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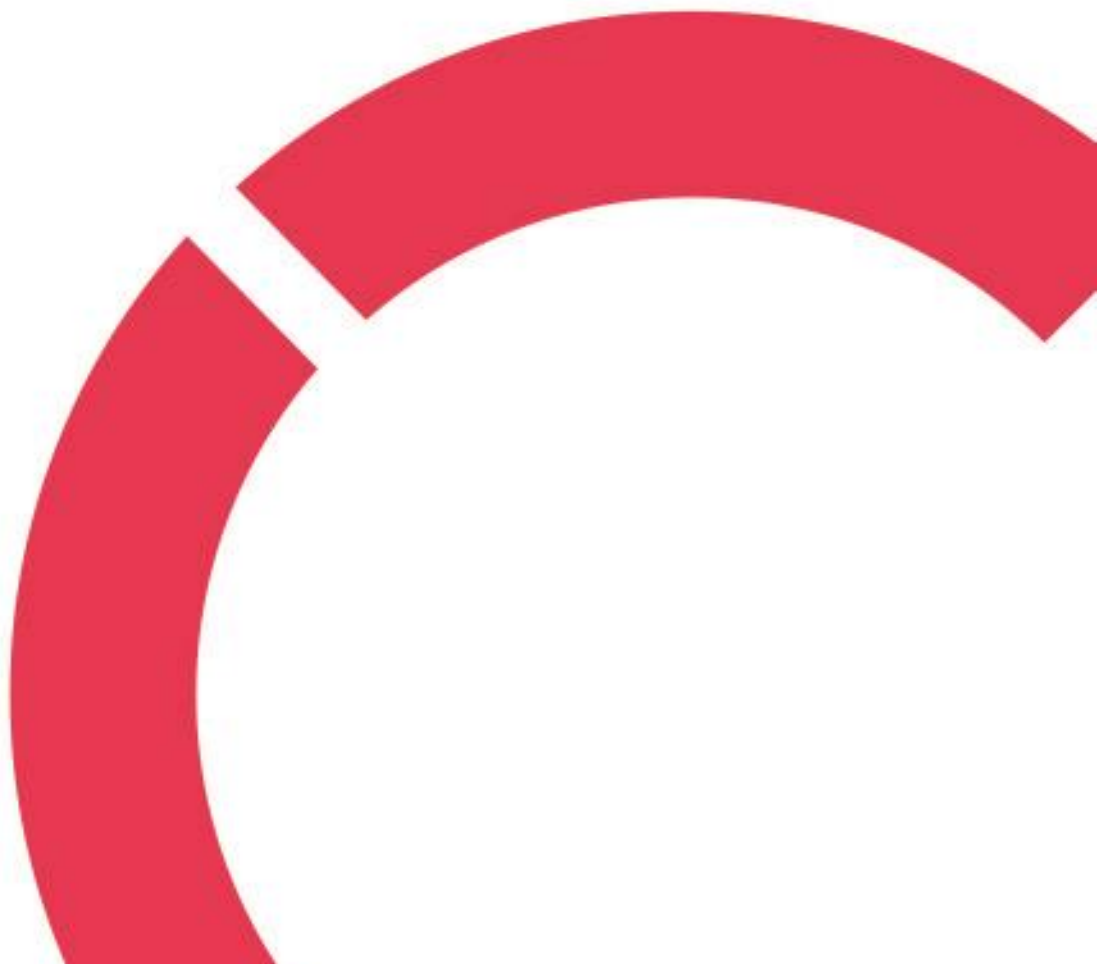
FINANCIAL CONTROL PROCESSES

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ABSTRACT

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<p>The goal of the research was to provide an extensive understanding of financial control and the different stages of financial control processes to readers. The central emphasis was on explaining the functioning of the financial control process and how the process is significant in guaranteeing the precision and trustworthiness of financial information. The thesis explored essential ideas, methodologies, and instruments utilized in financial control, providing readers with the understanding necessary to manage financial control procedures proficiently and effectively.</p> <p>The thesis is divided into two main points - financial control theory and financial control processes. Financial control theory covers the definition, types, objectives, and tools of financial control. The second main point, financial control processes, involves several stages, including detecting financial statement fraud, correcting deviations, assessing financial performance, forecasting financial statements, and valuing the firm.</p> <p>The knowledge and insights gained from this thesis on financial control theory and processes might be helpful to researchers in the field of financial management.</p>		

<p>Key words</p> <p>Financial control, financial ratios, financial statements, forecasting, fraud, valuation</p>

ABSTRACT

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1 INTRODUCTION

In today's complex and ever-changing business environment, financial control is an essential process that helps organizations to maintain their financial integrity and achieve their goals. Effective financial control processes enable companies to detect and prevent financial statement fraud, correct deviations, assess financial performance, forecast financial statements, and ultimately determine the value of their operations.

The thesis aims to provide a comprehensive overview of financial control and various stages of financial control, with a focus on how the process works and the importance in ensuring the accuracy and reliability of financial information. By examining the key concepts, techniques, and tools used in financial control, this thesis will equip readers with the knowledge needed to manage financial control processes effectively and efficiently.

The thesis includes two main points which are financial control theory and financial control processes. The first main point of this thesis is financial control theory, which encompasses the definition, types, objectives, and tools of financial control. The definition of financial control refers to the process of regulating financial activities to achieve organizational goals.

The second main point of this thesis is financial control processes, which involve a series of stages aimed at detecting financial statement fraud, correcting deviations, assessing financial performance, forecasting financial statements, and valuing the firm. Each stage is crucial in ensuring the effectiveness and efficiency of financial control processes. Detecting financial statement fraud helps in preventing financial misstatements, while correction of deviations involves identifying and rectifying financial errors. Financial performance assessment is necessary to evaluate the financial health of a company and forecast future financial statements. Finally, firm valuation is essential to determine the worth of a company, which helps in decision-making processes.

Overall, this thesis provides a comprehensive understanding of financial control theory and processes, which will be valuable to both researchers and practitioners in the field of financial management.

2 FINANCIAL CONTROL

The first chapter introduces readers to an overview of financial control which is the fundamental knowledge to understand the financial control processes.

2.1 Definition

Financial control is a function of financial management that organizations utilize to manage, direct, and allocate financial resources efficiently and ensure the operation functions smoothly (Webster 2000). The concept of financial control is additionally considered as a method for detecting and preventing any fraud that may appear in financial documents to secure assets in an organization (Warikiba, Ngahu & Wagoki 2014, 105 - 106). Besides, according to Nzabagerageza (2017), financial controls are accurate and reliable sources for the business to track the financial situation, evaluate the investment decision and regulate miscalculations to ensure a positive outcome. Furthermore, financial control concentrates on how well the organization has performed and will perform based on financial data. From that, the manager will detect the mistake's signals to enhance financial performance and make better decisions (Yogendrarajah 2011, 2).

Traditionally, financial control components include budget analysis, financial ratios, and financial statements. Based on financial statements and financial ratios, the manager uses those indicators to control the efficiency and profitability of using financial resources. Regarding financial resource allocations, a budget is an element of financial control that allows financial controllers to direct the resources in reasonable work activities. Therefore, budget analysis plays a role as a monitor for any inaccurate allocations (Yogendrarajah 2011, 2).

In modern organizations, financial control becomes significant in redefining goals, operating standards and financial policies and making decisions relying on financial data and forecasting. Financial control requires employees to follow the standards and regulations to achieve the organization's goals and help the administration become more effective and efficient. Therefore, in management, control is the means of the actual performance in the administrative operation and exam of the management object in the real scenarios (Osadchy & Akhmetshin 2015, 391 - 392).

2.2 Types of financial control

Generally, financial control is classified into three categories: intermediate, selective, and postdate. In intermediate financial control, the financial controller deals with the general financial situation and handles the arising issues immediately. Besides, selective financial control concentrates on a specific area in an organization and examines the adherence to working processes. On the other hand, postdate financial control is a method that organizations utilize to assess the business based on past activities. The manager uses this kind of control to make a comparison between the organization's objectives and actual performances, thereby, founding the anomalies and wrongdoings to help the organization make the appropriate adjustment and plan for future activities (Captio, 2015).

2.3 Objectives and purposes

The objectives of financial control can be described in four main words: regulating, preventive, informative, and motivational (Osadchy & Akhmetshin 2010, 392).

In the sense of regulating, valuable allocations are critical and essential for decreasing unexpected expenses and streamlining the processes for increasing profits. Therefore, allocation, distribution, and management of financial resources must adhere to the organizational standards, policies, and procedures to preserve prodigality and ensure the company's performance is on the right track (Wallstreetmojo Team 2022).

Preventive represents the minimization of all the deviations that may present in financial transactions, financial statements, and budgets. Anomalies may cause the wrong decision in investments or operations, losing the opportunities to achieve goals and the position between a business and competitors. Therefore, detecting, auditing, and preventing anomalies in financial data must be updated promptly. (Captio 2015.)

In connection with the concept of informative, financial control provides the accuracy and current financial documents and financial information for analyses, decision-making, standards' establishment, and effective administrative conduction. Additionally, financial control is responsible for financial accountability, auditing financial documents, and correcting any irregularities punctually. (Warikiba, Ngahu & Wagoki 2014, 105-108.)

Regarding the term motivational, profitability and productivity are considered an objective of a business for surviving and growing. The system of financial control allows the company to follow on business activities to boost profitability. Furthermore, the managers can use the company's standards and policies to motivate employees to obey organizational policies and follow the improvement processes (Wallstreetmojo Team 2022).

2.4 Fundamental evidence

The control system of financial control plays a key role in tracking the well-being of an organization by analyzing and monitoring financial data. Balance sheet, income statement, and cash flow statement are the three most essential and effective ways to keep track of the safety of the business (Wallstreetmojo Team 2022). A balance sheet is a formal financial statement that presents the company's assets, liabilities, and stakeholders' equity at a specific time. Income statement plays the primary role in demonstrating the profitability of a business through the performance of revenues and expenses over a period of time. In a financial control system, a cash flow statement shows the flow of cash in a company by tracking the change of cash from the beginning to the end in a period of time (Corporate Finance Institute 2023). In fact, the financial control system deploys these three financial statements as fundamental evidence and data for most of the activities that happen in the system.

2.5 Financial control devices

According to Pandey (2016), to implement effective financial control, financial control devices can be used: return on investment (ROI), ratio analysis, break-even analysis, cost control, cost, and internal audit.

Return on investment is an indicator that measures and indicates the efficiency and profitability of investments based on the cost of investments and their current value. Furthermore, the return-on-investment ratio can also be used to compare the efficiency of many different investments. (Fernando 2023.)

Ratio analysis is a tool in the financial statement analysis. By analyzing various pieces of financial information in financial statements, the analysts provide accurate information for decisions and

determine various aspects of businesses, such as liquidity, solvency, profitability, and growth. The financial data is analyzed based on the current and past financial statements. The analyst needs this data to assess the financial performance of a company or to examine the comparative ability with other competitors. (Corporate Finance Institute 2023.)

Break-even analysis is an essential tool in financial management. Break-even analysis refers to determining the margin of safety of a business relying on total cost and total revenue. In other words, this method measures the value of sales in the margin that can cover a company's fixed and variable costs. To analyze break-even, the analyst must calculate the break-even point by dividing fixed costs by the difference between sales price per unit and variable cost per unit. (Hayes 2023.)

Cost control refers to controlling and reducing business expenses for the growth of profitability purposes, and the controlling begins with the budget process. In the control system, controllers apply cost control to examine the performance efficiency by comparing the budget plan and the actual cost. Then, the manager can use variances from the comparison to offer the solutions. (Kenton 2022.)

Internal audit is an accounting area responsible for controlling the company's corporate governance, accounting processes, and internal control. Risk management is also the accountability of internal audits. (Tuovila 2022.)

3 FINANCIAL CONTROL PROCESSES

The control system is established and implemented by a consecutive process with different stages. Generally, the processes must adhere to accounting principles and are usually performed in a period that coincides with the tax year (Captio 2015).

Formally, the financial control processes can be formed and executed in five sequentially significant stages includes detecting financial statement fraud, correction of deviations, financial performance assessment, financial statement forecasts, and firm valuation (Corporate Finance Institute 2023).

3.1 Detecting financial statement fraud

At the beginning of the process, irregularities' observation and recognition in financial statements and financial transactions is a prerequisite step to secure and verify financial information's veracity. Furthermore, carefully maintaining the accuracy of financial statements helps organizations precisely define their goals and objectives, prevent errors in providing trustworthy information, and forecast for the future.

3.1.1 Financial statement fraud concept

In the agreement with Nguyen (2010) about the concept of fraud which can be defined in many different definitions, but in summarizing, "Fraud is a generic term, and embraces all the multifarious means which human ingenuity can devise, which are resorted to by one individual, to get an advantage over another by false representations". Fraud involves intentional wrongdoing, which will cause insecurity to others (Rezaee & Riley 2010, 3-6). There is no limit to fraud which consists of surprise, trickery, cunning, and unfair ways (Nguyen 2010, 3). Fraud can be seen as a crime when someone is "knowing misrepresentation of the truth or concealment of a material fact to induce another to act to his or her detriment" (Garner 1999).

As a definition by the Association of Certified Fraud Examiners (1995), financial statement fraud is:

The intentional, deliberate, misstatement or omission of material facts, or accounting data, which is misleading, and when considered with all the available information, would cause the reader to change or alter his or her judgment or decision.

Financial control fraud popularly occurs not only in the scope of corporations and enterprises but also can be found in non-governmental organizations and non-profits. Many factors can cause fraud in financial documents, such as lack the examination and audit system in accounting activities (e.g., board of directors, audit committee), auditing activities are weakness, many inappropriate regulations are using, missing reconciliation from shareholders, financial information is disclosed less transparent and inadequate, and the project management is inefficient. (Sahiti & Bektashi 2015, 96-97.)

Association of certified fraud examiners suggests that anyone can be stuck on fraud if they simultaneously have financial pressure, rationalization, and opportunity. Financial pressure can be construed as the pressure that people must deal with when they fall into a state of indigested, and the choice of being dishonest is more accessible than being honest to solve their problem. Besides that, rationalization refers to the attitude of people when they commit fraud, such as when someone commits fraud, they tend to be self-convincing by a reasonable reason. Moreover, finally, a favourable opportunity is a catalyst for people to commit fraud. According to Nguyen (2010), there are two main groups of people who commit financial statement fraud. The first group is senior management, and the second group is middle-level and lower-level employees.

In fact, there are various schemes that are found in fraud examinations. Sahiti & Bektashi (2015) supposed that these schemes below are associated with financial statement fraud:

Forgery, alteration, or manipulation of l financial records, supporting documents, or business transactions. Deliberate material omission or misrepresentation of events, transactions, accounts, or other important information from which financial statements are prepared. Intentional misuse of accounting principles, policies, and procedures used to measure, recognize, report, and detect economic events and business transactions. (Sahiti & Bektashi 2015, 97.)

The impacts of fraudulent financial activities widely spread from the large to small entities in the whole business. Financial statement fraud affects countries all over the world, from developing to developed countries. Despite the increase in supervision, adjusting in laws, and giving high attention to the issue, the financial statement fraud is still increasing (Sahiti & Bektashi 2015, 98). Inside the company, employees, shareholders, and creditors are also the victims of fraud and fraudulence is also the cause of the company's scandals. Moreover, financial statement fraud is causing unreliable

financial information for investors, so they can make wrong decisions based on misleading information (Rezaee and Riley 2010, 6-7).

3.1.2 Financial statement fraud's red flags

In detecting fraud, recognition of financial statement fraud's symptoms which can be known as fraud's red flags is a must for financial controllers and auditors. Identifying symptoms of fraud helps the detection be more accessible at the first stage or determine whether those symptoms are actual fraud or come from other factors (Albrecht, Albrecht, Albrecht & Zimbelman 2012). In fact, financial fraud's red flags are acknowledged as warning signals for investigating fraud risks but do not prove that there will be the existence of fraud (Association of Certified Fraud Examiners 1995). According to Albrecht, Albrecht, Albrecht & Zimbelman (2012), fraud's symptoms can be categorized into six groups: accounting anomalies, internal control weaknesses, analytical anomalies, extravagant lifestyle, unusual behaviour, and tips & complaints.

Accounting anomalies is a term that represents three symptoms in accounting namely irregularities in source documents, faulty journal entries, and inaccuracies in ledgers. Irregularities in source documents can be listed as the second endorsement on checks, missing documents, excessive voids or credits, sale items on bank reconciliations, duplicate payments, photocopied documents, increased past-due accounts, etc. Inside faulty journal entries, an embezzler manipulates assets by a shifty trick that adjusts the increase and decrease amount of assets and stakeholders' equity so that auditors could not recognize the deviation when the accounting equation still balances. Thus, the fraud's hints involved in journal entries are journal entries without documentary support, journal entries made by individuals who would not normally make such entries, unexplained adjustments to receivables, payables, revenues, or expenses, and journal entries that do not balance. The final symptom of accounting anomalies is inaccuracies in the books of accounts. There are two common frauds that belong to ledgers include a ledger that does not balance which the debit does not equal the credit and master account balances and the sum of the individual customer or vendor balances do not equal. (Albrecht, Albrecht, Albrecht & Zimbelman 2012, 139-142.)

Internal control weaknesses become financial fraud when internal controls are overridden or absent. As Association of Certified Fraud Examiners (1995) supposed that the ideal environment for occurring fraud is the fraud triangle - rationalization, incentive, and opportunity combine. In an organization,

pressure always exists, and everyone rationalizes. Thus, the absence or overriding of internal controls becomes a great opportunity and the combination of three elements will enhance the high chance of fraud occurring. In specific, the fraud symptoms involved in internal control weaknesses can be listed as lacking segregation of duties, lacking physical safeguards, lacking of independent checks, lacking of proper authorization, lacking of proper documents and records, overriding of existing controls, and inadequate accounting system (Albrecht, Albrecht, Albrecht & Zimbelman 2012, 143-144).

Analytical anomalies are analytical fraud symptoms that can be caught through the discrepancy or abnormality in financial and non-financial data. In other words, analytical anomalies represent anything out of the ordinary. In detail, any transactions, relationships, and procedures of financial data with abnormal conditions or those financial data that are performed by wrong people at the wrong times should be remarked upon by the auditors. Commonly, analytical fraud symptoms are considered as excess purchase, too many debit or credit memos, unexplained inventory shortages or adjustments, unreasonable expenses or reimbursements, and strange financial statement relationships. When finding fraud symptoms, analysts usually use analytical procedures. However, to deploy an effective analytical procedure in finding fraud symptoms, the analysts should understand the company's financial situation and the independent expectation of the analytical relationship. The reason is that the analytical relationship can be faked, so the analytical procedure is sometimes ineffective. (Albrecht, Albrecht, Albrecht & Zimbelman 2012, 144-148.)

Extravagant lifestyle reflects the financial needs and the irregularity in the crooks' lifestyle. Albrecht, Albrecht, Albrecht & Zimbelman (2012) supposed that most embezzlers are suffering financial pressures, or they are just simply greedy. The most accessible hint for this kind of symptom is that the embezzler spends the embezzled funds on buying an expensive house, an expensive car, taking a luxury vacation, spending money on much fancy food, etc. Over time, they get more familiar with their stealing schemes and in the very short term, they change their lifestyle and live a rich life which they couldn't afford. The stealers always seek immediate gratification by stealing more money time after time.

Unusual behaviour in the field of red flags can be understood as changing behaviour when someone commits a crime. According to psychology research, offenders tend to act abnormally compared to their normal actions. The reason for this phenomenon is that when people offend a crime, most of them usually feel guilty because of the fear of crime. This kind of fear leads the crooks to a stressful situation because they are scared of being caught for what they did. Due to stress, offenders can

change their behavior to deal with stress. These unusual changing behaviours are observable such as taking drugs, increased drinking, or smoking, thinking of excuses, inability to look people in the eyes, sweating, etc. The fraud's signals of the unusual behaviour red flags are not specific behaviour, but the signals are changing in behaviour. (Albrecht, Albrecht, Albrecht & Zimbelman 2012, 149-151).

In tips and complaints, co-workers, managers, employees and auditors are critical factors in identifying red flags symptoms based on the elements, which are theft act, concealment and conversion. In the first elements of the fraud triangle, the theft act implies stealing cash, information or other properties. When embezzlement happens, instead of auditors, co-workers, managers and employees at the company are in a great position to recognize the irregularity. During this stage, auditors have a low chance to realize what is happening because the theft act might have ended during the audit period. After doing this illegally, people typically try to hide their wrongdoing by adjusting the information in financial statements and transactions, miscalculating inventory, or destroying evidence. Again, co-workers and accountant managers are still in the best place to detect fraud in the concealment stage in their daily work. Besides, auditors can pay more attention to the issue through the financial documents, so they might recognize the wrong thing such as internal control weaknesses or analytical anomalies. In the final stage - conversion, most embezzlers convert their embezzled funds into a more prosperous life which turns to extravagant lifestyle symptoms. Generally, many frauds are found by employees inside the company; however, companies do not focus on training their employees to notice or realize the existence of fraud. Even though they know about the existence of fraud, sometimes they do not have chances to complain, or they might be scared of the consequences after complaining due to the company's policies or social morals. Furthermore, tips and complaints should be considered fraud symptoms rather than fraud evidence because many tips and complaints are unjustified. (Albrecht, Albrecht, Albrecht & Zimbelman 2012, 151-158.)

3.1.3 Techniques for detecting financial statement fraud

To determine whether a financial statement fraud exists, auditors and investigators have to find real evidence that proves there is fraud. Auditors and investigators use much financial data to detect financial statement fraud. Naturally, fraud usually is found when information from financial statements and real information from other grounds are put on the same scale. Focusing on changes in revenues, expenses, liabilities, and assets in different periods is also a great way to determine a fraud is happening. Auditors and investigators can apply various techniques and data to investigate fraud. The

most common techniques are vertical analysis, horizontal analysis, and ratios analysis in financial statements. In addition, using non-financial data and fraud exposure with financial statements analysis simultaneously can give more secure results. (Albrecht, Albrecht, Albrecht & Zimbelman 2012, 368-369.)

The idea of using financial statements analysis for detecting fraud is to find and look for the changes in three fundamental financial statements. Balance sheet and income statements are position and period statements that are not change statements. In order to use those statements as tools for investigating, investigators must convert those statements into change statements. However, the statement of cash flow is purely a change statement. Vertical analysis, horizontal analysis and ratio analysis are three techniques to change balance sheets and income statements into change statements (Albrecht, Albrecht, Albrecht & Zimbelman 2012, 183-184).

Horizontal analysis is considered the most direct method in detecting fraud compared to ratio analysis and vertical analysis (Albrecht, Albrecht, Albrecht & Zimbelman 2012, 185). This trend analysis technique is used for assessing a set of financial data from period to period and can be shown as an amount or a percentage. In performing horizontal analysis, financial statements are compared over a period of time with at least two years of preparation. Each line item of other years in financial statements is compared to compatible line items from the base year. The purpose of this technique is to make decisions based on the changes from period to period of financial statements. However, if the result is expressed as a substantial change, an investigation should be performed to determine whether the change is reasonable. The two primary financial documents in the horizontal analysis are the income statement and balance sheet. There are two basic formulas to perform the trend analysis: the formula of change since the base period and the formula of current results concerning the base period. (Weygandt, Kimmel & Kieso 2010, 647-651.)

$$\text{Change since base year} = (\text{Current year amount} - \text{Base year amount}) / \text{Base year amount} \quad (1)$$

$$\text{Current results in relation to base period} = \text{Current year amount} / \text{Base year amount} \quad (2)$$

The second method to convert the balance sheet and the income statement into change statements is vertical analysis technique which is also called as common-size analysis. The purpose of vertical analysis resembles horizontal analysis. Two techniques are utilized to evaluate financial statements based on the difference in the comparison. In vertical analysis, each line item in a related set is

calculated as a percentage of a base amount in that set. On the income statement, net sales should be a base amount, and other items are presented as percentages of net sales. Similarly, total assets or total liabilities and stockholders' equity are base amounts on the balance sheet. The comparison can be made in different companies in the same year or across years in the same company. Again, the significant differences from the comparison in the vertical analysis should be investigated for detecting fraud and other decision-making purposes. (Weygandt, Kimmel & Kieso 2010, 651-654.)

The ratio analysis technique is the final approach in converting financial statements to detect fraud (Albrecht, Albrecht, Albrecht & Zimbelman 2012, 184). Ratio analysis simplifies financial statements in various forms, either a rate, percentage, or proportion with a particular purpose (Weygandt, Kimmel & Kieso 2010, 654). Auditors and investigators can assess financial statements in four typical ratio groups - liquidity, leverage, efficiency, and profitability ratios. More specifically, estimating the quick ratio, current ratio, account receivable turnover, inventory turnover, debt-to-equity ratio, profit margin, return on assets, or return on equity ratios and comparing these ratios from period to period. The unexplained results or the significant changes could bring fraud (Albrecht, Albrecht, Albrecht & Zimbelman 2012, 184). In the customer approach, the measurements can be conducted in the price of products, goals of the company, the quality, and services. The internal business process is examined through the success rate and the learning & growth perspective includes business innovation, employees' attitudes and morale (Elliott & Elliott 2009, 736-737).

Albrecht, Albrecht, Albrecht & Zimbelman (2012) recommended that auditors and investigators should identify fraud exposures for investigating to enhance the chance of detecting financial statement fraud. A fraud exposure rectangle presents fraud exposures with four main groups - management & directors, relationship with others, organization & industry, and financial results & operating characteristics.

Statistics indicate that most financial statement frauds are regularly related to management. That is why management, and the directors should be investigated to verify the origin of fraud, the director's responsibilities, or the motivation for offending. Auditors and investigators are recommended to inspect the management and directors group's exposures in three aspects – management's backgrounds, managements' motivation, and management's influence in making decisions for the organization. In the aspect of backgrounds, investigators should review the past activities related to organizations, management, and directors. There are plenty of methods to deepen an overview of management's background, including researching from Google or newspapers or hiring a private

investigator. While investigating backgrounds, questioning management's motivation also strengthens the final results. Motivations can come from the pressure of the directors' position and management's activities. Creating fictitious financial statements to support the stock price is also considered a motivation for offending fraud in management and directors' position. The last thing to discuss in this kind of exposure is management's influence in making decisions for the organization. Fraud is offended easily when the offender has power in making decisions, internal control is weak, or auditors are not active in their role. In general, small organizations have a high chance of penetrating than larger organizations due to their structure in management. (Albrecht, Albrecht, Albrecht & Zimbelman 2012, 370 – 372.)

Albrecht, Albrecht, Albrecht & Zimbelman (2012) supposed that relationships with others are exposures and financial statement fraud is penetrated easily with others' help. That is why investing relationships can enhance the high chance of catching financial statement fraud. Investigators could consider the relationships with financial institutions, related organizations and individuals, auditors, lawyers, and regulatory bodies (Albrecht, Albrecht, Albrecht & Zimbelman 2012, 372-376).

Organization & industry exposures emphasize the action of using organization and industry as a mask to hide illegal activities. An organization that might be created for no purpose or used for other purposes compared to the primary should be investigated. An organization with a complex structure, no audit committee, with one person or small groups controlling the organization is considered as exposure and should be examined. Furthermore, the industry should be noticed carefully because some industries are risky compared to others (Albrecht, Albrecht, Albrecht & Zimbelman 2012, 376 - 377).

Financial results and operating characteristics are the last exposures group in the fraud exposure rectangle. Detecting fraud in this kind of exposure by comparing the financial results from period to period and in the same industry of different companies. A significant difference between comparing the balance and the actual amount should be investigated. Assessing financial results and operating characteristics require investigators to have a profound overview of the business in that organization (Albrecht, Albrecht, Albrecht & Zimbelman 2012, 377 - 378).

3.2 Correction of deviations

Correcting deviations in financial statements is a necessary step when fraud happens in financial statements. Those statements are critical tools for the financial market. Businesses, investors, and many organizations make essential decisions based on financial statements. That is why providing transparent, accurate, and reliable financial statements is a need. (Kenton 2021.)

Due to the imperative of financial statements, correcting errors in financial statements should follow the guidance in the topic 250 of Accounting Standards Codification (ASC) from Financial Accounting Standards Board (FASB). In addition, in correcting deviations, three steps should be conducted sequentially - identifying an error, assessing materiality of error, and reporting correction of error (BDO 2022).

The first step in correcting financial statements' errors is identifying whether an error or not. An error in a previously issued financial statement need to be distinguish with a change in accounting principle, accounting estimates, or reporting entity. The next step is assessing the materiality of error in financial statements. Regulators should examine the impact of errors in both previous and current financial statements. The final step is reporting the correction of error. The report depends on the materiality of financial statements and can be conducted with three approaches - out-of-period adjustment, little r restatement, and big R restatement. The first approach is adjusting an error of an inaccurate financial statement, but the impact of the error is trivial with both current and prior financial statements. In this case, the requirement of disclosures is not necessary. In the second approach, the error is trivial to the previous financial statement. However, the correction will cause materially inaccurate to the current financial statement. The adjustment in this approach is correcting the error in the previous financial statement while comparing to the current financial statement, and disclosures should be conducted. With the "big R restatement" approach, the error is material to the previous financial statement. Restatements and issuances of the prior financial statement are required to reflect the inaccuracy of that financial statement. (BDO 2012.)

3.3 Financial performance assessment

Financial performance is a term that refers to the efficiency level in financial activities that a company has performed. In financial performance, the company will be evaluated in various areas including

assets, liability, equity, revenue, expenses, and profitability (Corporate Finance Institute 2022). Through a financial performance report, the company can have an overview of overall activities effectiveness, obtain the information for forecasting investments and productions, and help the companies determine their next steps in business. In a company, internal users apply financial performance in examining the well-being of the company and their position inside the market, and for external users, financial performance is used to analyze potential opportunities and determine various reliable investments. To assess the financial performance of a company, the financial statement analysis is deployed (Corporate Finance Institute 2022).

According to Weetman (2011), there are three primary financial statements with their corresponding purposes:

Balance sheet is the statement of financial position. In general, the balance sheet shows the entire picture of the company's assets, liabilities, and equity. The role of the balance sheet is to keep track of the company's financial condition. In business, the balance sheet is used to define the company's nature and value of assets, lay out the company's amount of liabilities, and determine the company's financial solvency. In financial accounting and accounting principles, the structure of balance is organized by assets, liabilities, and equity.

$$\text{Assets} = \text{Liabilities} + \text{Owner's equity} \quad (3)$$

Income statement is a statement of financial performance. The income statement is a formal financial report that demonstrates the business profitability of a company through income and expenditures in a given period. The structure of the profit and loss account is organized by revenue, expenses, and profit.

$$\text{Profit} = \text{Revenue} - \text{Expenses} \quad (4)$$

Cash flow statement is the statement of financial adaptability. The cash flow statement refers to the inflow and outflow of cash in a company's operational business. In a business, various activities cause the inflow and outflow of cash such as operations, investments, and financing. Cash flow from operation comes from producing, buying, and selling goods or services. In investment, cash flow is created from buying and selling non-current assets in the long term. Financing activities make cash flow by increasing the long-term finance of a business (Weetman 2011, 60-62).

$$\text{Cash flow} = \text{Cash inflows to the enterprise} - \text{Cash outflows from the enterprise} \quad (5)$$

Financial statement analysis is performed through financial ratios based on three main financial statements such as balance sheet, income statement, and cash flow statement. Balance sheet ratios include current ratio, quick ratio, working capital indicator, and debt-equity ratio. Income statement ratios are the gross margin and the net income. Cash flow statement ratios contain the inventory turnover ratio, the operating cash flow ratio, the return of equity ratio, and the return of assets ratio. (Fridson & Alvarez 2002, chapter 2, 3, 4.)

3.3.1 Profitability ratios

Gross margin ratio or gross profit margin ratio is a useful indicator for measuring the profitability of a firm. This type of income statement ratio indicates the profit of subtraction between revenues and cost of goods sold (Bragg 2007, 39). Gross profit margin expresses the gross profit as a percentage of total revenues (Alexander 2018, 23).

$$\text{Gross profit} = \text{Revenues} - \text{Cost of goods sold} \quad (6)$$

$$\text{Gross profit margin} = \text{Gross profit} / \text{Revenues} \quad (7)$$

Gross margin ratio is an important indicator when the cost of sales - a factor in creating the gross profit is the largest expense in the income statement, and a survival company is required to have an affordable gross profit for the payment of various fixed costs, interest payments, and taxes (Schmidlin 2014, 9). Indeed, some factors that can affect the gross profit margin include industry, competition & pricing, product mix, product costs, production variances, material & labour costs, and composition of fixed & variable costs (Alexander 2018, 23-24).

Operating margin ratio is also known as a return on total assets or EBIT margin (earning before interest and taxes). The operating margin ratio is the operating income as a percentage of the total sales or revenues. This profitability ratio shows the profit in each dollar of sales that a company earns before interest and taxes (Berk & DeMarzo 2017, 69). The operating margin ratio is commonly used to evaluate a company's operational efficiency, future investments, and relative pricing strength (Alexander 2018, 25).

$$\text{Operating income} = \text{Gross profit} - \text{Operating Expenses} \quad (8)$$

$$\text{Operating margin ratio} = \text{Operating income} / \text{Revenues} \quad (9)$$

The operating margin ratio reveals how well a company uses variable costs to optimise profitability instead of fixed cost. Based on the operating margin ratio, a company can predict the value the business can provide for investors and creditors - the higher the ratio, the better the profitability. Besides, the comparison of operating margins should be in similar companies in the same industry. (Schmidt 2023.)

Net profit margin ratio is usually considered a benchmark for measuring financial performance. The result of a fraction between net income and revenues indicates that the profit is provided by subtracting all expenses belonging to the operating, financing, and activities of a company in an accounting period from the income. (Bragg 2007, 45.)

$$\text{Net profit margin} = \text{Net income} / \text{Revenues}. \quad (10)$$

According to Berk & DeMarzo (2017), comparing the efficiency based on net profit margins should be conducted carefully due to differences in leverage or accounting assumption. There can be positive results in calculating the net profit margin even though the company is in a bad financial situation. Therefore, examining other indicators while measuring the net profit margin can bring a safe result. A company with a high net profit margin typically has reasonable cost control, market position, and low debt (Schmidlin 2014, 45).

3.3.2 Liquidity ratios

Current ratio is favourable for the company's lenders in expressing the viability of paying debts obligation. In other words, the current ratio shows the availability of current assets to satisfy current payments. Therefore, the short-term liquidity of a company is examined based on the comparison between current assets and current liabilities (Walsh 2003, 116).

$$\text{Current ratio} = \text{Current assets} / \text{Current liabilities} \quad (11)$$

The proportion 1:1 is the minimum acceptable rate for the current ratio, while 2:1 is more reasonable for most companies in meeting short-term payment purposes (Bragg 2007, 89). Besides, the current assets include different types of assets which are not liquid. That is why some companies have high current ratios while others are in trouble with short-term payments (Walsh 2003, 116).

Quick ratio or acid test ratio has one higher level of liquidity than the current ratio when the inventory value is excluded from the current assets. Removing the inventories means giving better liquid assets so that examining the ability to generate cash from assets will be more precise (Walsh, 2003, p.118). The formulation of the quick ratio is computed by removing the inventory values from the current assets and then dividing the current liabilities (Alexander 2018, 29-30).

$$\text{Quick ratio} = (\text{Current Assets} - \text{Inventory}) / \text{Current Liabilities} \quad (12)$$

A factor that might have negative affections when using the quick ratio to evaluate the company's performance is using current assets and current liabilities in the balance sheet only gives examiners a snapshot of the company's financial situation rather than a whole picture. The results might only show the situation in one day (Walsh 2003, 118). Furthermore, the growth of the quick ratio that results from the abnormal increase in the inventory might indicate that the firm's products are selling difficulty (Berk & DeMarzo 2017, 71).

The most apparent ratio in evaluating the firm's liquidity is the cash ratio. The cash ratio will be a great alternative if the quick or current ratio is insufficient to evaluate the firm's liquidity. The cash ratio expresses the availability of cash for paying employees or other obligations. However, some cases related to loan covenants or compensating balance agreements with banks might cause wrong results. The examiner should carefully receive accurate results (Bragg 2007, 91-92). The cash ratio is computed by dividing cash by the current liabilities (Berk & DeMarzo 2017, 71).

$$\text{Cash ratio} = \text{Cash} / \text{Current Liabilities} \quad (13)$$

3.3.3 Solvency ratios

When measuring the leverage of a firm, the debt-to-equity ratio is the most fundamental ratio. This kind of solvency ratio reveals the strength of the firm's financing by examining whether the firm's operation is funded based on debt, equity, or both (Walsh 2003, 128). The debt-to-equity ratio is computed by dividing total debt by total equity (Berk & DeMarzo 2017, 73-74).

$$\text{Debt to equity ratio} = \text{Total Debt} / \text{Total Equity} \quad (14)$$

In calculating the debt-to-equity ratio, financial analysts should research total debt in different cases to receive better results for different purposes. Total debt might express different results due to interest-bearing obligations such as bank overdrafts, non-current loans, and preference share capital (Weetman 2011, 348-349). The debt-to-equity ratio is essential for investors and creditors to evaluate the risk and return of money from their investments. Even though debt brings profit and risk to the company, the danger increases with the debt level (Walsh 2003, 132).

$$\text{Debt-to-capital ratio} = \text{Total Debt} / (\text{Total Equity} + \text{Total Debt}) \quad (15)$$

Debt-to-capital ratio measures the firm's solvency by comparing debt, equity, and capital. The proportion gives financial analysts, investors, or creditors a quick view of the financing operation from stockholders or bondholders. A high ratio reveals that the firm's capital is funded by bondholders rather than stockholders and vice versa, which means investors will get more risk to investing in that firm (Alexander 2018, 30). Technically, financial analysts can use book values or market values to calculate the debt-to-capital ratio because the distinction between the two types of values is trivial (Berk & DeMarzo 2017, 74).

In the firm's solvency, the equity ratio measures the relationship between assets and shareholders' equity in proportion. The equity ratio shows how secure in finance a company is. A low ratio reveals the company is in a bad financed situation because the operating assets are based on debt rather than equity. Start-ups and investors rely on the high equity ratio to secure their business for hard times and their investments (Schmidlin 2014, 59).

$$\text{Equity ratio} = \text{Total Equity} / \text{Total Assets} \quad (16)$$

3.3.4 Operating return ratios

Asset turnover ratio represents the measure of how well a company manages and employs the total assets to generate significant sales. The ratio's indicators give financial analysts in detail about the firm's situation. The number of this ratio might give readers a misleading even with high or low portions. For instance, with a high asset turnover ratio, the company might have good sales, or the total assets are decreasing. The meaning is that a high ratio also expresses terrible or good news depending on which cases the company belongs to. In decreasing total assets, the reason should be explored to prevent the worst-case scenarios. When using the asset turnover ratio to compare various firms' performance, the comparison should be inside an industry due to the relationship between capital requirements and business models (Schmidlin 2014, 50). The proportion is computed by dividing sales by total assets (Elliott & Elliot 2009, 685).

$$\text{Asset turnover} = \text{Sales} / \text{Total Assets} \quad (17)$$

Return on equity is the most crucial ratio in evaluating the company's value. This proportion indicates the return from the investment capital through the business operation. The ratio is also a tool for attracting more future investments and measuring the expansion of future businesses based on the firm's finance with good portion. Investors generally use the return on equity ratio to measure the performance of invested companies (Weetman 2011, 345). The return on equity ratio results from dividing net income by the book value of equity (Berk & DeMarzo 2017, 76). To enhance the accurate result in calculating the return on equity ratio, using after-interest and tax net income, and book value of equity is critical. In analyzing financial ratio, different portions reveal different meanings. A high ratio might express an efficiency in using the capital to generate profits. In contrast, a low return on equity ratio indicates risky investments (Schmidlin 2014, 42).

$$\text{ROE ratio} = \text{Net Income} / \text{Book Value of Equity} \quad (18)$$

When calculating the ROE ratio, companies can also utilize this ratio to examine the firm's performance in different aspects or increase profitability. For example, to enhance profitability, the company can boost profits or cut down shareholders' equity (Schmidlin 2014, 44). In addition, the ROE ratio components are also analyzed to evaluate different business scenes that follow the ROE tree. ROE components include net profit margin, asset turnover, and financial leverage. By examining

each component, financial analysts can compare the performance of different companies or explore each component's role in the ROE tree. (Alexander 2018, 32.)

The return on assets ratio is a standard measure in measuring investment return and is also a foundation for generating a tolerable return on equity (Walsh 2003, 64). The return on assets ratio estimates the return levels from exploiting the operating assets to generate profitability. To compute the return on assets variation, divide net income and interest expenses by the book value of assets. In contrast to the return on equity ratio, the return on assets ratio formulation uses the interest expense because the assets in this equation include both debt and equity investors. (Berk & DeMarzo 2017, 77.)

$$\text{ROA ratio} = (\text{Net Income} + \text{Interest Expense}) / \text{Book Value of Assets} \quad (19)$$

Return on invested capital ratio is an attractive number for investors and financial managers. The meaning of this variation is to measure how well a company utilises the capital which is funded by investors and creditors to produce the investment return. Financial managers and investors generally use the ROIC ratio to compare the firm's performance in different companies across industries (Berk & DeMarzo 2017, 77). The calculation of the return on invested capital ratio is expressed by the below equation.

$$\text{ROIC ratio} = \text{After-tax Operating Income} / (\text{Book Values of Equity} + \text{Net debt}) \quad (20)$$

$$\text{After-tax Operating Income} = \text{EBIT} (1 - \text{tax rate}) \quad (21)$$

3.3.5 Interest coverage ratios

Interest coverage ratios or time interest earned ratios indicate the firm's ability to pay the interest on the debt. Investors, creditors, and lenders are interested in these variations in evaluating the investment's risk or short-term financial performance. For example, a low portion shows that the company produce less profit than interest payments and the business is carried a large amount of debt that might cause bankruptcy (Corporate Finance Institute 2023). Conversely, a high ratio reveals that the business is in an outstanding performance, and the profit exceeds the requirement for interest payments. Financial analysts can calculate the interest coverage ratios by using EBIT or EBITDA, depending on the evaluated purposes. EBIT is the operating profit earned before interest and taxes, and

EBITDA is the operating profit earned before interest, taxes, depreciation, and amortization (Berk & DeMarzo 2017, 72-73).

$$\text{Interest coverage ratio} = \text{EBIT} / \text{Interest expense} \quad (22)$$

$$\text{Interest coverage ratio} = \text{EBITDA} / \text{Interest expense} \quad (23)$$

3.4 Financial statement forecasts

In financial control, financial statement forecasts play essential roles in providing realistic future projections, which assist companies in formulating financial policies, making critical investment decisions, and determining business objectives (Corporate Finance Institute). Companies utilise financial statement forecasts to create projections in investing, operating, and financial activities based on the predicted balance sheets, income statements, and cash flow statements. Those projections help firms establish the future business in various aspects, including risks, profitability, business strategies, cash flow, and financial position. In addition, the financial statement forecasts also illustrate an overview of the firm's leverage to perform future payment obligations (Wahlen, Baginski & Bradshaw 2014, 62).

Financial controllers must provide rational and neutral forecasts to ensure users receive reliable information to make crucial decisions. Optimistic or pessimistic forecasts might cause inaccuracy, underestimated or overestimated company values, future risks, and investment opportunities. That is why a financial statement forecast should reflect the industry's economic conditions, competition level in that current industry conditions, the risk of the company's strategies, the firm's leverage, the firm's accounting, profitability & risks, and the firm's policies & goals. (Lipson 2019, 1.)

Due to the importance of financial statement forecasts in the firm's future finance, predictors should follow seven general forecasting principles to provide consistent, accurate, and reliable forecasts. The first requirement is to project future business activities, including investing, operating, and financial activities. The following principle requires forecasters again wishful thinking and must be rational and realistic in providing critical forecasts. Furthermore, comprehensive, and internally consistent financial statement forecasts should be ensured to avoid inconsistency in the financial statements integration and maintain objective financial statement forecasts. Besides, the assumptions in predicting must have

external validity by comparing the predicted information with other realistic data in a compatible industry or with the past strategies of that company. The most important thing is providing objective expectations for future payoff investments. (Wahlen, Baginski & Bradshaw 2014, 764-765.)

According to Wahlen, Baginski & Bradshaw (2014), the process of preparing a financial statement forecast has seven steps alternate project operating revenues; project operating expenses & derive operating income; project operating assets & liabilities; project financial leverage, financial assets & common shareholders' equity; project nonrecurring gains or losses; balance the balance sheet; and deriving the projected statement of cash flows.

3.4.1 Project operating revenues

The first step in predicting financial statements is to project the future revenues. Due to the importance of revenues in running a successful business, many analysts use projecting revenues as a foundation for other financial statements forecasts (Wahlen, Baginski & Bradshaw 2014, 769).

Revenues is formed by sales volumes and prices. In projecting revenues, analysts can predict the future sales volumes and prices separately while using the past data of both elements. With predicting sales volumes, analysts can use pure sales quantities or other related sales volumes (number of retailers, customers...) depending on purposes and information that affect sales quantities. Furthermore, the geography, population, and growth of industries can significantly affect some specific companies (technology devices, food...). So, analysts should consider in utilizing specific data on the specific industry to enhance the accuracy of results. When projecting prices, firms should consider internal and external factors affecting demand and price elasticity. These factors include excess or constrained capacity, raw material surpluses or shortages, substitute products, technological changes, macroeconomic conditions, and the competitive landscape. By considering these factors, firms can make more informed pricing decisions and better position themselves in the market. Furthermore, analysts should examine the economy-wide factors, including inflation and foreign currency exchange rates, as well as corporate transactions such as acquisitions and divestitures. If a company's revenue growth rate has been affected by foreign exchange rates or significant transactions, adjustments should be made when projecting future revenues. Cyclical firms present an additional challenge due to the wide variations in revenue growth rates over the business cycle. Forecasting is complicated for firms that depend heavily on new product discovery to generate growth due to the inherent uncertainty in the

discovery and development process. The success of forecasting depends on understanding the economic and competitive forces of the industry, the competitive strategy of the firm, the quality of the firm's accounting, and the drivers of its profitability and risk. (Wahlen, Baginski & Bradshaw 2014, 770-771.)

3.4.2 Project operating expenses & derive operating income

Predicting operating expenses process is based on whether the expenses have fixed or variable components. If expenses vary directly with sales and the relationship is expected to remain constant, future operating expenses can be projected using common-size income statement percentages. However, if expenses have cost structures that do not change directly with sales, using a common-size income statement approach may result in too high or too low projections. In this case, estimating the contribution of fixed versus variable expenses to the total amounts reported is necessary. The presence of fixed costs can be identified by changes in the ratio of percentage change in expenses relative to the percentage change in sales. The variable cost can be estimated as a percentage of sales by dividing the change in the expense item by the corresponding change in sales, and the total variable cost can be estimated by multiplying sales by the variable cost percentage. The fixed cost can be estimated by subtracting the variable cost from the total cost. For those firms that belong to the industry in property, plant, and equipment, a separate schedule may be needed to forecast capital expenditures and depreciation expenses. (Wahlen, Baginski & Bradshaw 2014, 778 – 779.)

Projecting operating expenses as a percentage of sales can be complex because expenses and sales can change over time, even if one remains constant. The expense-to-sales ratio may decrease if a firm drives down costs by creating operating efficiencies or new production technologies, but it may increase if input costs rise and the firm cannot raise prices. Conversely, sales may decrease if a firm faces increased competition and must lower prices, but expenses remain steady. The net result of the projected expense-to-sales percentage will depend on the relative magnitudes of the two effects (Wahlen, Baginski & Bradshaw 2014, 779).

3.4.3 Project operating assets & liabilities

Developing forecasts for individual operating assets and liabilities involves identifying the key operating activities that influence them. The growth of certain assets such as inventory and property, plant, and equipment can lead to future sales growth, while for liabilities such as accounts receivable, growth tends to follow sales growth. To forecast future amounts for operating assets and liabilities, analysts use turnover ratios based on past growth trends or expected changes in the company's strategy. However, caution must be taken when using turnover ratios to forecast operating assets and liabilities that are dependent on revenues, especially if the firm's growth rates in revenues are expected to change significantly or if the relationship between them varies unpredictably over time (Wahlen, Baginski & Bradshaw 2014, 783).

3.4.4 Project financial leverage, financial assets & common shareholders' equity

The projection of financial assets and liabilities involves the estimation of the firm's operating assets and liabilities as well as the financial assets, debts, and shareholders' equity required to finance the operating and investing activities. Furthermore, the forecasting of the effects of financing on net income necessitates the estimation of future interest income, interest expense, and other financial income elements. For firms that maintain a consistent capital structure over time, the common-size balance sheet percentages can be utilized to project debt and equity capital. Alternatively, the projection of debt capital and equity accounts can be carried out by estimating potential future changes in the firm's financial leverage strategy. Examples of such changes include an increase in debt financing through the issuance of short- and long-term debt, resulting in a reduction in shareholders' equity through common share repurchases and increased dividends. Additionally, changes in the firm's capital structure resulting from mergers, acquisitions, or divestiture transactions may need to be projected (Wahlen, Baginski & Bradshaw 2014, 802).

To evaluate a company's utilization of financial assets for operating liquidity versus financial purposes, an assessment of the firm's business activities and financial strategy is necessary. Typically, companies rely on financial assets, including cash, short-term and long-term investment securities, to achieve one or more of the following objectives: to manage seasonal fluctuations in operating liquidity, to establish a financial buffer for potential uncertainties in the future, and to maintain financial flexibility to capitalize on profitable opportunities as they arise. (Wahlen, Baginski & Bradshaw 2014, 802.)

3.4.5 Project provision for retained earnings

The process of predicting retained earnings entails the estimation of future net income and dividends, rather than directly projecting retained earnings. Therefore, in order to accurately forecast the various line items on a balance sheet, completing the projection of line items on the income statement first is a need. By doing so, net income can be obtained and used to calculate retained earnings, allowing for a more accurate forecast of the company's financial position. (Corporate Finance Institute n.d.)

3.4.6 Balance the balance sheet

Balancing the balance sheet is a critical process that involves projecting individual asset and liability accounts, which are not perfectly correlated. This process enables the determination of the difference between projected total assets and projected total liabilities and equity, which represents the amount by which a flexible financial account must be adjusted to balance the balance sheet. When this difference is positive, the firm must raise additional debt or equity capital or reduce projected assets. On the other hand, if the difference is negative, the firm can pay down debt, issue larger dividends, repurchase more shares, or increase investments in financial assets. (Wahlen, Baginski & Bradshaw 2014, 813-815.)

To balance the balance sheet effectively, the analyst must evaluate the firm's financial flexibility, which may be in cash or marketable securities, short-term or long-term debt, or equity. Start-ups, for instance, may keep relatively large amounts of cash or marketable securities on the balance sheet for financial slack, while profitable growth firms may exercise financial flexibility through short-term or long-term debt or equity. The analyst must also assess the potential impact of changes in the firm's financial flexibility on the balance sheet, income statement, and cash flow statement. This evaluation is critical for decision-making processes and ensures the firm's financial stability and growth. (Wahlen, Baginski & Bradshaw, 2014, 813-815.)

3.4.7 Project the statement of cashflows

The final step of the seven-step forecasting process is projecting the statement of cash flows, which is a simple task that characterizes changes in the balance sheet in terms of cash implications. The projected changes in balance sheet accounts, excluding cash, are used to derive implied cash flows.

Increases in assets imply uses of cash, while decreases imply sources of cash. On the other hand, increases in liabilities and shareholders' equity imply sources of cash, and decreases imply uses of cash. (Wahlen, Baginski & Bradshaw 2014, 816.)

3.5 Firm valuation

Valuation is a fundamental process in business that involves estimating the worth of a company's assets or equity based on forecasts. This process is important for both internal and external decision-making and enables companies to make informed decisions about projects and actions that impact their overall value. Capital budgeting and strategic planning, for instance, are two key areas that utilize valuation to determine how those activities will affect the firm's value. Similarly, security analysts, potential acquirers, and credit analysts rely on valuation to inform their buy/sell recommendations, target firm estimations, and credit risk assessments. Several different methods are used to undertake this process, including valuation based on the price multiples approach, discounted dividends approach, discounted unorthodox approach, and discounted cash flow analysis approach. (Palepu & Healy 2013, 7-1.)

3.5.1 Valuation based on price multiples

In the valuation based on the price multiples approach, the firm's valuation is determined by converting a performance measure or a performance forecast by using the applicable price multiple from the comparable firms' value. The valuation based on price multiples is deployed extensively in determining the firm's value by analysts because of the simplicity. Analysts should follow three sequential steps to perform the valuation based on the price multiples method. The first step is choosing a fundamental value for the multiple such as book equity, book assets, cash flows, and earnings. The following step compares the firm to similar firms and adjusts their stock prices based on a chosen performance metric. This adjustment can help to generate multiples, such as price-to-earnings or price-to-book ratios, which can help evaluate the firm's relative valuation. Finally, calculate the average multiple used for similar companies and apply that same multiple to the evaluated metric for the analysed company (Palepu & Healy 2013, 7-1, 7-2). Additionally, earnings and book equity are two ordinary values used for measuring performance (Palepu & Healy 2013, 7-2).

3.5.2 Discounted dividends

In stock valuation, the discounted dividends valuation method is the most common approach. The method performs based on the assumption that the value of the shareholders' equity equals the present value of future dividends (Palepu & Healy 2013, 7-3).

$$\text{Equity value} = \text{Expected future dividends} \quad (24)$$

The concept of present value enables the aggregation of future dividends received at different time intervals. Transforming present-day dollars into future dollars is commonly referred to as compounding. On the other hand, discounting is the process of converting future dollars into their present value. Essentially, present value calculations enable the comparison of cash flows across different time periods while considering the time value of money. By discounting future cash flows to their present value, investors and analysts can evaluate the feasibility and profitability of potential investments or projects. This methodology is widely utilized in the fields of finance and accounting and is essential for informed decision-making. (Palepu & Healy 2013, 7-3, 7-4.)

3.5.3 Discounted abnormal earnings

In the discounted abnormal earnings valuation method, the firm's valuation is evaluated based on the booked value of equity and the expected earnings. The discounted abnormal earnings valuation theory is to predict the willingness to fund a company from investors based on the relationship between abnormal earnings and the book value. Investors more likely invest in a company at the normal rate for the next round when the book value is at the normal rate also. Depending on the deviation of the abnormal earnings, if the rate is higher than the normal value, investors are willing to invest more than the book value. In contrast, if the rate is lower than the normal value, the funding from investors might be cut down. The abnormal earnings are calculated by subtracting the net income to a capital charge. (Palepu & Healy 2013, 7-4, 7-5.)

$$\text{Abnormal earnings} = \text{Net income} - (\text{Expected return} \times \text{Beginning book equity}) \quad (25)$$

3.5.4 Discounted cash flow analysis

The discounted cash flow model is a widely used valuation method in the field of finance and is derived from the dividend discount model, based on the idea that dividends can be converted into free cash flows. The approach involves three steps. Firstly, free cash flows available to equity holders are forecasted over a finite time horizon, which is typically between 5 to 10 years. Secondly, free cash flows beyond the terminal year are predicted based on certain assumptions. Finally, the forecasted free cash flows are discounted to the present value using the cost of equity, and this discounted amount represents the estimated value of free cash flows available to equity. Operating cash flows to equity holders are calculated as the sum of net income and depreciation less changes in working capital accruals. Capital outlays are computed as capital expenditures less asset sales, while net cash flows from debt owners are obtained by subtracting the after-tax cost of interest from the issuance of new debt less retirements. Overall, the discounted cash flow method provides a systematic framework for valuing a firm's equity by taking into account its expected future cash flows (Palepu & Healy 2013, 7-12, 7-13).

4 CONCLUSION

Through the research, I have gained a deep understanding of financial control theory, including its definition, objectives, types, and tools. Financial control theory serves as the foundation for effective financial control processes, and understanding the concepts is crucial for organizations seeking to implement effective financial control.

I also explored financial control processes, including detecting financial statement fraud, correcting deviations, assessing financial performance, forecasting financial statements, and valuing the firm. These processes are crucial for ensuring that an organization's financial performance is effectively monitored, evaluated, and improved.

The findings of this research might have implications for readers who are seeking for reliable information about financial control. The implementation of effective financial control processes, combined with a strong control environment, is critical for ensuring the long-term success of an organization.

In summary, this thesis has provided a comprehensive discussion of financial control theory and financial control processes. I hope that this thesis will serve as a useful resource for readers seeking to gain a deeper understanding of financial control and its processes.

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