The Influence Of Logistic Management, Governance, And Social Responsibility On Competitiveness And Operational Performance Of Manufacturing Companies At Makassar Industrial Estate

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ABSTRACT

This study aimed to analyze the direct effect of logistic management, governance, and social responsibility on competitiveness and operational performance of manufacturing companies, competitiveness on operational performance of manufacturing companies, and logistic management, governance, and social responsibility through competitiveness on operational performance of manufacturing companies. The questionnaire data were analyzed using Structural Equation Model with AMOS 20. The population of this study were all manufacturing companies (127 companies) at Makassar Industrial Estate (KIMA) based on data from the Makassar City Central Bureau of Statistics in 2021. Based on the results, logistic management had positive and significant influence on operational performance with direct effect of 0.295, governance had positive and significant influence through competitiveness on operational performance with indirect effect of 0.117.

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INTRODUCTION

Global competition between countries is increasing along with the Group 20 (G20) meeting forum as an international economic cooperation discussing various economic activities. Therefore, Indonesia has created a profit contribution of Rp. 7.4 trillion, an increase in domestic consumption of Rp. 1.7 trillion by absorbing 33 thousand of people in the economic sector and growing global investment by 80 percent of investors [1]. This momentum is in the context of increasing economic competitiveness as a production base for world trade in creating regional markets for 500 million people [2].

The G20 meeting has benefits and challenges for manufacturing companies in Indonesia, especially Makassar [3]. One of the benefits is to provide a business opportunity for Indonesian products to increase income with low production costs and provide certainty for entrepreneurs to invest in seeking consumer choices or domestic market segments with competitive prices and quality so that various collaborations in running the business will be more open [4]. As a challenge, entrepreneurs, including manufacturing companies, are required to continuously improve their capabilities in running a business in a professional manner so they can compete with several other countries so that operational performance continues to increase [5]. The voice of this new generation of young entrepreneurs has been since 2010 the G20 Young Entrepreneurs' Alliance (G20 YEA), whose members are the most important young entrepreneur organisations in the G20 countries. Once a year, their representatives meet in order to discuss problems, obstacles and success factors - also from their own experience - and to develop demands that are presented to the governments of the G20 countries as to how international young entrepreneurship can be better supported [6]. Thus, products made in Indonesia are less desirable and less in demand. This is a picture that must be addressed by entrepreneurs, especially manufacturing companies [7].

Currently, in Makassar City, especially at Makassar Industrial Estate, there are 106 companies with various types of business or production. There are manufacturing companies that have low operational performance. This condition causes companies to experience opportunity uncertainty and tend to experience bankruptcy so that operational production costs continue to increase. The following shows the operational performance of manufacturing companies in Makassar City in a period of five years (2017 – 2021):

<table>
<thead>
<tr>
<th>Operational performance</th>
<th>2017</th>
<th>2018</th>
<th>Year</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability (%)</td>
<td>33.6</td>
<td>33.2</td>
<td>32.9</td>
<td>32.4</td>
<td>31.7</td>
<td></td>
</tr>
<tr>
<td>Sales Growth (%)</td>
<td>15.8</td>
<td>14.5</td>
<td>13.2</td>
<td>12.9</td>
<td>10.9</td>
<td></td>
</tr>
<tr>
<td>Market Share (%)</td>
<td>13.8</td>
<td>13.4</td>
<td>12.7</td>
<td>12.2</td>
<td>11.5</td>
<td></td>
</tr>
</tbody>
</table>

Source: Manufacturing Companies KIMA, 2022

Table 1 shows that within five years, based on information from the management of manufacturing companies at Makassar Industrial Estate (KIMA), operational performance has decreased. This is illustrated by profitability over a period of five years, where in 2017 it reached 33.6% and then continued to decline until 2021 at 31.7%. In addition, sales growth in 2017
reached 15.8%, then continued to decline until it reached 10.9% in 2021. The same can be seen in the market share in 2017 of 13.8% and then decreased to 11.5% in 2021. The decline in operational performance of manufacturing companies occurred because the company was able to grow competitiveness with other companies engaged in the same field, both domestic and multinational companies. On this basis, Krismiyati (2017) [8] explained the theory of operational performance showing that competitive operational performance is determined by output quality, production costs, delivery speed, production system flexibility, and design quality. This indicates that the operational performance problems of manufacturing companies at Makassar Industrial Estate need to be improved and addressed by improving the existence of companies to compete with domestic and multinational companies, so as to be able to improve operational performance [9]. However, several manufacturing companies at KIMA indicated that companies tend not to consider cost efficiency, have low product quality, are slow in managing production (flexibility), and are not timely in product delivery. These four things are a consideration for manufacturing companies to be able to compete and improve operational performance.

According to Chi-fen et. all (2020) [12], the ability to compete and improve operational performance is determined by quality standards, quality management, and social responsibility. These three things can provide direct and indirect effects on competitiveness and operational performance. The complexity of activities within the organization requires organizational drivers to work hard in each job specialization [13]. Management activities need to be developed and managed properly in order to achieve institutional goals and strengthen the formulated vision and mission. The implementation of inventory management can be analyzed from several indicators, including procurement, recording, storage, distribution, maintenance, and disposal [14]. Accuracy in inventory management is the key to success for the orderly administration of the inventory itself. Administratively strategic inventory management is broken down into a series of administrative activities, starting from planning, organizing, and supervising. Besides that, operational activities consist of procurement, recording, distribution, storage, maintenance, and disposal [15]. Thus, inventory management must pay attention to inventory operational activities where each stage must be carried out in order to smooth and orderly supplies in an organization [16]. Sharma and Dives (2005) [17] stated that "inventory management is an activity related to planning, implementing and controlling the determination of material requirements in such a way". This definition implies that inventory management activities aim to ensure the availability of inventory items, limit the value, type, and quantity of goods and make optimal use of available goods or materials. There is no single model of corporate governance and each country has through time developed a wide variety of mechanisms to overcome the agency
problems arising from the separation of ownership and control. The document looks at the various mechanisms employed in different systems (e.g. concentrated ownership, executive remuneration schemes, the market for takeovers, cross-shareholdings amongst firms, etc.) and examines the evidence on whether or not they are achieving what they were intended to do. For example, one of the benefits of concentrated ownership is that it brings more effective monitoring of management and helps overcome the agency problems arising from the separation of ownership and control.

Based on what was stated above, several companies at KIMA have not implemented corporate governance in accordance with the Decree of the State Minister for BUMN Number Kep-117/M-MBU-2017 on the Implementation of Corporate Governance. As a result of unoptimal corporate governance, employees are not ready to carry out their main tasks and functions to increase competitiveness and operational performance. For this phenomenon, it is necessary to apply governance theory to overcome problems in manufacturing companies. Previous studies have explained a lot about the practice of implementing logistics management with direct effects on competitiveness and operational performance. Many previous studies showed positive and significant influence of logistics management on competitiveness, although many also showed negative and significant influence on competitiveness. Meanwhile, the direct effect of logistics management on performance had a positive and significant influence on operational performance after or before going through the implementation of competitiveness that must be carried out by the company according to the type of business. In general, many studies recommended that companies need to implement logistics management to increase understanding of the importance of quality awareness, the importance of quality audits, the importance of document control, and carrying out process management.

Previous studies on the implementation of governance on competitiveness and operational performance, including Pun et. all (2001) [18] showing governance determining operational performance improvements, Abdurrazaq et. all (2021) [19] showing governance making it easy to improve operational performance, Alim, et. all (2021) [20] showing the integrated quality management had an influence on performance. In general, these previous studies emphasize the implementation of governance based on top management commitment, customer involvement, supplier relations and product design to ensure product quality can be managed properly by the company in implementing competitiveness and achieving operational performance.

Conceptual Framework
The conceptual framework is a description of the constructive relationship between the observed variables. This study showed a direct relationship between the independent variable on the mediating variable and the dependent variable. In this study, there were five observed variables, consisting of three independent variables, one mediating variable and one dependent variable. The independent variables in this study are logistics management, governance and social responsibility. The conceptual framework is as follows in figure 1.
Figure 1. Conceptual Framework

Description:
H_1 = X_1 on Y  
H_2 = X_2 on Y  
H_3 = X_3 on Y  
H_4 = X_1 on Z  
H_5 = X_2 on Z through Y  
H_6 = X_3 on Z  
H_7 = Y on Z  
H_8 = X_1 on Z through Y  
H_9 = X_2 on Z through Y  
H_10 = X_3 on Z

Hypothesis
Referring to the formulation of the problem described above, the following hypotheses are proposed: 1) logistic management has a positive and significant influence on competitiveness of manufacturing companies at Makassar Industrial Estate; 2) governance has a positive and significant influence on competitiveness of manufacturing companies at Makassar Industrial Estate; 3) social responsibility has a positive and significant influence on competitiveness of manufacturing companies at Makassar Industrial Estate; 4) logistic management has a positive and significant influence on operational performance of manufacturing companies at Makassar Industrial Estate; 5) governance has a positive and significant influence on operational performance of manufacturing companies at Makassar Industrial Estate; 6) social responsibility has a positive and significant influence on operational performance of manufacturing companies at Makassar Industrial Estate; 7) competitiveness has a positive and significant influence on operational performance of manufacturing companies at Makassar Industrial Estate; 8) logistic management has a positive and significant influence on operational performance through competitiveness of manufacturing companies at Makassar Industrial Estate; 9) governance has a positive and significant influence on operational performance through competitiveness of manufacturing companies at Makassar Industrial Estate; 10) social responsibility had a positive and significant influence on operational performance of manufacturing companies at Makassar Industrial Estate.
performance through competitiveness of manufacturing companies at Makassar Industrial Estate.

**RESEARCH METHOD**

This study was designed to answer the formulated problems and objectives to be achieved as well as to test hypotheses. According to Karahan et. al (2012) [4], study design is an investigation structure arranged in such a way, so that researchers obtain answers to study questions, for example, exploratory studies, ex post facto studies and causal studies. This study was carried out on manufacturing companies at Makassar Industrial Estate (KIMA) as an object of study to find out the influence of logistics management, governance and social responsibility on competitiveness and performance of manufacturing companies at Makassar. This study was conducted for two months, namely September to October 2022. This study used a quantitative approach to find out relationships or influences developed using statistical models. This study used primary and secondary data. Primary data were collected from observations, questionnaires and interviews. Secondary data were collected from manufacturing companies at Makassar Industrial Estate. Data collection techniques (instruments) used were observation, questionnaires, interviews and documentation. The population of this study were all manufacturing companies (127 companies) at Makassar Industrial Estate (KIMA) based on data from the Makassar City Central Bureau of Statistics in 2021. The target population were manufacturing companies implementing logistics management, governance and social responsibility practices with a total of 43 companies. The subjects of this study were managers from each company consisting of production managers, financial managers and marketing managers. Thus, in one manufacturing company, 3 people were selected to be the respondents. Therefore, the number of samples from 43 companies were 3 x 43 = 129 respondents (Jacobs, 2020). To explain the phenomena in this study, this study used descriptive statistical analysis and Structural Equation Modeling (SEM) analysis. Descriptive statistical analysis was used to explain the characteristics of the respondents including gender, last education, age, and years of service. In addition, descriptive statistical analysis was used to explain responses to study variables including logistics management, governance and social responsibility on competitiveness and operational performance. Calculations in the descriptive statistical analysis were carried out with the help of a computer using AMOS 5.0 and SPSS version 17.0. Inferential analysis in this study was used to test the hypothesis.

**RESULT AND DISCUSSION**

Based on the values in the model, the variables tested in this first model were grouped into exogenous variables and endogenous variables. Exogenous variables are variables whose values are determined outside the model. The model is said to be good when the theoretical development of the hypothetical model is supported by empirical data. The complete SEM analysis results can be seen in the following figure 2. Based on the model evaluation, of the eight criteria of goodness of fit indices, the chi-square value was still high and all criteria were not in accordance with the specified cut-off value, so it is necessary to modify the model by correlating between indicator errors according to the modification indices. The final model obtained is as follows in figure 3.
The results of the model test presented in the figure above were evaluated based on the goodness of fit indices in Table 2 below showing the model criteria and critical values.

**Table 2. Evaluasi kriteria Goodness of Fit Indices Overall Model**

<table>
<thead>
<tr>
<th>Goodness of fit index</th>
<th>Cut-off Value</th>
<th>First Model</th>
<th>Desc.</th>
<th>Final Model</th>
<th>Desc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi_Square</td>
<td>Supposedly low</td>
<td>602.814</td>
<td>Marginal</td>
<td>310.496 &lt; (0.05 : 288 = 328.580)</td>
<td>Good</td>
</tr>
<tr>
<td>Probability</td>
<td>≥ 0.05</td>
<td>0.000</td>
<td>Marginal</td>
<td>0.175</td>
<td>Good</td>
</tr>
</tbody>
</table>

[http://doi.org/10.30988/jmil.v7i1.1180](http://doi.org/10.30988/jmil.v7i1.1180)
Based on the model evaluation, of the eight criteria of goodness of fit indices, the chi-square value was still high and all criteria were not in accordance with the specified cut-off value, so it is necessary to modify the model by correlating between indicator errors according to the modification indices, as has been described above. After modifying the model, in the final stage, the six goodness of fit indices criteria have met the cut-off value criteria, and although the two variables remain marginal, the model can be said to have met the goodness of fit indices criteria for analysis. The test results are presented in the following table 3.

Table 3. Hypothesis Testing on Direct Effect, Indirect Effect and Total Effect

<table>
<thead>
<tr>
<th>HIP</th>
<th>Exogenous Variable (Dependent)</th>
<th>Mediating Variable</th>
<th>Endogenous Variable (Independent)</th>
<th>p-Value</th>
<th>Direct Effect</th>
<th>Indirect Effect</th>
<th>Total Effect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Logistic Management (X1)</td>
<td>-</td>
<td>Competitiveness (Y)</td>
<td>0.001</td>
<td>0.330</td>
<td>-</td>
<td>0.330</td>
<td>(+) Significant</td>
</tr>
<tr>
<td>2</td>
<td>Governance (X2)</td>
<td>-</td>
<td>Competitiveness (Y)</td>
<td>0.042</td>
<td>0.198</td>
<td>-</td>
<td>0.198</td>
<td>(+) Significant</td>
</tr>
<tr>
<td>3</td>
<td>Social Responsibility (X3)</td>
<td>-</td>
<td>Competitiveness (Y)</td>
<td>0.977</td>
<td>0.003</td>
<td>-</td>
<td>0.003</td>
<td>(+) Not Significant</td>
</tr>
<tr>
<td>4</td>
<td>Logistic Management (X1)</td>
<td>-</td>
<td>Operational Performance (Z)</td>
<td>0.000</td>
<td>0.295</td>
<td>-</td>
<td>0.295</td>
<td>(+) Significant</td>
</tr>
<tr>
<td>5</td>
<td>Governance (X2)</td>
<td>-</td>
<td>Operational Performance (Z)</td>
<td>0.000</td>
<td>0.275</td>
<td>-</td>
<td>0.275</td>
<td>(+) Significant</td>
</tr>
<tr>
<td>6</td>
<td>Social Responsibility (X3)</td>
<td>-</td>
<td>Operational Performance (Z)</td>
<td>0.548</td>
<td>0.039</td>
<td>-</td>
<td>0.039</td>
<td>(+) Not Significant</td>
</tr>
<tr>
<td>7</td>
<td>Competitiveness (Y)</td>
<td>-</td>
<td>Operational Performance (Z)</td>
<td>0.000</td>
<td>0.591</td>
<td>-</td>
<td>0.591</td>
<td>(+) Significant</td>
</tr>
<tr>
<td>8</td>
<td>Logistic Management (X1)</td>
<td>Competitiveness (Y)</td>
<td>Operational Performance (Z)</td>
<td>-</td>
<td>0.295</td>
<td>0.195</td>
<td>0.490</td>
<td>(+) Significant</td>
</tr>
</tbody>
</table>

Source: Data Processed
Based on the empirical model proposed in the study, hypothesis testing was proposed by testing the path coefficients in the structural equation model. Table 3 shows the result of hypothesis testing, if the p-value is less than 0.05 then the relationship between the variables is significant. In addition, the direct effect column shows a direct positive effect between variables, the indirect effect column shows an indirect positive effect between variables, and the total effect column shows the accumulation of direct and indirect effects. Therefore the entire model, five paths had a positive and significant effect while two paths had a positive and insignificant effect. The interpretation of Table 3 for the direct effect can be explained as follows the hypothesis result are, logistic management had positive and significant influence on competitiveness with direct effect of 0.330; governance had positive and significant influence on competitiveness with direct effect of 0.198; social responsibility had positive and insignificant influence on competitiveness with direct effect of 0.003; logistic management had positive and significant influence on operational performance with direct effect of 0.295; governance had positive and significant influence on operational performance with direct effect of 0.275; social responsibility had positive and insignificant influence on operational performance with direct effect of 0.039; competitiveness had positive and significant influence on operational performance with direct effect of 0.591; logistic management had positive and significant influence through competitiveness on operational performance with indirect effect of 0.195; governance had positive and significant influence through competitiveness on operational performance with indirect effect of 0.117; and social responsibility had positive and insignificant influence through competitiveness on operational performance with indirect effect of 0.002.

CONCLUSION

Logistic management had a positive and significant influence on competitiveness of manufacturing companies at Makassar Industrial Estate, governance had a positive and significant influence on competitiveness of manufacturing companies at Makassar Industrial Estate, social responsibility had a positive but insignificant influence on competitiveness of manufacturing companies at Makassar Industrial Estate, logistic management had a positive and significant influence on operational performance of manufacturing companies at Makassar Industrial Estate, governance had a positive and significant influence on operational performance of manufacturing companies at Makassar Industrial Estate, and social responsibility had a positive but insignificant influence on operational performance of manufacturing companies at Makassar Industrial Estate.
operational performance of manufacturing companies at Makassar Industrial Estate, competitiveness had a positive and significant influence on operational performance of manufacturing companies at Makassar Industrial Estate, logistic management had a positive and significant influence through competitiveness on operational performance of manufacturing companies at Makassar Industrial Estate, governance had a positive and significant influence through competitiveness on operational performance of manufacturing companies at Makassar Industrial Estate, social responsibility had a positive but insignificant influence through competitiveness on operational performance of manufacturing companies at Makassar Industrial Estate. Based on the conclusions stated above, it is recommended to apply good logistics management in accordance with the principles of fairness, transparency, accountability, responsibility and independence to be able to be competitive, improve customer-oriented governance, in accordance with top management commitment, customer involvement, through a process approach, decision making, procurement of continuous improvement, creation of partnerships and product design systems approach, so that competitiveness of manufacturing companies can be realized, demonstrate high social responsibility in the workplace, social, economic, stakeholder and voluntary attitudes to increase the competitiveness of manufacturing companies, continue to maintain the principles of good logistics management in manufacturing companies to support the achievement of operational performance, apply governance to contribute to customer-oriented operational performance, increase social responsibility so that it always contributes to operational performance, maintain stable competitiveness so that the company continues to grow and develop through cost efficiency, quality improvement, flexibility and timeliness in delivery to improve operational performance, maintain the implementation of good logistics management in manufacturing companies to support competitiveness and operational performance, maintain integrated quality management to contribute to competitiveness and operational performance, increase social responsibility to contribute to competitiveness and operational performance by making responsibility the moral spirit of the company in order to gain competitive market share. For further researchers to examine logistics in terms of inventory management and social responsibility according to social empowerment institutions, innovative technology-based competitiveness, and operational performance according to ISO.

REFERENCES


**BIOGRAPHIES OF AUTHORS**

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