

Managerial Accounting And The Business Environment In Pharmaceutical Companies

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Abstract

Managerial accounting and business environment is playing the major role in pharmaceutical companies to facilitate the managers driving the business strategy into the right path and increase the effectiveness of the pharmaceutical companies by proper information that have been given. This paper will provide the insight of managerial accounting and business environment impact in pharmaceutical industry and the condition of pharmaceutical industry in Indonesia by collecting and analyzing information from various journals.

Keywords: Business Environment, Green Supply Chain, Industry, Managerial Accounting, Pharmaceutical.

INTRODUCTION

Entering the era where the business landscape is actively changing, every company requires talented managers who are able to keep up with current market requirements and make prompt business decisions to drive the business into the right path. Obviously proper information need to be provided to facilitate the managers in doing their jobs. Managerial accounting is an essential practice in a company to providing proper information by identifying, analyzing and measuring required information which will eventually be given to the managers who direct and control the company's operation (Azmi et al., 2018). All factors which affecting the managerial accounting result and company's performance are refers to the business environment. Business environment plays a major role in achieving the company's goals since it has uncertain and unpredictable conditions that can influence the business itself. Especially in pharmaceutical company who is authorize on researching, developing, and producing drugs for common, rare and new disease. Pharmaceutical company have experienced a complex environment, it's very difficult to predict the health conditions like what we recently experienced where the covid19 (unknown disease at that time) have swiftly spreaded in the society (Sitorus et al., 2022). Hence this paper will focus to elaborate managerial accounting and business environment in pharmaceutical companies.

LITERATURE REVIEW

Managerial Accounting in Pharmaceutical Companies

Managerial accounting can be elaborated as the provision of information to help the organization make better decisions and improve the efficiency and effectiveness of the company's operation. The nature of health care has very specific implications for the scope and nature of cost accounting. Health care in most countries is a heavily regulated sector, and this regulation has a direct impact on definitions of costing including the calculation itself, but also linked concepts such as the kind of cost object that becomes a focus for analysis (Chapman, Kern & Laguecir, 2014).

Managers of pharmaceutical industry requires financial and non-financial data to making strategy by forecasting about products, services, prices and incurred costs and ensuring that plans are going well and achieved. The drug price competition and patent are affecting the growth in the supply of generic drugs, by lowering the cost it eliminated the duplicative testing requirement and increased the availability of generic drugs in the market. Meanwhile the ability of manufactures to exploit the different demand of consumers can caused price discrimination in the pharmaceutical industry which eventually benefits the consumers. As of the industry has expanded widely it would be good if they can increasing the prices in an inelastic demand market and

lowering the price in elastic demand market to recover their investment (Abushah and Rahman, 2003).

In the past years government conveyed to the society that all people will have equal access to drugs since many countries have a problem of access the drugs for the poor. The WHO expert committee defines essential drugs as below:

“Essential drugs are those drugs that satisfy the health care needs of the majority of the population; they should therefore be available at all times in adequate amounts and in the appropriate dosage forms, and at a price that individuals and the community can afford”

But many poors said that drug's price is too high and not affordable because of patent rights. On the other hand, pharmaceutical industry claims that the drug's price is high due to the high cost of research and development of the new drugs and patent is necessary to ensure the protection of the research. To solve this issue, better regulation of health care is necessary, health care budgeting must established to ensure the access to drugs is afford all people (Martijn, 2022).

The The Relationship between Environmental Performance with Company Profitability concept of environmental performance usually refers to the amount of environmental damage caused by business activities carried out by the company (Putri et al., 2019). Environmental damage resulting from less company operations will improve environmental performance. Conversely, the greater the impact of environmental damage, the worse the company's performance. The rating program can be used to assess capabilities in environmental management or is called PROPER. Profitability is the company's ability to earn a profit in terms of sales that have been made. Companies that have high profits mean good performance and vice versa. In increasing company profits, companies can effectively and efficiently manage their resources. Research (Putri et al., 2019), (Nawang Sari & Nugroho, 2019), (Asjuwita & Agustin, 2020), (Mardiana & Wuryani, 2019) states that environmental performance can increase company profitability. Based on the theory and empirical studies that have been carried out by several researchers, the hypothesis in this study is H4: environmental performance has an influence on company profitability.

The Relationship Between Intellectual Capital and Company Profitability Intellectual capital can be interpreted as intellectual material that has been formalized, captured, and leveraged to create wealth, by producing an asset of high value for the company's sustainability (Ihyaul, 2009). The increasing phenomenon of IC causes the measurement method of IC to become an important topic, considering the potential benefits that can be obtained by the company either directly or indirectly on the management of the company's IC assets. IC asset management which will have an impact on efforts to increase company profits. The role of intellectual capital for companies is increasingly strategic because many companies have realized the role of intellectual. Capital by making intellectual capital the key in increasing profits for the company (Marfuah & Ulfa, 2014). Several studies linking IC with company profitability include: (Cahyani et al., 2015), (Qomariah et al., 2019), (Hermanus et al., 2013), (Marfuah & Ulfa, 2014), (Halim et al., 2016) stating that intellectual capital can increase company profitability. Based on the theory and empirical studies that have been carried out by several researchers, the hypothesis in this study is H5: intellectual capital has an influence on company profitability.

The Relationship between Corporate Social Responsibility and Corporate Profitability Corporate social responsibility can be interpreted as the commitment of the company or the business world to contribute to sustainable economic development by paying attention to corporate social responsibility and focusing on the balance between attention to economic, social and environmental aspects (Untung, 2009). Corporate social responsibility has an impact on increasing the company's economic performance, such as: increasing sales, market legitimacy, increasing investors in the capital market, increasing value for the welfare of owners and the like (Hadi, 2011). The community will give an assessment of the company that pays attention to the surrounding environment from economic, social and environmental aspects. Corporate Social Responsibility (CSR) can be used as a new marketing tool for companies if it is carried out continuously with the hope that company profits can increase. Research (A.S. Putra, 2016), (Rahayu et al., 2014) states that corporate social responsibility can increase the company's profit. Based on the theory and empirical studies that have been carried out by several previous researchers, the hypothesis in this study is H6: corporate social responsibility has an influence on company profitability.

The Relationship between Environmental Performance and Financial Performance Several studies on the disclosure of environmental and social information use legitimacy theory as a basis in explaining the practice of disclosing environmental information (Patten, 1992). Environmental performance is a measurable result of the environmental management system, which is related to the control of environmental aspects (Muda and Wahyuni, 2019). Environmental performance assessment is based on environmental policy. Environmental targets and environmental targets (ISO 14001). Companies that pay attention to the surrounding environment are related to the company's environment and the impact caused by the existence of the company will provide a positive value for the community towards the company's existence in the eyes of the community.

A positive assessment from the community will have a positive impact on the company's existence so that it can increase the company's profits and financial performance. Disclosure of environmental performance will have an impact on financial performance (Muda et al., 2021). Disclosure of environmental performance will have an impact on financial performance stated by several studies such as: (Nakao et al., 2007), (Testa et al., 2011), (Aniela, 2012), (Fitriani, 2013), (Haholongan, 2016), (Y. P. Putra, 2018), (Tahun, 2019), (Hardiyansah & Agustini, 2020). (Manrique & Martí-Ballester, 2017) also conducts research related to environmental performance which is linked to the company's financial performance. (Elsayed & Paton, 2005) states that

environmental performance has a neutral impact on firm performance. (Al-Tuwaijri et al., 2004) in his research revealed that “good” environmental performance is significantly associated with “good” economic performance, and also with more extensive quantifiable environmental disclosures of specific pollution measures and occurrences (Tambunan et al., 2018). Similar research was also expressed by (Meiyana & Aisyah, 2019), (Nurhudha & Suwarti, 2013), (Ong et al., 2019). Based on the results of previous research, the following hypotheses were formulated. H1: Environmental performance has an influence on the company's financial performance.

The Relationship between Intellectual Capital and Financial Performance Intellectual capital is one of the important strategic assets in economic-based knowledge (S.D. Lestari et al., 2017). High human capital will be able to encourage increased profits and financial performance of the company. Human capital is a combination of knowledge, skills, innovation and a person's ability to carry out their duties so that they can create value. The most valuable asset in a company is Human Resources (HR), especially intellectual capital (Nurhayati, 2017). Knowledge-based management patterns encourage companies to be able to manage intellectual capital effectively because intellectual capital is part of the intangible assets owned by the company.

The company's intangible assets such as intellectual capital have the potential to increase the added value of the company, therefore it needs good maintenance (Khasanah, 2016). Intellectual capital is an asset that is not real by nature, which is currently stated as the company's main asset in the form of a strategy that can increase the company's ability to compete and increase financial performance to a superior level (H.S. Lestari, 2017). Disclosure of information about intellectual capital (IC) in the annual report is one of the disclosures that is voluntary (Ihyaul, 2009). (Kurniawan, 2013), (Haryanto & Henny, 2013), (Iskandar et al., 2019), (Nursaid et al., 2020) states that companies that pay attention to the capital they have can improve the company's financial performance, because this capital is very important in a company. Similar statements were also expressed by several researchers regarding the relationship between intellectual capital and financial performance as expressed by: (Ongkorahardjo et al., 2008), (Santoso, 2011), (W & Firmansyah, 2012), (Gozali & Hatane, 2014), (Gozali & Hatane, 2014), (Sirojudin, Gatot Ahmad; Nazaruddin, 2014), (Agustina et al., 2015), (Habibah & Riharjo, 2016), (Dženopoljac et al., 2016), (H. S. Lestari, 2017), (Cahyono & Qomariah, 2017), (Sumani & Suryaningsih, 2020). Several other studies that also link intellectual capital issues with company financial performance and state that intellectual capital can improve the company's financial performance if it is managed properly, including: (Janosevic & Dzenopoljac, 2011), (Jordão & de Almeida, 2017), (Suseno et al., 2019), (Yusuf et al., 2020), (Gama et al., 2020), (Silviani & Noekent, 2020), (Azzahra, 2020), (Yurianda & Masdupi, 2020), (Hidayah et al., 2020), (R. Muhammad et al., 2021). Based on theory and empirical studies that have been conducted by several researchers, the second hypothesis in this study is H2: intellectual capital has an influence on the company's financial performance.

The Relationship between Corporate Social Responsibility and Financial Performance the social impact of the activities of a company is an important issue to be studied lately. This is because social impacts are closely related to company risks that arise from the relationship between the company and its stakeholders. Bad social impacts will increase the company's risk, disrupt relationships with stakeholders and ultimately affect the company's reputation (Darmawati, 2015). Companies are required to have social concern for the communities in which the company operates. This company's concern will have a positive value and in the end it can increase the company's profits and financial performance. Corporate social responsibility includes several aspects within the company, including relationships with employees, diversity, human rights activities, healthy products and also corporate governance and compensation policies (Pramukti & Buana, 2019). CSR is a corporate responsibility based on three basic principles known as the triple bottom line which consists of profit, people and planet (Pramukti & Buana, 2019). Corporate Social Responsibility can be used as a new marketing tool for companies if it is implemented sustainably. Corporate social responsibility is a company effort to pay attention to the environment in which the company does business. The company's business operations are committed not only to increasing corporate profits financially, but also to the development of a socio-economic area in a holistic, institutionalized and sustainable manner (Pratiwi & Setyoningsih, 2010). Corporate social responsibility is a mechanism for a company to voluntarily integrate attention to the social environment into its operations and interactions with stakeholders, which goes beyond social responsibility in the legal field (Nurhuda & Suwarti, 2011). Corporate social responsibility is a company effort to provide part of the profits it manages for corporate social activities (Qomariah, 2015). Research that links corporate social responsibility with financial performance results that corporate social responsibility carried out by the company can make company performance increase, among others, carried out by: (Tang et al., 2012), (Hamdani, 2014), (Darmawati, 2015), (Suciwati et al., 2016), (Yoon & Chung, 2018), (Cho et al., 2019), (Hafidzi & Qomariah, 2020). (Angelia & Suryaningsih, 2015) also argued that CSR disclosure had a significant effect on ROE, but had no effect on ROA. Companies that have a social responsibility to the community and the surrounding environment will be recognized by the community, which later on the products of the company will also be known by the community (Sari & Sinambela, 2008), (Angelia & Suryaningsih, 2015), (Darmawati, 2015), (Yulianingtyas, 2016), (Suciwati et al., 2016). Companies are required to pay attention to the surrounding environment and society with concern in the form of corporate social responsibility. This corporate responsibility can take the form of community welfare through good business practices and contributing a portion of the company's resources (Bidhari et al., 2013), (Hamdani, 2014), (Hamdani, 2014), (Hafidzi & Qomariah, 2020). Based on theory and empirical studies that have been conducted by several researchers, the second hypothesis in this study is H3: Corporate social responsibility has an influence on the company's financial performance.

The Relationship Between Company Profitability and Company Financial Performance Profitability can be interpreted as a measure used to assess the extent to which the company is able to generate profits at an acceptable level so that the company is able to survive. The company as a form of organization generally has a goal to achieve maximum profit or profit, both short-term and long-term goals (Gumanti, 2011). (Fahmi, 2014) said that performance is a description of the achievements achieved by the company in its operational activities, both in terms of financial aspects, marketing aspects, aspects of raising funds and distributing funds, technological aspects, and aspects of human resources.

There are many studies that link the company's profitability with the company's financial performance. (Halim et al., 2016), (IMGD Putra & Dana, 2016), (Surmadewi & Saputra, 2019), (Sudaryo & Pratiwi, 2016), (Gultom & Wijaya, 2013), (Pasaribu & Tobing, 2017) conducted research on the relationship between the company's profitability with the company's financial performance, the result is that the company's profitability can improve the company's financial performance. Based on the theory and empirical studies that have been carried out by several previous researchers, the hypothesis in this study is H7: The company's profitability has an influence on the company's financial performance.

Business Environment in Pharmaceutical Companies

Green Supply Chain is a product supply chain business model that is highly correlated with the implementation of the principles of sustainable development of business practices by paying attention to environmental aspects. Green Supply Chain Management includes environmentally friendly design and production as well as technology functions in recycling. The main objective of this supply chain model is to minimize resource consumption and adverse effects on the environment (Starostka-patyk, 2012). This supply chain model is also a concept that contributes to gaining competitive advantages that can meet client expectations for an environmentally friendly supply chain (Sarkis et al., 2016). Several aspects can be improved in efficiency in order to encourage the implementation of Green Supply Chain Management by the pharmaceutical industry in Indonesia including procurement, manufacturing, distribution and reverse logistics.

- a. **Procurement:** Considering suppliers who have obtained ISO 14000, OHSAS 18000 and/or the Restriction of Hazardous Substances Directive and place orders via email (paperless) (Beamon, 1999);
- b. **Manufacturing:** Production processes that use inputs with relatively low environmental impact, are efficient and produce little or no waste or pollution (Atlas & R, 1998);
- c. **Distribution:** Includes aspects of packaging and logistics. Packaging characteristics such as size, shape, and materials used have an impact on distribution because they affect the transport and characteristics of the product (Dandekar, 2012);
- d. **Reverse Logistics:** The process of sorting out the unused and expired products from consumers so the product can be destroyed properly (Zhudkk, 2008).

Steps that can be taken to implement Green Supply Chain Management in the pharmaceutical industry are as follows.

a. Pre-Production Stage

- Organize seminars for suppliers on environmental awareness.
- Guide suppliers to set up environmental programs.
- Invite all suppliers in the same industry to share knowledge and problems.
- Provide information about suppliers to achieve the advantages of production and environmentally friendly technology.
- Emphasize suppliers to take environmental action.
- Select suppliers according to environmental based criteria.

b. Production Stage

- Environmentally friendly raw materials.
- Include criteria-based environmental aspects in the production process considerations.
- Consider environmental design.
- Process optimization for waste and emission reduction.
- Use of environmentally friendly technology to save energy, water and waste.
- Apply the principles of total quality management (Total Quality Management).

c. Post-production stage

- Waste management in an environmentally friendly manner.
- Take back expired packaging and products.
- Withdrawal of damaged company products.

- Provide information to customers that their products and production processes are environmentally friendly.
- Use of environmentally friendly transportation and minimal gas emissions

Meanwhile, environmental impact as a function of Green Supply Chain Management implementation can be defined as reduce the amount of waste generated, increase the efficiency of energy use, reducing air emissions, reducing water emissions, and reducing fuel consumption is not environmentally friendly.

The Situation of Pharmaceutical Companies in Indonesia

Pharmacy is one of a potential industry in Indonesia, in every year there is a significant increment of investment from both foreign and domestic investment. The advantages from pharmaceutical industry is the drugs that have been made by the pharmaceutical industry of Indonesia itself. One of the big pharmaceutical industry in Indonesia is Kimia Farma. Quoted from bisnis.com news, Minister of Health Budi Sadikin said “the pharmaceutical industry in Indonesia can generate revenue of USD 32 billion or equivalent to IDR 400 trillion per year”.

To objectify the revenue of pharmaceutical industry in Indonesia, ministry of health will attempt to make all government procure the drugs directly from local pharmaceutical industry. The World Health Organization (WHO) explains that Covid19 is an infectious disease caused by a corona virus which can cause death. Hence, the pharmaceutical industry is required to make drugs and vaccines to take care and increase the immune of Indonesia’s citizen and minimize the spread of virus.

The opportunity to objectify the resilience of pharmaceutical industry, the minister of industry Agus Gumiwang Kartasmita stated there were 220 pharmaceutical industry in Indonesia and 90 of them focused in the production of drugs. According to data from the ministry of health, till 2021 there were 241 pharmaceutical manufacturing, 17 raw material for pharmaceutical industry, 132 traditional pharmaceutical industry, and 18 natural extraction industry. Indonesia is exporting pharmaceutical products and medical devices from several countries such as Netherland, England, Poland, Nigeria, Vietnam, Phillipines, Myanmar, Singapore, South Korea and United States.

METHOD

The method used in writing this scientific work is a literature study by collecting data from various studies that have been published in accredited national and international journals including the Supply Chain Management Journal, Journal of Operations Management, and Review of Public Administration and Management. Secondary data was also obtained from supply chain books, namely Green Manufacturing, Handbook of Technology Management. This paper also evaluates the Green Supply Chain model as a supply chain method for pharmaceutical products along with theoretical and practical case studies.

Descriptive approach also applied in this study through a collection of previous literature on the origins of public sector accounting standards. This research will provide a theoretical description of the relationship between the management accounting and business environment in the Pharmaceutical Industry. These concepts are to analyzed the market requirements for consideration in increasing the effectiveness of pharmaceutical industry. This research will add deeper insight into management accounting and business environment in pharmaceutical industry.

RESULTS AND DISCUSSION

Results

According to this paper, the effectiveness of pharmaceutical companies are influenced by managerial accounting and business environment. Below are the impact of managerial accounting and business environment in pharmaceutical companies:

- Financial and non financial of pharmaceutical companies are necessary to help managers in taking business decision promptly.
- Many poors can’t afford the drugs due to the price is too high hence government need to take thorough step to increase the healthiness of the country by giving the investment of pharmaceutical industry to lowering the prices of drugs.
- Pharmaceutical companies need to increasing the drug’s prices in an inelastic demand market and lowering the drug’s price in elastic demand market to recover the cost.
- Green supply chain management should be applied in pharmaceutical industry to avoid the drug’s waste pollutes our environment.
- Indonesia’s government can utilizes many pharmaceutical industries in Indonesia to increasing healthiness level of Indonesia’s citizen.

Discussion

The emergence of new disease in the past years is pushing pharmaceutical companies to research and develop the new drugs which impacting on the financial of the companies. Optimum performance can be gained by utilizing management accounting system so companies can execute the correct steps to manage the operation. Basically there are two types of performance measures such as accounting based (Return on equity (ROE) and return on investment (ROI)) which more controllable by managers cause they have the sales data and strategy meanwhile the market based is out of managers control due to it depends on market requirement. Some trainings also need to be conducted to train the managers become more effective.

These programs related to environmental conservation in the future will be supported by the community and consumers, which in the end the community and consumers will have high trust in the company. This trust will encourage consumers to become loyal consumers for the company, where this loyalty will increase sales of products issued by the company. Companies in implementing environmental performance and environmental disclosure will require no small amount of funds. So the company needs a high level of profitability in order to provide benefits for investors and continue to carry out its social responsibility to the environment and society. Disclosure made by companies can generate many advantages. The company fulfills social needs and higher self-disclosure, increases public trust while increasing the company's image in the eyes of the public who will buy the company's products or invest in the company's operations through investment. Environmental disclosure has a positive effect on company profitability, which makes environmental disclosure a thing that can be applied by companies to increase the company's profitability.

The main aspects that drive the industry to implement Green Supply Chain Management are regulatory pressures and supply chain pressures. The regulation that encourages the industry to implement Green Supply Chain Management is the Presidential Regulation of the Republic of Indonesia Number 61 of 2011 concerning the National Action Plan for Reducing Greenhouse Gas Emissions.

Total Quality Management (TQM) consist of seven practice, namely management commitment, supplier quality, employee involvement, leadership management, customer orientation, continuous improvement and quality management system, and with respect to business performance. This variabel was analyzed through four different perspective, namely financial, customer, internal Business process and learning & growth. Leadership management has greater effect on the successful of TQM practice compared to other TQM dimensions. This study also provides a particular contribution for the companies and expect to be used as feedback related to the execution of their TQM implementation to improve their business performance.

CONCLUSION

Based on the results of the literature review, it shows that in Indonesia there is still a need for a deeper understanding of the application and implementation of Green Supply Chain Management, especially in the pharmaceutical industry and also that the level of industry awareness about environmental problems caused by business operations must also be increased. The Green Supply Chain Management model framework is very important to be implemented in Indonesia in order to minimize the adverse impacts caused by a series of pharmaceutical industry business processes on the environment. There is also a need to increase compliance with regulations set by the government regarding the national action plan on environmental aspects.

The absence of environmental performance on financial performance does not mean that the company does not care about the surrounding environment, but it could be that the company has paid attention to the environment in which the company operates, because by paying attention to the environment due to the company's operations, it is a form of company concern for the consequences of its operations. This lack of intellectual capital could be because the company has not been optimal in increasing its intellectual resources because it is still focused on the company's short-term goals; The variable of corporate social responsibility disclosure has a positive influence on the company's financial performance. The influence of corporate social responsibility on financial performance indicates that the company has implemented a level of concern for the existence of the community by taking part in community welfare programs around the company.

The environmental performance has no significant effect on financial performance. The absence of environmental performance on financial performance does not mean that the company does not care about the surrounding environment, but that the company's efforts towards the surrounding environment can be said to have not been maximized; Intellectual capital has no significant effect on financial performance. Intellectual capital has no effect on financial performance because the company's attention has not been maximized on knowledge assets rather than human resources owned by the company; Corporate social responsibility has a negative and significant effect on financial performance. The influence of corporate social responsibility on financial performance indicates that the company's efforts to care for the social environment of the community have been maximized so that it can have an impact on the company's financial performance; The company's profitability has a negative and significant effect on financial performance. These findings indicate that profitability can improve the company's financial performance.

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