housing Development and Investment Joint - Stock Company in the coming time. At the same time, the dissertation has proposed some recommendations to implement solutions. In the proposed solution system, research applied for the cash flow management situation at the parent company as a practical illustration of the solutions.

Regarding research methods: the thesis has collected data from two primary and secondary sources. Primary source through surveys and interviews with financial and accounting experts. Secondary source through financial statements of companies under HANDICO. The author used a combination of qualitative research methods and case studies to analyze and evaluate the current situation as well as propose solutions to clarify the contents of the dissertation. The qualitative research method is expressed through statistics and analysis of primary and secondary data, interviews and surveys. The case method illustrates the current state of cash flow management and proposes cash flow management solutions.

Study limits:

In this study, the author has not quantified the objective factors affecting the cash flow management content of HANDICO. This is a suggestive issue for further studies. The scope of study is limited to cash flow management at the Hanoi Housing Development and Investment Joint - Stock Company, so it can be extended to businesses in the construction sector.

The author has tried to research, synthesize, analyze and evaluate the current situation of cash flow management of HANDICO, by applying appropriate research methods to make recommendations to enhance cash flow management for HANDICO in the future, however, the thesis cannot avoid shortcomings. The author of the dissertation would like to receive valuable comments from scientists and interested readers about the thesis so that the author can supplement and improve.

Thank you very much!

**LIST OF PUBLISHED STUDY OF THE AUTHOR
RELATED TO THE DISSERTATION**

1. Nguyen Thi Hai Yen (2021), "Tăng cường quản trị dòng tiền trong các tập đoàn: Minh chứng tại Tổng công ty Đầu tư và Phát triển nhà Hà Nội" (Strengthening cash flow management in corporations: Evidence at Hanoi Housing Development and Investment Corporation), *Journal of Accounting & Auditing*, (212).
2. Nguyen Thi Hai Yen (2021), "Corporate cash flow planning - Research at Hanoi Housing Development and Investment Corporation", *Finance*, Vol. 4, Issue 2.