

## Low Growth in State-Owned Enterprises Profitability, Weak Quality Cost Management?

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### Abstract

State-Owned Enterprises (SOE) has a role in growing the Indonesian economy for citizen prosperity, with most of its capital coming from the state. Indonesian SOEs are experiencing a challenge in decreasing their ability to make profits. This research will test the quality costs management in minimizing internal and external failure costs, so the SOE can produce the goods that result in competitiveness, sales growth, and high profits. This research's analysis unit (SOE) is listed on <https://bumn.go.id/> with 25 SOEs in total, using purposive sampling techniques. The data collection uses a secondary data method—taken from the financial report 2021. Data analysis was performed using a descriptive-verifiable statistical significance test (*t-test*). Based on the significance test results, evidence was found that quality costs affect profitability in Indonesian SOEs. Logically, the quality cost consists of prevention, assessment, and internal and external failure costs. Meanwhile, controlling cost consist of prevention costs and assessment costs. With huge controlling costs, SOE produced good quality and competitive products that will impact sales growth.

**Keywords:** *Quality Costs; Prevention Costs; Assessment Costs; Internal Failure Costs; External Failure Costs; Profitability.*

### INTRODUCTION

The state owns most State-Owned Enterprises' capital through direct participation of state wealth. In the national economic system, State-Owned Enterprises have an important role in actualizing the prosperity of citizens (Law of the Republic of Indonesia Number 19 of 2003 on State-Owned Enterprises, n.d.). Onward, State-Owned Enterprises will be written as SOEs.

In facing increasingly open business development, it is very important to conduct a health assessment of SOEs. The health level of SOEs can be assessed by comparing the results of calculating financial ratios. The health level of SOEs is determined based on (1) Financial Aspects; (2) Operational Aspects; (3) Administrative Aspects. These aspects imply that SOEs are healthy if financial performance is good, indicated by profitability, because it will impact external and internal parties.

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For external parties, it serves as a consideration for investing or investing in the company. Meanwhile, internal parties function as a consideration in making a decision in each company's activities for the company's progress. A good company is a company that prioritizes quality over price, meaning that the company must maintain product quality (Kreem & Al-yasar, 2020). The decrease in SOEs' performance is caused by the inability to compete (Rachmawati, 2022).

However, in fact, there are still several SOEs that have not been able to display the level of health of their companies under the existing regulations, one example being unable to display good financial performance, as stated by the Minister of Finance, Sri Mulyani Indrawati, when dissecting the performance of SOEs receiving PMN in 2020 with Commission XI of the DPR RI. She was "outraged" and dismantled the ulcer of SOEs because all SOEs were in poor condition, especially since the Covid-19 pandemic, where many SOEs are expected to go bankrupt. In terms of distress or the possibility of bankruptcy, 68% and 32% are in the safe category," she said. Next, from the debt-to-equity ratio (DER) standpoint, it was found that most SOEs' State Equity Participation (PMN) receivers have relatively high debt compared to comparable industries. Sri Mulyani even said that the debt is generally exceeding the comparable industries. The equal comparison to the comparable industries is only 2%; contrary, debt was recorded at 34% for the lower comparable industries.

Another fact about the performance of SOEs was conveyed by the Ministry of State-Owned Enterprises Utilization, Tanri Abeng, who said that the fall in several SOE companies' performance was not only caused by the Covid-19 pandemic but had occurred long before there was Covid-19. This fall happened in SOEs such as PTPN, BUMN Karya, and even Garuda Indonesia, which was caused by a lack of efficiency, leadership, and poor management. Thus, restructuring and efficiency must be implemented quickly and thoroughly to nourish SOEs before the losses get more extensive since some SOEs are in poor condition PT Pusri, Semen Baturaja (Siregar, Cahyadi, Igamo, Saggaf, & Sulbahri, 2022).

Quality improvement is one of the most important strategic factors for the company because it can reduce the level of damage up to zero (Naini, Santoso, Andriani, Claudia, & Nurfadillah, 2022). In addition, quality improvement can control and reduce quality costs, although sometimes the impact is indirect. Thus, making quality improvements means it can guarantee increased profitability because good quality will reduce costs (Quality Costs) and support the achievement of greater profits (Khairina Rosyadah, 2021). With efforts to control quality costs, the company's total productivity will increase because waste and inefficiency will be reduced. Customers will receive high-quality products or services at a low cost-per-unit level (Myeza, 2017).

Based on the background above, the researchers identify the problem of the importance of controlling quality costs to increase profitability.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Profitability is related to profit and is a measurement of efficiency used to measure the success and failure of a company's operations (Rachmawati, Romdani, & Ganiah, 2020). Profitability is a fundamental aspect of the company because, in addition to providing great attractiveness for investors who will invest their funds in the company, it is also a measuring tool for the effectiveness and efficiency of using all existing resources in the company's operational processes. Profitability is measured by the financial ratio of return on investment with the formula of profit after tax of total assets (Botchkarev, Care, Andru, & Care, 2011).

The profitability of SOEs is influenced by asset growth, liquidity, asset turnover, and liability (Muin & Wardini, 2020).

Quality costs help to show the importance of quality-related activities for management. They indicate non-quality costs for an organization and track the causes and effects of problems (Campanella, 1990). Quality costs are related to the prevention, identification, repair, and correction of low-quality products with the loss of production opportunity cost and sales time due to low quality (Blocher, Stout, & Gary, 2010). Eraslan & Önal (2021) claim that measuring and calculating quality costs is an important stage of the Total Quality Management program. There are several other definitions of quality costs, namely:

1. *Quality costs* are defined as those costs that occur due to the presence of low quality.
2. *Quality costs* are costs incurred by companies for *doing things wrong*.
3. *Quality costs* are costs incurred due to activities that are not directly needed to support the department's goals.

Components of quality cost include internal failure, external failure, appraisal cost, and prevention cost (Omachonu, Suthummanon, & Einspruch, 2004). Quality costs result from product development studies and process improvements because the products produced do not meet customers' needs (Eraslan & Önal, 2021). Quality costs with four restrictions (prevention, assessment, internal failure, and external failure) as implied by prevention and assessment activities and by losses caused by internal and external failures (Firescu & Popescu, 2015).

Other quality cost models from Rosiawan et al. (2019) include the stages of the verification model by numerical experiment and model parameter changes. Quality costs are reflected in reducing the cost of internal and external errors that decrease customer complaints (Teplická & Hurna, 2021).

An inverse relationship between assessment costs and prevention costs + failure costs means that failure costs are negatively correlated with quality (Omachonu et al., 2004). Quality cost measurement and analysis should be given great attention by recording them and implementing corrective measures to reduce costs as the cause of internal failure (Eraslan & Önal, 2021). Implementation of preventive

costs (part of quality costs) at PT. Putra Karangetang influences the decrease in failure costs and increases profitability (Tambingon, Karamoy, & Pangerapan, 2020).

Padmiwati (2018) also supported the claim that quality costs affect profitability by giving evidence at Kasih Ibu Surakarta Hospital when they mediate the operational cost. Prevention and assessment costs can be controlled by the company so that it affects the quality of the goods produced. The more product quality maintained, the more product sold at Cake & Cookies Corporation, meaning that profits and sales growth also increase (Aulia & Meyliana, 2019). Quality costs are proven to affect profitability by 64.3% in PT. Cerya Riau (Paidi, 2010).

The results of a study by Abulaila & Abdulrahman in 2019 on operating banks in Jordan showed a significant effect of quality costs on financial performance with the recommendation that banks should pay attention to assessment fees because these costs are very supportive in asset returns. One of the ways that Iraqi companies do about this matter is to increase competition by paying attention to the allocation of quality costs to industrial companies (Kreem & Al-Yasar, 2020).

Hansen & Mowen (2015) also found a *trade-off* between control costs (prevention costs and assessment costs) and failure costs (internal failure costs and external failure costs). As controlling costs increase, the failure cost of defective goods must decrease. This decrease happens because no more waste must be paid due to defective goods, which will later cause an increase in the quality of the goods produced.

Based on the description of the conceptual framework above, the research hypothesis that will be proposed is as follows:

H<sub>0</sub>: quality costs do not affect the level of profitability

H<sub>1</sub>: quality costs affect the level of profitability

## **METHOD**

### ***Population and Sample***

Thus, this study's population consists of registered companies in SOEs. Purposive sampling techniques obtained 25 companies as samples. Some particular considerations in sampling used are:

1. Companies that issue annual financial statements, which ended December 31, 2021, via the *bumn.go.id*.
2. Companies that publish audited annual financial statements by the Public Accounting Firm.
3. Companies that list components included in the quality costs in their income statement and letters to their financial statements.

### ***Variables Operationalization***

Quality Costs are costs incurred because there may have been a product with poor quality. Quality costs are an independent variable. The level of profitability measures a company's ability to generate profits by using the company's resources, such as assets, capital, or company sales, which are categorized as dependent variables.

### Data Analysis

This study used a descriptive-verifiable method. The descriptive method determines the highest, lowest and average values of quality costs and profitability. Moreover, the verifiable method is operated using the significant test (Sig.) and t-test. Simple regression analysis tests the functional or causal relationship of quality cost variables with profitability variables—data processing using *Eviews*. Simple linear regression:  $Y = \alpha + \beta x + \varepsilon$ .

### Hypothesis Testing

A hypothesis test is used to determine whether there is a positive or negative relationship between the quality cost variable and the profitability variable, using a significance level of 5%. The statistical hypothesis used is  $H_0$ : quality costs do not affect the level of profitability.  $H_1$ : quality costs affect the level of profitability.

## RESULTS AND DISCUSSION

Descriptive Analytics. The results of the descriptive analytics are displayed in Table 1.

**Table 1. Descriptive Statistics**

Variable	N	Min	Max	Mean	Std. Deviation
ROA	25	-0,580	0,1224	-0,0186	0,1281
Quality Cost	25	2.203.735.474	947.260.000.000	420.470.004.977	296.099.337.529

### Return of Assets

The lowest Return on Assets (ROA) is -0.580, found in PT. Garuda Indonesia, and its maximum is 0.1224 found in PT. Telkom. A mean value of -0.0186 indicated that the average ROA of the research sample was -0.0186. The standard deviation value of 0.1281 is greater than the mean value, meaning that the data for the ROA variables are varied.

### Quality Cost Variables

The maximum value produced is 947 billion Rupiah by PT. Pertamina and the minimum value of 2.203 billion Rupiah are found in PT. Rajawali, with a mean value of 420 billion Rupiah, indicates that the average value and standard deviation value of 296 billion are smaller than the mean value, meaning that the data for the Quality Cost Variables are less varied.

### Verificative Analysis

The verifier f analysis using the coefficients value is shown with table 2:

**Table 2. Simple Linear Regression Analysis**

Type	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	-18,819	3,584		-5,251	0,000
	Quality Cost	0,579	0,138	0,658	4,192	0,000

a. Dependent Variable: Profitability

The regression analysis results were made of the equation  $Y = -18.819 + 0.579X + \varepsilon$ . If the cost of quality is 0, then the profitability value is -18,819. The value of the profitability constant of 0.579 (positive) means that if the quality cost increases by 1 unit, the profitability will also increase by 0.579.

The results of the verificative analysis can be seen at the value of Sig. The result of the significance value is less than the significance limit (0.05). Meaning that  $H_0$  is rejected, that the variability of quality costs affects the variability of profitability in SOE companies.

The variability of quality costs affects profitability, meaning that the higher these costs are incurred, the higher the profitability opportunities obtained by SOE companies. The quality costs include prevention, assessment, and internal and external costs.

Quality costs are costs that affect the increase in profitability. This study's results align with those tested on the CV. Anabanua Cipta that quality costs affect profitability. Additional valuation fees will make company management easier, and profits will increase (Fajar, 2019). Quality costs consist of prevention, assessment, and internal and external failure costs into a unified set to name quality costs. The four costs are grouped into two large parts: control costs (prevention and assessment) and failure costs (internal and external). The greater the allocation given to the controlling costs as the investment can be the smaller the internal failures. Quality costs are costs that affect the increase in profitability. This study's results align with those tested on the CV. Anabanua Cipta that quality costs affect profitability. Additional valuation fees will make company management easier, and profits will increase (Fajar, 2019). Quality costs consist of prevention, assessment, and internal and external failure costs into a unified set to name quality costs. The four costs are grouped into two large parts: control costs (prevention and assessment) and failure costs (internal and external). The greater the allocation given to the controlling costs as the investment, the smaller the internal failures can be. By assessing the dominant control costs, it is interpreted that the company has significant control in reducing defective products. A company that can minimize defective products can be interpreted as a company with a competitive advantage and a high level of profitability (Blocher et al., 2010).

The results of this research also align with Tandiontong et al. (2010) finding that implementing cost management can improve service quality to minimize consumer complaints at The Majesty Hotel so that the company can enjoy profits. Quality costs applied by PT. The development of Jaya Ancol can increase profitability, as happened in 2009 when quality costs increased by 26% and profits increased by 40% (Swantari & Habibie, 2015).

The coefficient of determination is indicated by the *Adjusted R Square* value with an acquisition of 0.408, meaning that the variability of SOE profitability is influenced by the variability of quality costs of 40.8%.

## CONCLUSION

Based on the phenomenon, the conceptual framework, and the research's findings, the quality costs in SOEs were evidence of increasing profitability. This research found evidence that the management of control costs (prevention and assessment costs) can minimize failure costs (internal and external) so that the impact SOE can make good quality products. With good quality products, SOE will have high competitiveness and sales growth, impacting the ability to generate high profits.

This research also has many hindrances and obstacles, including first, the quantity of data that needs to be improved so that the research results can be generalized. Second, this research has weak testability because the research model used is superficial. This obstacle happened because researchers had limited time to complete and were bound by contracts. The following recommendation for researchers is to increase the data quantity or add more companies to study, for example, so that it will improve the research generalizations quality.

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## REFERENCES

- Abulaila, M. D., & Abdulrahman, I. (2019). The Impact of Quality Cost on Financial Performance of Banks Operating in Jordan. *Research Journal of Finance and Accounting*, 10(2), 53–61. <https://doi.org/10.7176/RJFA>
- Aulia, A., & Meyliana. (2019). Analysis of the effect of the costs of prevention, assessment, internal and external failures on the profitability of the enterprise. *Proceedings of the Research Results Seminar*, 58–65.
- Blocher, E. J., Stout, D. E., & Gary, C. (2010). *Cost Management: A Strategic Emphasis*. McGraw-Hill.
- Botchkarev, A., Care, T., Andru, P., & Care, T. (2011). A Return on Investment as a Metric for Evaluating Information Systems: Taxonomy and Application. *Interdisciplinary Journal of Information, Knowledge, and Management*, 6.
- Campanella, J. (1990). *Principles of Quality Costs*. ASQC Quality Press.
- Eraslan, S., & Önal, S. (2021). Quality Costs And Application In A Manufacturing Enterprise Kalite Maliyetleri v e Bir Üretim İşletmesinde Uygulaması. *International Journal of Society Researches*, 17(35). <https://doi.org/10.26466/opus.824779>
- Dawn, M. (2019). *The Effect of Quality Costs on Increasing Profitability on CV Anabanua Cipta Buana in Wajo Regency, South Sulawesi Province*. University of Muhammadiyah Makassar.
- Firescu, V., & Popescu, J. (2015). The Costs of Quality : An Important

- Decision Tool. *International Journal in Economics and Business Administration*, III(4), 44–52.
- Hansen, D. R., & Mowen, M. M. (2015). *Management Accounting*. New York: Cengage Learning.
- Khairina Rosyadah, B. A. M. N. (2021). Does Profitability, Firm Size, and Investment Opportunity Set Affect Earnings Quality? *Journal of Accounting*, 25(1), 54. <https://doi.org/10.24912/ja.v25i1.724>
- Kreem, Z. A., & Al-yasar, A. R. A. (2020). Quality Costs and Their Impact of the Competitive Advantage of Industrial Companies: Exploratory Study. *PalArch's Journal of Archaeology of Egypt*, 17(3), 2362–2374.
- Muin, M. F., & Wardini, A. K. (2020). Study of State-Owned Enterprises ( SOEs ) Profitability in Indonesia 2012-2016 Period. *Sriwijaya International Journal of Dynamic Economics and Business*, 4(May), 57–72.
- Myeza, Z. (2017). *The effects of waste management on profitability in a flexible packaging company*. University of the Witwatersrand.
- Naini, N. F., Santoso, S., Andriani, T. S., Claudia, U., & Nurfadillah. (2022). The Effect of Product Quality on Customer Satisfaction ImplicThe effect of product quality, service quality, customer satisfaction on customer loyaltyations on Customer Loyalty in the Era of Covid-19. *Journal of Consumer Sciences*, 7(1), 34–50.
- Omachonu, V. K., Suthummanon, S., & Einspruch, N. G. (2004). The relationship between quality and quality cost for a manufacturing company. *International Journal of Quality & Reliability Management*, 21(3), 277–290. <https://doi.org/10.1108/02656710410522720>
- Padmiwati. (2018). *The Effect of Quality Costs on Profitability with Operational Costs as an Intervening Variable at Kasih Ibu Surakarta Hospital*. Widya Dharma Klaten University.
- Paidi, M. (2010). *Analysis of the Effect of Cost of Quality on Profitability Levels in PT. Cerya Riau Mandiri Printing Pekanbaru*. Sultan Syarif Kasim Riau State Islamic University Pekanbaru.
- Rachmawati, R. (2022). Intellectual Capital and Corporate Governance on The Profitability of Indonesian State-Owned Enterprises. *Central Asia and The Caucasus*, 23(1), 1502–1507.
- Rachmawati, R., Romdani, N., & Ganiah, S. (2020). Does Disclosure of Intellectual Capital Increase the Profitability of State-Owned Enterprises in Indonesia? *PalArch's Journal of ...* , 17(March), 4074–4083. Retrieved from <https://archives.palarch.nl/index.php/jae/article/view/6051>
- Rosiawan, M., Singgih, M. L., & Widodo, E. (2019). Model of quality costs and economic benefits of a business process of manufacturing companies. *Cogent Engineering*, 6(1), 1–15. <https://doi.org/10.1080/23311916.2019.1678228>
- Siregar, M. I., Cahyadi, A., Igamo, A. M., Saggaf, A., & Sulbahri, R. A. (2022). Financial Ratio Analysis of State-Owned Enterprises (SOE) in the City of Palembang. *Journal of Finance and Business*, 20(1), 13–27.

- Swantari, A., & Habibie, F. H. (2015). Quality Cost Analysis of Profitability (Case of PT. Development of Jaya Ancol Tbk.). *Scientific Journal of Tourism*, 20(3).
- Tambingon, R., Karamoy, H., & Pangerapan, S. (2020). Indonesia Accounting. *Indonesia Accounting Journal*, 2(1), 52–57.
- Tandiontong, M., Sitanggang, F., & Carolina, V. (2010). The Effect of Quality Costs on the Company's Profitability Level (Case Study at The Majecty Hotel Bandung). *Scientific Journal of Accounting*, 2(1).
- Teplická, K., & Hurna, S. (2021). New Approach of Costs of Quality According their trend of During Long Period in Industrial Enterprises in SMEs. *Management Systems in Production Engineering*, 29(1), 20–26. <https://doi.org/10.2478/mspe-2021-0003>
- Law of the Republic of Indonesia Number 19 of 2003 concerning State-Owned Enterprises.*