The Psychological Aspects of Accounting and Relation With The "Quality" of Information in Chemical Corporation

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Abstract : This paper examines the psychological aspects of accounting on the quality of the company. Psychological aspects in the context of accounting can be seen how the company's management in managing profits as a result of the quality of the company's work. Good work quality will affect the company's image from the public's point of view. Management is given trust by shareholders or company owners in operating the company, in taking responsibility for the results of its performance, management compiles and reports the company's operational results and the company's financial position to shareholders or other stakeholders by making company finances. Financial performance can be used as an assessment by investors or potential investors to determine the prospects or future development of the company. Financial performance is a measure of the achievement achieved by a company in a certain period with good financial performance that will attract investors to invest in the company (Kusna & Setijani, 2018). Therefore, the main objective in this study is to analyze how the psychological aspects of accounting on the quality produced by the company. By using chemical companies as objects in this study.
Keywords : The Psychological Aspects of Accounting, Quality, Chemical Corporation

1. Introduction

Several literatures discuss the relevance of psychological aspects in carrying out business activities to be able to achieve satisfactory results. In the context of accounting, this topic is of great interest to researchers to identify variables associated with both positive and negative indices in psychological adjustment (Chang et al., 2019). Every action produced by individuals or groups can determine the success of the company in achieving the desired goals.

The company's success can run if market agents do not have psychological problems or can be said to be cognitive bias. Cognitive bias is a form of deviation made in decision making that can harm the company (Soll et al, 2015). Most deviant behavior occurs due to ineffective conflict of interest management (Clements et al., 2012). Based on Goto, (2007) Ignoring bias can make a company bankrupt and cause huge losses. Therefore, companies need to monitor every business activity in order to avoid risk-free business (Habib et al., 2022).

There are many forms of deviations that people make to improve the quality of their work. One of them is doing earnings management. Earnings management is carried out so that the company's performance results look good so that the information produced is of high quality (Muda et al., 2018). The resulting information can be in the form of financial statements with low profits so that they can be manipulated with the aim of attracting the attention of investors to invest in the company ((Fatmawati, 2013), Chiang et al., 2017). Barth et al, (2008) Earnings manipulation can make negative earnings perceived as higher quality earnings. The findings of Leuz et al, (2003) show that companies in a weak investor protection environment show evidence of earnings management, this finding is also similar to the results of a study conducted by (Lang et al, 2006). In this case, companies that have weak performance will be motivated to carry out earnings management.

Our research contributes to the previous literature that discusses behavioral bias in business decisions, namely the act of performing earnings management (Cavaliere et al., 2022). Therefore, we determine this topic is the psychological aspects in the context of accounting to the quality of the company, which is the focus of our study is a chemical company that will be sampled in this study. This study aims to analyze how the relationship between psychological aspects of accounting and the quality produced by the company.

2. Literature Review

2.1. Psychological Aspects in Accounting

An understanding and awareness of this aspect of psychology in accounting is important to minimize biases and weaknesses in decision-making and information presentation.

a. Aspects of Cognitive Bias

Cognitive Bias according to behavioral finance is related to decision making which is a process of thinking without being based on rational considerations but not based on strong reasons. Cognitive Bias leads to Irrational decisions (Restu et al., 2022) The behavior that causes cognitive bias is the first group that simplifies the decision-making process or known as Heuristic, The second group is biased reaction to information consisting of 1. Overreaction (overreaction to information) 2. Conservatism (slow reaction to information) 3. Anchoring and adjustment (reaction that is fixated on information and does not make adjustments) 4. Confirmation bias (attitude of having confidence only in certain information), The third group is those who make understanding and adjustment biases consisting of 1. Excessive Optimism and Overconfidence (overconfidence in success) 2. Mental Accounting (behaving differently depending on the type of investment made) 3. Framing Effect (depending on the delivery event) 4. Disposition Effect (making decisions not at the right time). These cognitive biases can lead to the presentation of information that is not objective or accurate.

b. Aspects of Self-Control

Self-control is an individual's ability to control emotions or impulsive actions that affect accounting decisions. Self-control is very important for accountants as a barrier to prevent accountants from committing acts of financial manipulation. Self-control can also mean the ability to organize and direct forms of personal behavior towards positive consequences. According to Block and Block (Gufron & Risnawati., 2010) There are three types of self-control quality, namely 1) Over Control (is a self-control that is carried out by individuals in an excessive manner that causes individuals to hold back a lot in reacting to stimuli), 2) Under Control (is an individual's tendency to release impulsivity freely without careful calculation), and 3. Appropriate Control (is an individual's control in an effort to control impulses appropriately.). The power of good self-control is needed to produce honest and accurate information.

c. Aspects of Ethical Perception

Ethical perceptions play an important role in decision making and accountants' behavior in dealing with ethical issues. Ethical behavior of accountants is indispensable for the high standards of the accounting profession. An internal factor that can influence ethical perceptions in making a decision is love of money. Love of money is the attitude/behavior of a person's love of money. Other factors that influence ethical perceptions are macheviallian traits (perceptions regarding perceptions of relationships that occur between individuals) and ethical sensitivity (individual awareness in assessing ethical behavior). The higher the macheviallian nature, the lower the ethical perception. Ethical perception can also be said to be the way individuals interpret and respond to ethical issues. A low level of ethical perception can affect the quality of accounting information, because individuals may tend to make decisions that harm the interests of others or carry out dishonest accounting practices.

d. Motivation and Incentive Aspects

Motivation is an enthusiasm that exists within individuals and can control their behavior and the intensity of energy that individuals have to complete a task or achieve a goal can indicate their level of motivation.

Motivation and Incentives : The motivations and incentives that individuals have can affect their behavior in presenting accounting information (Irawan et al., 2022). If individuals have strong motivations to achieve certain outcomes, such as improving Accounting performance or obtaining incentives, this may influence their accounting decisions. The wrong motivation or inappropriate incentives can lead to information manipulation or misappropriation that is detrimental to the quality of information.

e. Communication and Cooperation

Communication and cooperation are very important because they can affect the quality of accounting information. Openness in sharing information, collaboration in analyzing data, and a shared understanding of accounting objectives can improve the quality of the information produced.

2.2. Accounting Information Quality

The main function of accounting information is to collect and store data about the business activities of each company. Callen et al (at Falana et al) states that the quality of financial information is the accuracy of financial reporting that provides financial information to investors. The quality of accounting information is based on accurate predictions of future cash flows for investors that will be used to make decisions. The emphasis is on the reliability or accuracy of accounting information when used for prediction (Falana et al., 2023). It is important to note that obtaining high quality accounting information can involve efforts between the management of the entity that prepares the financial statements, the external auditors who are tasked with verifying the financial statements, and the information users who rely on the information for decision making. High-quality information can help guide decision-making.

Accurate and quality financial statements are effective tools that can be used as considerations for conducting financial analysis, possibilities and interpretations (Muda et al., 2017). Accounting quality is not only influenced by accounting standards but also influenced by economic and political factors that affect the incentives of managers. Internally, in addition to accounting standards, another factor that can affect the quality of financial statements is the level of governance within the company because good corporate governance will affect compliance with the application of accounting standards in the company. Quality accounting information has the following categories:

a. Relevance

Relevance is the ability to disclose information by financial statements in describing and summarizing the value of the company (Indriyana et al., 2019, Muda et al., 2019). Relevance is the ability of information information so that it can help users to easily make choices when faced with several alternative decisions (Suwardjono (at Indriyana et al., 2019)).

b. Compliance with Accounting Standards

Accounting quality is strongly related to compliance with applicable accounting standards. Accounting standards, such as International Financial Reporting Standards (IFRS) or Generally Accepted Accounting Principles (GAAP), provide clear guidance on how transactions are recorded, how financial statements are prepared, and other accounting principles. Compliance with standards is important to ensure the quality and consistency of accounting information.

c. Neutral

Accounting information should not favor either party. And must appear neutral. If accounting information is not neutral, it will undermine the credibility of the company because it will be considered to benefit one party and can make the other party lose.

d. Timeliness

If an accounting information is done or presented on time, it will be easy for the company to make decisions because accounting information is one of the guidelines in the company to make important decisions for the progress of the company.

2.3. Chemical Corporation

Chemical companies are companies that produce chemical substances. They include petrochemicals, agrochemicals, pharmaceuticals, polymers, paints, and oleochemicals. These companies produce chemical substances into new substances where the separation is based on properties such as solubility or ion charge, distillation, transformation by heat and other methods. The industrial products produced by this company are polymers and plastics, mainly polyethylene, polypropylene, polyvinyl chloride, polyethylene terephthalate, polystyrene and polycarbonate. Sales from chemical companies consist of several categories including basic chemicals (about 35-37% of sales), science (30%), specialty chemicals (20-25%) and household products (10%). Examples of the world's largest chemical companies include BASF, Bayer, Ferro, Solvay, Braskem, Celanese/Ticona, Arkema, Degussa, Dow, DuPont, Eastman Chemical Company, Exxon Mobil, Givaudan, INEOS, LG Chem, Lyondell Basell, Mitsubishi, Monsanto, PPGIndustries, SABIC, LANXESS, Shell, Wanhua.

3. Methods

This research uses a qualitative descriptive approach, by collecting data and analyzing phenomena on the relationship between aspects of accounting psychology and company quality. The access we use in collecting this data is Google scholar, Sciencedirect, Emerald insight, Taylor and francis, and etc.

The object that is the sample in this study is a chemical company. Data sources are obtained through journals or previous literature studies that can add insight into the writing of our research.

4. Result and Discussion

As presented in the literature review, the psychological aspect of earnings management can be applied in the chemical (pharmaceutical) industry. The identification process is as follows :

1. Identify financial statements

Financial statements are documents that record the financial information of a company. Financial statements are designed to provide an overview of the company's financial performance, financial position, cash flow, as well as changes in equity during a certain period. As part of identifying financial statements, chemical companies must consider the history of financial statements because one of the conditions in identifying financial statements is the clear and enforceable rights of each party involved. Another criterion for identifying financial statements involves understanding the types of financial statements that exist and how to recognize each financial statement.

A case in point is the company PT Kimia Farma, Tbk (KAEF) which is a government-owned pharmaceutical manufacturer in Indonesia. PT Kimia Farma as one of the manufacturing companies listed on the IDX is an example of financial statement manipulation.

As of December 31, 2001, it showed a net profit of Rp 132 billion and the financial statements were audited by Hans Tuanakotta & Mustofa (HTM). However, the Ministry of SOEs and Bapepam considered that the net profit was too large and contained elements of management. On October 3, 2002 Kimia Farma's 2001 financial statements were restated. The profit presented was only Rp. 99.56 billion, a decrease of Rp. 32.6 billion, or 24.6% from the initial profit reported.

From this case, identification and assessment of ethical risks can be taken. Where to assess and identify HTM stakeholders, consider the capabilities of HTM human resources with the expectations of stakeholders and assess the risk of inability of HTM human resources to carry out audit tasks and prioritize the reputation of KAP HTM.

2. Identifying Company Performance

When identifying the performance of a pharmaceutical company whether or not the company is practicing earnings management through its financial statements can be difficult. Earnings management refers to practices undertaken by companies to influence financial statements with the aim of creating a false impression of actual financial performance. Some of the common points used in earnings management include delaying revenue recognition, inflating or delaying expense recognition, use of aggressive estimates, and others.

Company performance can be measured using financial information when company performance decreases. It is not uncommon for management to manipulate financial data in the financial statements so that the company's declining financial condition is not known by shareholders, company owners, or other users of financial information (Chariri and Ghozali, 2007). The act of manipulating financial data is called earnings management (Herawaty, 2008).

For cases, based on previous research in recent years many companies have lost most of their profits in a short time, one of which is shown by the decline in net profit at the companies PT Waskita Beton Precast Tbk (WSBP) and PT Fajar Surya Wisesa Tbk (FASW). In 2019, PT Waskita Beton Precast (WSBP) recorded a decline of 6.66% yoy from Rp 8 trillion to 7.47 trillion. In fact, WSBP's net profit decreased drastically by 26.94% yoy to Rp 806.15 billion. The same case was also experienced by PT Fajar Surya Wisesa Tbk (ASW), this paper producer experienced a decline in revenue in 2019 by 16.8% yoy to 8.27 trillion, which was previously Rp 9.94 trillion. Even FASW's net profit decreased drastically by 31.06% yoy to Rp 968.83 billion. This was due to declining demand for domestically produced goods. In addition, export sales in the first quarter of 2019 also fluctuated. Even when entering the second quarter of 2019, export performance declined sharply which occurred in October 2019 (Kontan.co.id).

3. Identifying Leverage with Earnings Management Practices

Investors will look at the company's smallest leverage ratio because the leverage ratio affects the impact of risk that occurs. The smaller the leverage ratio, the more risky it is. And vice versa. In this way, when the company has a high leverage ratio, the company tends to practice earnings management because the company is threatened with not being able to fulfill its obligations by paying its debts on time. As a consequence of restricted accrual earnings management, companies that have qualified auditors will choose to perform real earnings management (Herusetya, 2012).

The following financial data and ratios of basic industry and chemical sector companies are attached in the following table :

Table 1. The Financial Data

Basic Industry and Chemicals	Average in 2019			
	Assets	Liabilities	Equity	Net Profit
Cement Sub Sector	Rp 18,410	Rp 5,956	Rp 12,454	Rp 1,115
Ceramics, ornament and glass sub-sector	Rp 3,078	Rp 1,316	Rp 1,489	Rp 51
Metals and similar sub-sectors	Rp 4,292	Rp 2,341	Rp 1,950	-Rp 78.19
Chemical Sub-sector	Rp7,280	Rp3,375	Rp3,905	Rp586
Plastics and Packaging Sub-sector	Rp1,494	Rp708	Rp786	Rp31
Feed and Livestock Sub-sector	Rp12,539	Rp5,910	Rp6,629	Rp1,149
Wood and its Processing Sub-sector	Rp958	Rp1,006	-Rp47	Rp49
Pulp and Paper Sub-sector	Rp15,784	Rp9,706	Rp6,079	Rp256

Data source : www.idx.co.id, 2020

Based on the data presented in the table above, it is known that the average composition of funds used by companies in each subsector is not the same. Some companies have a greater use of external funds (Liabilities), and some have greater equity. Companies certainly have their own reasons why they are more interested in using a larger portion of debt than equity.

There are two views on the shape of company size on earnings management. The first view is that small company sizes are considered to practice earnings management more than large companies. This is because small companies tend to want to show the condition of the company that is always performing well so that investors invest in the company. Large companies are more concerned by the public so that they will be more careful in conducting financial reporting so that the impact on these companies is to report their conditions more accurately (Nasution dan Setiawan, 2007). However, the second view views that firm size has a positive influence on earnings management. Watts and Zimmerman (1990) state that large companies that have high political costs are more likely to choose accounting methods to reduce reported earnings than small companies.

4. Identifying Financial Statements and Earnings Management Cases

Financial reports are a source of information that presents the results of company performance and communication media for interested parties, both internal parties such as management and external parties such as investors, creditors, government, and others. Financial reports are the main reference for the decision-making process for information users. therefore, financial reports must be presented correctly in accordance with applicable Financial Accounting Standards.

The preparation of financial statements using the accrual basis (basic accrual) which is the recording of transactions based on rights and obligations not based on cash receipts or disbursements. The use of the accrual basis is considered more rational and fair in reflecting the company's financial condition, but can provide flexibility for management in choosing accounting methods as long as they do not deviate from the Financial Accounting Standards.

Flexibility in determining accounting methods is often used by management when conditions occur that cannot achieve the target as expected by the company. Management tries to show good financial performance in managing company operations in order to generate maximum profit or profit. In this action, earnings modifications such as increasing profits, decreasing profits, or flattening profits based on the interests of some people or organizations are commonly known and referred to as Earnings Management.

Earnings management occurs quite a lot in Indonesia, here are some companies with cases related to earnings management seen from previous research.

Table 2. The Earnings Management Occurs

No	Company Name	Cases
1.	PT Garuda Indonesia	In the 2019 report, there was an insignificant increase in profit of USD 809.85 thousand with a loss in 2017 of USD 216.5 million. In this action, it is suspected that the company's financial statements were manipulated to make it look better.
2.	PT Inovisi Intracom	In this case, the Indonesia Stock Exchange (IDX) found indications of misstatements in INVS's financial statements for the September 2014 period. In addition, the IDX also found misstatements in the items of cash payments to employees and cash receipts (payments) to employees and net receipts (payments) of related party debt in the cash flow statement.
3.	PT Kimia Farma	Based on the examination of the Capital Market Supervisory Agency (Bapepam) in 2002, it was found that PT Kimia Farma made mistakes in the presentation of financial

		statements resulting in overstated profits of Rp 132 billion, which should have been Rp 99 billion.

(Fatimah, 2019)

There are several factors that influence earnings management, including leverage and managerial ownership. In previous research, it was explained that leverage and managerial ownership can affect the level of earnings management. a company with a high level of leverage indicates that the company has a large debt. This can lead to the company's tendency to violate the debt agreement which has an impact on the possibility of accelerating maturity, increasing interest, and renegotiating the debt period. In research (Fatimah, 2019) states that companies with high leverage are less involved in earnings management, because companies assume that creditors are more interested in debt accounts than other accounting information.

Managerial ownership is the amount of shares owned by management in the company. Management motivation can influence earnings management actions. If the manager has share ownership in the company being managed, the manager will be motivated to improve company performance and shareholder prosperity in accordance with Jensen and Meckling's research. Because the manager considers that the interests of shareholders are equal to the interests of management. So that share ownership can suppress earnings management practices.

However, with a high level of profit (stable), the company's risk will be small. This is what triggers management to reduce company risk by trying to stabilize the company's financial level in various ways, in order to avoid the risks that might occur.

5. Conclussion

This study aims to analyze the psychological aspects of accounting on firm quality. We use a sample of chemical companies that intensively discuss the psychological aspects of accounting on firm quality. In particular, we focus on the psychological aspects of accounting from the perspective of earnings management.

The results of our study show that aspects of accounting psychology can be seen from the point of view of earnings management. There are 3 processes that can be done for identification in earnings management in chemical companies, namely, Identifying financial statements, Identifying company performance, Identifying leverage with earnings management practices, and Identifying financial statements and earnings management cases. In addition, in this study, there are two views in the form of company size on earnings management. The first view is that small company sizes are considered to practice earnings management more than large companies, and the second view is that company size has a positive influence on earnings management.

This research has limitations, including: 1) Limited data sources, we cannot collect data in more detail. 2) The study uses aspects of accounting psychology to see the quality of the company, which in this case has a shortage of factors that find different results. Future research is expected to expand and add several factors that support this topic so that it can provide even better results.

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