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THE TREASURY FUNCTION "DOTTED LINE" RELATIONSHIP AND "SOLID LINE" RELATIONSHIP TO OVERSEE THE CONTROLLER FUNCTION IN CHEMICAL COMPANY

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Abstract

Chemical companies are companies involved in the production of chemical substances, including petrochemicals, agrochemicals, pharmaceuticals, polymers, paints, and oleochemicals. In carrying out their operations, of course, chemical companies have several functions that work together in achieving their goals. In a chemical company, there is one function, namely the treasury function. The treasury function is a financial function that is very important in companies, including chemical companies. One of its functions is to check whether the business's financial condition is healthy to be able to maintain its business continuity or not. In addition to the treasury function, there is also a control function in chemical companies that plays an important role in ensuring that financial resources are used effectively and efficiently. By identifying errors and taking corrective action, and ensuring that the company's financial objectives are met. Among the relationships between treasury and control in chemical companies. These two functions are also linked in a "dotted line" and "solid line" relationship in their respective functions in chemical companies. In chemical companies, the "dotted line" relationship between Treasury and Controller can be explained as a weaker relationship compared to the "solid line" relationship. Treasury and Controller have different responsibilities within the company. This "dotted line" relationship shows that Treasury and Controller have a looser relationship and are not too closely related to each other's responsibilities. Although both have different responsibilities, they still have to work together to achieve company goals. Whereas in the context of the relationship, "Solid Line" refers to the close relationship between Treasury and Controller. Treasury is responsible for managing the financial aspects of the company, including cash management, financial risk management, investment, and financing. Meanwhile, the Controller is responsible for ensuring the integrity of financial data, preparing financial reports, and maintaining compliance with accounting regulations. Strong cooperation between Treasury and Controller is essential in maintaining the company's financial balance. With effective cooperation between Treasury and Controller, companies can better achieve their financial goals. Treasury and Controller support each other in terms of risk management, cash flow monitoring, financial strategy determination, and fulfillment of legal and regulatory compliance.

Keywords: Chemical Company, Treasury Function, Control Function, Dotted Line, Solid Line

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1. Introduction

Chemical companies are companies involved in the production of chemical substances, including petrochemicals, agrochemicals, pharmaceuticals, polymers, paints, and oleochemicals (Contributors from Wikimedia Project, 2023). These specialty chemical products are marketed by chemical companies to finished goods manufacturing companies, whose typical products are pesticides, polymers, electronic chemicals, surfactants, construction chemicals, industrial cleaning agents, aroma compounds, coatings, food additives, paper chemistry, oil chemistry, paper adhesives, adhesives, cosmetics and others (Contributors from Wikimedia project, 2023). Chemical companies generally have research and development laboratories to test and develop their processes and products. The chemical industry is an industry that processes raw materials / raw materials into a result/product by utilizing chemical processes (Faizarteta, 2022; Kimia, 2022). Chemical processes carried out in the chemical process industry are chemical reactions and physical-chemical events (Faizarteta, 2022). Examples of chemical industry companies include Pertamina which processes crude oil into fuel (Contributor from Wikimedia project., 2023). Chemical Farma, does business in pharmaceuticals, and companies engaged in the production of cement, ceramics, porcelain, metals, plastics, animal feed, wood, and its processing, paper, and so on (Lavinda, 2023).

In a chemical company, there is one function, namely the treasury function. The treasury function is a financial function that is very important in companies, including chemical companies. One of its functions is to check whether the financial condition of the business is healthy to be able to maintain its business continuity or not. Treasury has the responsibility for all the management of the company's liquidity assets, including managing working capital or working capital management, as well as monitoring the company's cash inflows and outflows (Lifepal, 2022; Pintar, 2022). Treasury is also responsible for maintaining the company's liquidity and ensuring that the company has enough cash to meet the company's operational needs at unexpected times (Redaksi, 2016). The treasury department is also responsible for establishing controls for accounts payable, limiting risk exposure in fundraising, establishing payment strategies, and investing excess cash in the capital market to generate financing income (Bragg, 2022; Noah, 2020).

In addition to the treasury function, there is also a controller function in chemical companies. Controllers in chemical companies have an important role in maintaining the quality and quantity of production (Syahputra, 2015). Here are some functions of controllers in chemical companies: First, maintaining production levels and product quality, namely in a chemical plant must produce products in certain quantities and with the required quality, thus a control system is needed to maintain the desired production level and product quality (Syahputra, 2015). Second, controlling the process in the reactor where the chemical reactor is the most important part of the chemical industry so that the stability of the work of the chemical reactor becomes research material on the process control system in the reactor. Third, managing the company, namely the management control system has an important role in the development of a company. The principle of the management control system includes rules that must be followed by company actors to manage the company with certain assumptions (Via, 2022). Fourth, to prevent the risk of chemical hazards, namely employers or managers who use, store, use, produce, and transport hazardous chemicals in the workplace are required to control hazardous chemicals to prevent occupational accidents and occupational diseases. One way to control these K3 chemical hazards is through the presence of Chemical K3 Supervisors and Chemical K3 Experts (Tami, 2021). And finally, producing quality products where quality control is closely related to the quality control process. For the production process to run efficiently and produce quality products, quality control must be considered. The benefit of quality control is to produce a final product that meets quality standards and is to consumer expectations and needs.

In an organization chart, the solid line represents the relationship between an employee and his or her direct supervisor or manager, while the dotted line represents the person who is the employee's supervisor on a particular project or a secondary supervisor (Brewer, 2023). The solid line usually connects direct managers with their subordinates, while the dotted line is a weaker relationship where the dotted line manager still has formal rights to some part of the individual's time and attention and will usually organize some of their tasks (Stuckenbruck, 1979; Cardia, 2020). Therefore, in a chemical company, dotted lines and solid lines can be used to indicate different levels of authority or responsibility in supervising the controller function within the treasury function. For example, the treasury function may have a solid line relationship with the controller function for day-to-day operations, while having a dotted line relationship for specific projects or tasks (Brewer, 2023; Indeed Editorial Team, 2022).

The treasury function plays an important role in overseeing the financial health of the company, including the Controller Function. The Controller function acts as a watchdog of the company's financial health by taking over the financial reporting process and overseeing all financial departments including accounts payable, purchasing, vendor management, treasury, financial reporting, and more (Kenton, 2022). In the operations of chemical companies, the treasury function often uses two types of lines as the main supervisory tool, namely the "dotted line" and the "solid line". Nonetheless, chemical companies need to have a strong Treasury Function to ensure proper financial oversight and decision-making. Treasury management is a company's effort to conduct financial planning, asset management, fund storage, and control of company assets or funds (Bivisyani, 2023). However, there are still not many studies investigating the relationship between the use of dotted lines and solid lines in supervising the controlling function in chemical companies. Therefore, it is important to examine this relationship and see whether the use of a combination of "dotted line" and "solid line" will be effective in supervising the controlling function in chemical companies. So with this information, the problems and objectives of this study can be identified, namely: 1) How is the "Dotted Line" relationship between Treasury and Controller in a Chemical Company?; 2) How is the "Solid Line" relationship between Treasury and Controller in Chemical Companies?

2. Literatur Review

2.1 Treasury Function

2.1.1 Definition of Treasury Function

The treasury function is also known as the treasury department or treasury management (Maksum et al., 2014). It refers to financial activities and responsibilities and involves managing cash flow, liquidity, financial risk, and investments. The treasury function is responsible for managing the liquidity of the business, which means that all current and projected cash inflows and outflows must be monitored to ensure that there is enough cash to fund the company's operations, as well as to ensure that excess cash is properly invested (Robert Half, 2022). The treasury function is also responsible for mitigating various risks, such as foreign exchange, and providing visibility into the organization's liquidity position, settlements, forecasts, exposures, and risk management (Michael McCaw, 2018). The treasury department manages the company's financial resources to help meet the company's business objectives, including making effective use of cash and other financial instruments, and ensuring sufficient cash is available to meet future obligations (Finlync, 2021). The treasury function is one of the most important business functions and will continue to be for the foreseeable future (Karsten Füser, 2019). Treasury management is an approach in a dynamic profession that is always evolving, an effort to optimize efficiency and streamline the treasury function in banking (P. Polak et al., 2018). According to Afriani (2020), treasury management is a position with the task of ensuring company liquidity is given to a person or group of people. According to Herlliar and Dunne (2004), the treasury department is an integral part of the organization's activities and performs tasks in managing cash, raising funds, and implementing sophisticated risk management derivative programs. Treasury management is a position in a company occupied by a party or group of people who are responsible for maintaining liquidity conditions in the company. Thus, treasury management can monitor activities and cash flow projections as well as specifically in the funding needs of the company and invest in the presence of excessive sources of funds, just as preparations for increasing loans or increasing share capital. With treasury management, the company's objectives can be achieved by doing several things, namely cash transfers, forecasting, and cash concentration. Cash transfer is an activity that functions to transfer funds from one cash account to another and this is used in fulfilling the needs of the company. Forecasting is an activity that estimates an event that will occur in the future and over a relatively long period. And forecasting is the initial stage carried out by the treasury section of all other roles. And finally, cash concentration is an activity carried out by the treasury department in increasing the efficiency of cash management by moving funds from various accounts and directed to the central account section (Maiyuniarti, 2020).

Treasury management is an activity that manages financial resources in a company or bank. In general, there are three main tasks of treasury management, namely cash management, investment, and payment transactions. And the purpose of treasury management itself is to optimize existing resources and achieve maximum profit and be at a safe limit by maintaining the level of liquidity in the company and being able to minimize any risks that exist and can take into account every step taken in the company (Rahmawati, 2020, Liu et al., 2023). And according to Jose et. al. (2011) that the finance department assumes treasury management responsibilities and develops a model to confirm these responsibilities. Where the model explains and unites the main functions of the treasurer through two concepts, namely basic cash management and advanced cash management. In terms of the basic cash management concept, which will support the development of administrative techniques conducive to optimizing the amount of assets that can be spent by the company (Binh et al., 2023). And basic cash management also groups billing and payment management, liquidity monitoring, short-term treasury forecasting, and negotiations with financial organizations. And so is the case with advanced cash management, which includes treasury deficit financing management, treasury top positioning management, and financial risk management.

2.1.2 Roles and Responsibilities of the Treasury Function

The treasury or financial management function is responsible for managing the utilization of funds in rupiah and foreign currency owned by banks or companies. Treasury management is also tasked with controlling cash flow and maintaining company liquidity (Refita, 2021). The duties and responsibilities of treasury staff include risk management such as liquidity, ventures, interest rates, and so on, making investment decisions, managing liquidity and Net Open Position (NOP) limits, and executing transactions (Wisnu, 2022).

Treasury management has a central role in terms of corporate financial management. One of its obligations is to be able to maintain the company's financial health by paying attention to its liquidity level. Treasury management must be able to maintain the bank's ability to fulfill its obligations. Therefore, every financial management action must be carefully planned and calculated according to needs. In this application, treasury management can also implement the value of good corporate governance which raises the principles of openness, accountability, fairness, independence, and accountability (Renny Oktafia, 2017). In the opinion of Rahmawati (2020), the roles that must be carried out by the treasury management section include:

1. Make cash forecasting (cash forecasting). Here the treasurer or person in the treasury management division calculates what cash needs will occur in the short and long term. From here it will be known about the amount of cash that will be needed at a time so that the treasury can determine what fund management is appropriate so as not to let the funds settle.
2. Create working capital governance. Here the treasurer must determine the working capital management that the company needs. As is known that working capital is very influential on the company's performance so the working capital that is managed will not hurt the company.
3. Create cash governance. In addition to estimating cash and managing working capital, the treasurer must also ensure that the company has sufficient funds in case of emergencies.
4. Create governance on investment. In making investments, the treasurer must pay attention to many factors so that the investments made are truly appropriate and able to provide benefits for the future.
5. Create governance on risk control. By determining investment, treasurer management will certainly take into account the risks that will be faced when investing. Therefore, strong instincts are needed so that the treasurer can see what risks will be faced and his ability to control risks.
6. Maintain good relations with the bank. In addition to the ability to seek profit, the treasurer must also be able to establish good relations with banks and other companies. This is a form of immaterial long-term investment that will be needed at any time.
7. Conduct fundraising. As an additional fund, the treasurer can also conduct fundraising. This can be done easily if the treasurer has a good relationship with every customer and all colleagues. Therefore, continuous communication is needed so that each role performed can run properly.

Ultimately, any sufficient cash that the company has can be ensured by the treasury department. According to Bragg (2010) the treasury department also has important responsibilities in the following areas:

1. Cash forecasting. In general, accounting staff handles cash in and cash out, but treasury staff compiles all information from subsidiaries

into short-term and long-term cash forecasts. Where the forecast is aimed at investment, to plan the right investment and match the cash expenditure. And the forecast is also used by treasury staff to determine when more cash is used so that funds through the use of debt and equity can be planned and obtained. Cash forecasts are also required at the individual currency level, which is used by treasury staff to plan their hedging operations.

2. Working capital management. Working capital is a major component of cash forecasting and cash availability, which is a response to the company's general level of sales and various internal policies involving changes in the level of current assets and current liabilities. Thus, working capital levels and trends should be kept in mind by the treasurer and advised management on the impact of proposed policy changes on working capital levels.
3. Cash management. In ensuring that sufficient cash is available for operational needs, the treasury staff uses information obtained from cash forecasting and working capital management activities. With the use of a cash pooling system, efficiency can be significantly improved in this area.
4. Investment management. Excess funds in the company used for investment will be accounted for by treasury staff. The maximum return on investment of these funds is rarely the primary objective. Instead, it is far more important to keep the funds out of risky situations and to match the maturity dates of the investments with the projected cash requirements of the company.
5. Treasury risk management. Interest rates can vary directly with market interest rates. This interest rate represents the company's payment for its debt obligations and can cause problems if market interest rates increase. And if the exchange rate suddenly deteriorates, the company's foreign exchange position may be at risk. In both cases, risk management strategies can be taken by treasury staff and implement hedging tactics to reduce the company's risk.
6. Management advice. Market conditions should be monitored by the treasury staff constantly, as it is an excellent internal resource for the management team to know about the interest rates the company is likely to pay on new debt offerings, the availability of debt, and the likely terms that equity investors will want in return for their investment in the company.
7. Relationship with credit rating agencies. When a company issues debt securities, credit rating agencies review the company's financial condition and assign a credit rating to the debt securities. And requests for information from the credit rating agency review team will be responded to by treasury staff and provide additional information from time to time.
8. Relationship with banks. In discussing the company's financial condition, the bank's fee structure, debts granted to the company by the bank, and other services such as foreign exchange transactions, hedging, transfers, custodial services, money collection, etc., the treasurer will meet with bank representatives to discuss these matters. The level of cooperation with the bank in case of financial difficulties is a reflection of the long-term and open relationship between the company and the bank

and can sometimes reduce the bank's costs.

9. Fundraising. For fundraising purposes, the treasurer will function in maintaining excellent relationships with the investment community. This community consists of brokers and investment bankers who sell corporate debt and equity offerings to investors, pension funds, and other sources of funds, who buy corporate debt and equity. While all funds ultimately come from the buy side, the sell side is valuable because of its contact with the buy side, and therefore often worth the substantial costs associated with fundraising.
10. Credit granting. Extending credit to customers can be assigned to accounting staff and falls under the purview of the treasury department. Since the treasurer has control over working capital locked up in receivables, it is useful for this task to be managed by treasury staff.
11. Other activities. The treasury staff should have expertise in integrating the acquired company's treasury system into the company's treasury system in case the company is involved in mergers and acquisitions regularly. Another activity is the maintenance of all types of insurance on behalf of the company. The treasury staff already handles a significant amount of risk management through hedging activities and therefore, this task can be assigned to the treasury staff so that it is a further centralization of risk management activities.

Thus, it is clear that maintaining cash availability extends the previous points to include several types of asset management, risk management, working capital management, and dealing with banks and credit rating agencies. Thus, the central role in modern corporate finance is occupied by the treasury department.

2.1.3 The Importance of Treasury Function in Chemical Companies

The treasury function plays an important role including managing, protecting, and optimizing the company's cash and mitigating various risks in chemical companies (Finlync, 2021). The treasury function in chemical companies serves as financial and liquidity risk management and influences operations and adds value to cross-business functions across the organization. The treasurer at a chemical company is responsible for carrying out some of the things the company has planned by ensuring cash is available to do these things, and the treasury department helps meet the company's business objectives by managing financial resources within the chemical company (LeRoy Rands, 2019). Treasury management includes the effective use of cash and other financial instruments, and meeting future obligations by ensuring sufficient cash is available to meet these obligations, as well as managing risks such as foreign exchange which these risks come from internal and external risks of chemical companies (Finlync, 2021). The Treasury function plays an important role in a chemical company, providing its management and essential financial support within the company. Here are some reasons why the Treasury function is important in chemical companies:

1. Cash Flow Management. Chemical companies often have significant working capital requirements due to the need to purchase raw materials, maintain inventory, and manage operational costs. The Treasury function helps manage the company's cash flow by forecasting and optimizing cash inflows and outflows, ensuring that there is sufficient liquidity to meet the day-to-day operational needs of the chemical company.
2. Working Capital Optimisation. Efficient working capital

management is essential for chemical companies. The Treasury function monitors and manages working capital components such as receivables, payables, and inventory levels. By optimizing these areas, the Treasury function helps minimize the company's investment in working capital while ensuring smooth operations.

3. Risk Management. Chemical companies are exposed to various financial risks, including currency risk, interest rate risk, commodity price risk, and credit risk. The Treasury function identifies and assesses these risks and develops strategies to mitigate them. This may involve using hedging instruments, negotiating favorable terms with suppliers and customers, and implementing risk management policies and procedures.
4. Capital Structure and Funding. The Treasury function assists in determining the optimal capital structure for the company, balancing debt and equity financing to support growth objectives and maintain a sound financial position within the chemical company. This function evaluates funding options, manages relationships with banks and financial institutions, and executes capital-raising activities such as issuing bonds or obtaining loans.
5. Investment Management. Chemical companies often have excess cash that can be invested to generate returns. The Treasury function evaluates investment opportunities, assesses the risk-return profile, and manages the investment portfolio to maximize returns while considering liquidity requirements and risk tolerance.
6. Financial Planning and Analysis. The Treasury function provides financial analyses, forecasts, and support for strategic decision-making. The function assists in budgeting, financial modeling, and evaluating the financial impact of investment projects, acquisitions, and other strategic initiatives within the chemical company.
7. Compliance and Regulatory Issues. Chemical companies operate in a highly regulated environment. The Treasury function ensures compliance with financial regulations, accounting standards, and internal controls related to treasury activities. It maintains appropriate documentation, supports audits, and ensures compliance with reporting requirements.
8. Mergers and Acquisitions (M&A) and Capital Allocation. In the chemical industry, M&A activities are common for strategic growth and expansion. The Treasury function plays a key role in assessing the financial aspects of potential acquisitions, conducting due diligence, evaluating financing options, and managing capital allocation decisions.
9. Relationship Management. The Treasury function builds and maintains relationships with banks, financial institutions, rating agencies, and other external stakeholders. It negotiates banking services, manages banking relationships, and keeps informed of market trends and developments that may affect the financial position of chemical companies.

Overall, the treasury function is critical for chemical companies to effectively manage financial resources, optimize working capital, mitigate financial risks, support strategic decision-making, and ensure regulatory compliance. By providing financial expertise and guidance, the treasury function contributes to the financial stability, growth, and long-term success of the company.

2.2 Control Function

2.2.1 Definition of Control Function

The control function is one of the basic management and is essential for successful management. It is vital to the maintenance and effectiveness of an organization. The systematic work continues and never stops before the expected goals are achieved. This function is also useful for realizing a working system that is based on an honest attitude, full of responsibility, and by applicable regulations. In addition, the control function is also useful in the supervision of all behavior in the organization (Nasihuddin, 2009).

The control function in the company is part of the management control system that seeks to ensure that organizational activities move toward their goals (Syarifudin, 2015). This control function is carried out by comparing existing work achievements with plans and making the best and most appropriate actions (Nandy, 2022). Here are some control functions that need to be understood (Tysara, 2021): First, evaluate the success and achievement of goals and targets according to the set indicators. Second, taking clarification and correction steps for deviations found. Third, implementing various alternative solutions to various problems related to achieving company goals. Fourth, strengthen the sense of responsibility of officials who are given duties and authority in carrying out work. Fifth, educate officials so that they understand the importance of supervision and control in carrying out their duties. In carrying out the control function, companies can use three types of supervision, namely preliminary supervision, simultaneous supervision, and final supervision (Rarnasari, 2022). This supervision is carried out to ensure that what is monitored is achieved according to plan and to correct any deviations (Rarnasari, 2022).

The control function in chemical companies includes several important things which are the basic principles of implementing process control in factories (Juwari, 2017). According to Paramitha (2020), here are some control functions that need to be understood: First, carrying out the safe operation of a chemical process is the main requirement. Second, compliance with Company Regulations and applicable laws and regulations. Third, ensuring the performance of a chemical process, ensuring the stability of a chemical process, and suppressing external disturbances. In addition, the management control system is used as one of the efforts in a systematic form used by a company in achieving the goals it wants to achieve (Nandy, 2022). This is done by comparing existing work performance with plans and making the best and most appropriate actions.

According to Nandy (2022), several functions of the management control system in a chemical company include: carrying out proper planning for a company, carrying out proper coordination between sections, increasing work efficiency and effectiveness, improving product and service quality, increasing customer satisfaction, increasing company profits, minimizing the risk of loss and damage, ensuring compliance with rules and regulations, improving overall organizational performance, and ensuring that every member of the company does not experience difficulties or problems either in carrying out their duties or in achieving organizational goals.

2.2.2 Roles and Responsibilities of the Control Function

The control function has an important role and responsibility in an organization. The main role of controlling is to ensure that the company's operational activities are run by the plans and objectives that have been set (Tysara, 2021). The following are the main roles and responsibilities of the control function:

1. Collection and analysis of financial data: Controlling is responsible for collecting and analyzing the company's financial data. This includes preparing financial statements, analyzing costs, controlling budgets, and monitoring the company's financial performance.
2. Supervision and control: Controlling ensures that the company's operational processes are run by established procedures. They supervise and control operations, including identifying risks and taking steps to minimize them.
3. Planning and budgeting: Controlling plays a role in preparing company plans and budgets. They help in determining the company's goals and objectives and allocate the right resources to achieve these goals.

In addition to the main roles and responsibilities of the controlling function above, the following roles and responsibilities of the controlling function in the company also include the following: First, achieving goals effectively and efficiently (Choliq, 2020). Second, ensuring security and safety in carrying out operations (Paramitha, 2020). Third, maintaining compliance with company regulations and applicable laws and regulations. Fourth, overseeing the entry and exit of all goods, storekeepers, and receiving (DConsulting Business Consultant, 2023). Fifth, maintaining the quality of products or services according to established standards and providing the necessary resources to achieve organizational goals (Dwinda, 2023). Sixth, controlling every activity that occurs and improving work effectiveness and efficiency (Anggraeni, 2022).

In carrying out the control function, the company must ensure that each employee understands their responsibilities in carrying out their duties (Choliq, 2020). In addition, the company must also ensure that every activity carried out is by established standards and minimize the risk of loss and damage. The control function also has an important role in securing the company's cash or cash equivalents because every financing activity that is consumable or inventory can be monitored by cost control (DConsulting Business Consultant, 2023).

2.2.3 The Importance of Control Functions in Chemical Companies

In the chemical industry, the control function is very important to ensure that each process runs well and by established standards (Juwari, 2016). This can help companies to avoid the risk of loss and damage and improve the quality of products and services (Paramitha, 2020). In addition, the control function can also help companies to achieve goals effectively and efficiently and increase customer satisfaction (Syarifudin, 2015). Therefore, chemical companies must pay attention to the importance of the control function in carrying out their operations.

The control function is important in a chemical company in the context of financial management because it helps ensure that the company's financial resources are utilized effectively and efficiently. Here are some reasons why the control function is important in financial management: Helps identify errors and take corrective action to minimize deviations from standards (Yunita et al., 2020; Gischa, 2022). Helps measure progress against objectives and detect deviations from planning promptly to take corrective action (Yunita et al., 2020). Ensure compliance with company regulations and applicable laws and regulations. Helps maintain safety in chemical operations, which is a key requirement (Paramitha, 2020). Helps minimize costs by reducing waste and better management of by-products and by-products (Yunita et al., 2020).

In chemical companies, the control function plays an important role in ensuring that financial resources are used effectively and efficiently. Identifying errors and taking corrective action, and control functions can also help minimize deviations from standards and ensure that the company's financial objectives are met (Yunita et al., 2020; Gischa, 2022). In addition, by measuring progress against objectives and detecting deviations from planning promptly, the control function can help ensure that corrective actions are taken promptly to avoid financial losses (Yunita et al., 2020). Compliance with company regulations and applicable laws and regulations is also important for financial management, and the control function can help ensure that these requirements are met. Finally, safety is a key requirement in chemical operations, and the control function can help maintain safety by ensuring that operations are conducted within safe limits (Paramitha, 2020). By minimizing costs through waste reduction and better management of by-products and by-products, the control function can also help improve a company's financial performance (Yunita et al., 2020).

3. METHOD

3.1 Types of Research

Through further topical analysis, this study employs a qualitative descriptive methodology. (Sugiyono, 2005:21)

3.2 Research Instruments and Data Collection Techniques

Literature books and scholarly publications were used as research resources for this investigation. Additionally, official websites that might serve as sources are used by research tools. To accomplish the goals of this research, data collection methods employed literature and documentary studies.

4. RESULTS AND DISCUSSION

4.1 The "Dotted Line" Relationship between Treasury and Controller in a Chemical Company

In chemical companies, the "dotted line" relationship between Treasury and Controller can be explained as weaker than the "solid line" relationship (Miguel Cardia, 2020). Treasury and Controller have different responsibilities within the company (Nathan S. Collier, 2011). Treasury is responsible for managing the company's finances, including investments and fund management, while the Controller is responsible for managing the company's accounting and financial reporting. Although both have different responsibilities, they still have to work together to achieve company goals (Nuvest, 2017). This "dotted line" relationship indicates that Treasury and Controller have a looser and less tightly coupled relationship with their respective responsibilities (Reference, 2020).

According to Miguel Cardia (2020), the dotted line reporting relationship is a weaker relationship. Meanwhile, the dotted line means that reports are still required (Reference, 2020). From this, it can be concluded that the "dotted line" relationship between treasury and controller indicates that the two still have to coordinate and communicate, but their respective responsibilities are not too closely related to each other.

The nature and extent of the dotted line relationship between the Treasury and the Controller may vary, depending on the structure, size, and industry of the organization. However, some common aspects of collaboration and coordination between the two functions may include:

1. Cash Management. The Treasury function is responsible for managing cash flow, liquidity, and funding needs, while the Controller function focuses on cash accounting, reconciliation, and

financial reporting. These two functions collaborate to ensure accurate cash forecasting, effective cash allocation, and proper recording and reporting of cash transactions.
2. Financial Risk Management. The Treasury function typically handles financial risk management, including currency risk, interest rate risk, and commodity price risk. The Controller function assists in assessing and reporting these risks, ensuring that the financial statements reflect the appropriate accounting treatment for risk-hedging activities.
3. Compliance and Control. The Controller function is responsible for establishing and maintaining internal controls and ensuring compliance with financial regulations and reporting requirements. The Treasury function collaborates with the Controller to implement appropriate controls related to cash management, treasury transactions, and financial risk management.
4. Financial Reporting. The Controller function prepares financial statements and reports, while the Treasury function provides relevant information related to cash position, investments, debt, and other treasury activities. Both collaborate to ensure accurate financial reporting, including proper disclosure of treasury-related information.
5. Budgeting and Forecasting. The Controller function leads the budgeting and forecasting process, while the Treasury function provides input and insight into cash flow projections, financing needs, and interest expense. Both work together to align financial projections with the organization's strategic objectives and ensure consistency between treasury activities and financial planning.
6. Capital Expenditure and Funding. The Treasury function assists in evaluating and prioritizing capital expenditure projects, considering funding options, and assessing the financial impact of investment decisions. The Controller function provides financial analysis and oversight to ensure proper recording and reporting of capital expenditure in the financial statements.

The dotted-line relationship between Treasury and Controller facilitates effective collaboration, coordination, and knowledge sharing between the two functions. This ensures that financial management, control, and reporting activities are aligned, and enables a comprehensive approach to managing financial risk and optimizing financial performance.

4.2 The "Solid Line" Relationship between Treasury and Controller in a Chemical Company

The solid line relationship between Treasury and Controller in the company can be explained from each of these functions which include the following: Treasury's role is to manage cash or cash management, maintain the company's liquidity conditions, find solutions if the company is unable, invest company funds at low risk (Duha, 2022). And the Controller's role is to identify, measure, and report financial information in the form of systematic, transparent, and detailed financial reports, also produce specific and detailed reports, identify problems that arise and solve these problems, and provide current and future information from the company, such as budgeting, performance evaluation, operational optimization, and so on, as well as being an evaluation material and decision-making tool for the company (Utami, 2023). These two functions are interrelated because both play a role in managing the company's finances. Treasury is responsible for managing the company's cash and investments, while the Controller is responsible for identifying, measuring, and reporting detailed financial information. Both must work together to ensure that the company's finances are managed properly and efficiently and minimize the risk of loss and damage.

The solid line relationship between the Treasury and Controller in the context of financial management in chemical companies can be explained as follows: The Treasury function involves managing the company's cash and investments, ensuring the liquidity of the company, and investing company funds in low-risk investments (Duha, 2022). And the Controller function includes planning and managing all the company's financial resources, approving expenditures and managing income, and controlling costs to minimize expenditure (Admin, 2022; DConsulting Business Consultant, 2023).

The solid line relationship between Treasury and Controller is important in financial management because both functions are responsible for managing the company's financial resources. Treasury manages cash and investments, while the Controller plans and manages all of the company's financial resources. The two functions must work together to ensure that the company's financial goals are achieved. Treasury must ensure that there is enough cash to meet the company's needs, while the Controller must ensure that all expenses are properly approved and managed to minimize expenditure. By working together, Treasury and Controller can help maximize the value of a company's financial resources and ensure its long-term viability.

5. Conclusion

Chemical companies are companies involved in the production of chemical substances, including petrochemicals, agrochemicals, pharmaceuticals, polymers, paints, and oleochemicals. Chemical products are marketed by chemical companies to finished goods manufacturing companies, which usually include pesticides, polymers, electronic chemicals, surfactants, construction chemicals, industrial cleaning agents, aroma compounds, coatings, food additives, paper chemicals, oil chemicals, paper adhesives, adhesives, cosmetics, and others. In a chemical company, there is one function, namely the treasury function. The treasury function is a very important financial function in companies, including chemical companies. One of its functions is to check whether the financial condition of the business is healthy to be able to maintain its business continuity or not. Treasury is responsible for all liquidity asset management, including working capital management, as well as monitoring the company's cash inflows and outflows. In addition to the treasury function, there is also a control function in chemical companies. In chemical companies, the control function plays an important role in ensuring that financial resources are used effectively and efficiently. Identifying errors and taking corrective action, and controlling functions can also help minimize deviations from standards and ensure that the company's financial objectives are met.

Among the relationships between treasury and controllers in chemical companies. These two functions are also linked in a "dotted line" and "solid line" relationship in their respective functions in chemical companies. In chemical companies, the "dotted line" relationship between Treasury and Controller can be explained as a weaker relationship compared to the "solid line" relationship. Treasury and Controller have different responsibilities within the company. Treasury is responsible for managing the company's finances, including investments and fund management, while the Controller is responsible for managing the company's accounting and financial reporting.

Although both have different responsibilities, they still have to work together to achieve company goals. This "dotted line" relationship shows that Treasury and Controller have a looser and less closely related relationship with their respective responsibilities.

In a reporting relationship, the dotted line is a weaker relationship. Meanwhile, the dotted line means that reports are still required. From this, it can be concluded that the "dotted line" relationship between treasury and controller indicates that the two still have to coordinate and communicate, but their respective responsibilities are not too closely related to each other. The dotted line relationship between Treasury and Controller facilitates effective collaboration, coordination, and knowledge sharing between the two functions. This ensures that financial management, control, and reporting activities are aligned, and enables a comprehensive approach to managing financial risk and optimizing financial performance.

While in the context of relationships, "Solid Line" refers to the close relationship between Treasury and Controller. Treasury is responsible for managing the financial aspects of the company, including cash management, financial risk management, investment, and financing. Meanwhile, the Controller is responsible for ensuring the integrity of financial data, preparing financial reports, and maintaining compliance with accounting regulations. Strong cooperation between Treasury and Controller is essential in maintaining the company's financial balance. Treasury provides relevant financial information and data to the Controller, which is then used in the accounting and reporting process. Conversely, the Controller provides Treasury with financial insights to assist in making investment, cash management, and financing decisions. With effective cooperation between Treasury and Controller, companies can better achieve their financial goals. Treasury and Controller support each other in terms of risk management, cash flow monitoring, financial strategy determination, and fulfillment of legal and regulatory compliance.

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