Empirical Investigation of Factors that Affect SOE Financial Performance other than Financial and Insurance Service

Yulian Ade Chandra\textsuperscript{1}, Hadi Paramu\textsuperscript{2} & Nurhayati\textsuperscript{3}

\textsuperscript{1}Yulian Ade Chandra, S.E., \textsuperscript{2}Hadi Paramu MBA, Ph.D & \textsuperscript{3}Dr. Nurhayati, M.M.
Faculty of Economics and Business, University of Jember
East Java, Indonesia

Abstract: SOE is one of the significant sources of state revenue in the form of various types of taxes, dividends and privatization proceeds. An analysis of the identification of factors that influence SOE financial performance needs to be done. This study aims to determine what factors influence SOE financial performance in addition to financial services and insurance. The factor analysis test and the canonical correlation analysis test are used to achieve this goal. The sample in this study was 47 BUMN in addition to financial services and insurance which were divided into 2 groups of SOEs based on the best performance level and the worst performance level. The data in this study were taken from SOE annual reports from 2013 to 2015 published on each company website and also annualreport.id site. The results of the study show that the factors formed in each test on the data of the two sample groups have differences. The results of the Wilks Lambda test for all SOE samples other than financial services and insurance are significant at alpha 0.05.

Keywords: financial performance, SOE, factor analysis, canonical correlation analysis.

1. INTRODUCTION
State-owned enterprises (SOEs) have the responsibility of driving the national economy. BUMN is also needed to encourage economic progress and increase national economic growth. This is stated in the explanation of Undang - Undang Number 19 of 2003 concerning State-Owned Enterprises (UU of SOEs) that advancing welfare for all people as mandated in the Preamble of the 1945 Constitution and Article 33 of the 1945 Constitution is a constitutional duty for all components of the nation including SOEs. In the explanation of the UU of SOEs in the second part general point explained that "SOE is
also a significant source of state revenue in the form of various types of taxes, dividends, and privatization results”.

Chandra (2017) writes about losses to a number of SOEs. The Deputy for the Restructuring and Business Development of the Ministry of SOEs said that of the 24 SOEs that suffered losses, 9 of them were included in the "sick" category. Some of them are PT Merpati Nusantara Airlines (Persero), PT Kertas Leces (Persero), PT National Fleet Development Corporation (Persero), and PT Iglas (Persero). Until the first semester of 2017 there were 24 State-Owned Enterprises (SOEs) that suffered losses, but the figure is less than the same period in 2016, as many as 27 SOEs.

In the article Kusuma and Fitriyani (2018) the Ministry of SOE mentioned that there were 4 SOEs that experienced technically bankrupt or technically bankruptcy. The four are PT Merpati Nusantara Airlines (Persero), PT Kertas Kraft Aceh (KKA), PT Industri Gelas (Iglas), and PT Kertas Leces.

SOE has unique characteristics compared to private companies. SOEs are often seen by the public as companies that have been assigned by the government in their business processes and financial losses are common because of this. However, scientific research is still needed whether the factors that can affect the financial performance of SOEs are really different from companies in general. It should be noted that Law (Law) No. 19 of 2003 confirms that among the several purposes and objectives of the establishment of SOEs is to pursue profits and contribute to the development of the national economy in general and state revenue in particular.

Demirhan and Anwar (2014) in their research explained that the factors that have important effects on determining company performance can be divided into micro and macro factors. Micro factors include internal factors, while macro factors include factors from the external environment. Any changes in macro factors in the economy affect the company which can be seen in the company's performance as well. This influence can be positive or negative depending on changes in the macro environment and company structure.

The Government of Indonesia in SOE Ministerial Decree number KEP-100 / MBU / 2002 specifically uses several financial ratios to assess the soundness of the financial aspects of SOEs in addition to financial services. These financial ratios are rewards to shareholders (ROE or Return On Equity), investment returns (ROI or Return On Investments), cash ratios, current ratios, collection periods, inventory turnover, total asset turnover and total own capital to asset ratio.

Deitiana and Habibuw (2015) have conducted research with the aim of finding factors that affect financial performance. The population used in this research is property and real estate companies listed on the Indonesia Stock Exchange from 2007 to 2012. As a result, the variable leverage and age of the company affect the financial performance. While other variables namely liquidity, company size, managerial ownership and block holder ownership have no effect on financial performance.

The research on SOE is the renewal of this research compared to previous studies. We also find several research gaps from previous studies regarding the factors that affect a company's financial performance. One of the research gaps is that the liquidity variable is stated to have a positive effect on financial performance in Demirhan and Anwar's research (2014), while in Deitiana and Habibuw's (2015) research it was found that liquidity had no effect on company performance.

Another research gap is firm size or firm size in the study of Pantea et al. (2014) concluded that it had a positive and significant effect on the company's financial performance, while in the Makhdalena (2014) study the size of the company was stated to have a negative but not significant effect on the company's financial performance. In the study of Deitiana and Habibuw (2015) company size variables did not affect the company's financial performance.

Based on the background that has been explained before, there are some inconsistent results from previous studies regarding factors that affect the company's financial performance. Variables that are stated to influence the company's financial performance need to be analyzed again to identify the factors that influence the company's financial performance. The purpose of this study is to determine what factors influence SOE's financial performance in addition to financial services and insurance.
2. CONCEPTUAL FRAMEWORK

The hypothesis of this study is the formation of factors that affect financial performance that is feasible to use from the variables of liquidity, leverage, capital structure, sales growth, capital intensity, capital turnover, human resources, efficiency, company age, company size, investment returns, returns shareholders, cash ratios, collection period and total own capital to total assets (TOCTA).

3. RESEARCH METHODS

3.1 Research Design

The design of this research is exploratory research. This study was designed to find factors that influence SOE financial performance in addition to financial services and insurance. The research sample was taken using a purposive sampling method. The criteria used to determine the sample are SOEs in the form of Persero and Persero Tbk in addition to financial services and insurance that publish annual reports (annual hassle) from 2015 to 2017. Of the 47 samples of SOEs that were collected in this study will be divided into 2 groups which is divided based on the highest performance up to the SOE which has the lowest performance.

Some reasons why the financial services and insurance sectors are not sampled in this study are that the financial services and insurance sectors have special characteristics that are different from other sector companies. These differences include financial ratios used to assess the financial condition of banks. The second reason is that the performance of SOEs in the banking sector is always satisfying, reflected in the ever-increasing net profit. Based on the second reason, it is probable that research on the financial performance of SOEs in the financial and insurance sectors is less needed by the general public and interested parties.

The data used in this study are secondary data, namely annual reports (annual reports) of SOE companies in the form of Persero and Persero Tbk. in addition to the financial services and insurance sectors from 2015 to 2017. Data in this study were collected using archival research techniques. The data in this study were obtained from the sites of each company and also the annualreport.id site.
3.2 Definition of Variable Operations

The following are definitions of the variables used in this study:

1) Rewards to shareholders are ratios that measure a company’s ability to generate profits available to shareholders.
2) Investment Return is a ratio that measures the efficiency of an investment by comparing net income with total operating costs or invested capital.
3) Liquidity is a ratio that shows a company’s ability to meet short-term financial obligations on time.
4) Cash ratio is the ratio used to compare the total cash (cash) and cash equivalents of the company with its current liabilities.
5) Leverage is a ratio that measures the use of fixed costs on assets to increase returns to the company owner.
6) Sales Growth is the increase in sales from year to year in the form of a percentage.
7) Capital Turn Over (CTOR) is a ratio that shows the level of efficiency of the company in the utilization of net fixed assets (net fixed assets).
8) Efficiency is a measure of success by looking at the amount of resources or costs to achieve the results of the activities carried out.
9) Capital Structure is a ratio that measures the level of optimization of the capital structure consisting of debt and own capital.
10) Firm Size is the sum of all assets owned by the company.
11) Firm Age is the number of years since the company was founded.
12) Capital intensity is a ratio that shows the amount of fixed assets of all assets owned.
13) Human Resources is the total number of employees the company has.
14) Collection Periods is a ratio that measures the average period of accounts receivable payments received by a company in one year.
15) Total Own Capital To Total Assets (TOCTA) is a ratio that compares the amount of own capital of the total capital.

3.3 Data analysis method

As mentioned in the research design, the purpose of this study is to identify what factors influence the financial performance of SOE companies in addition to financial services and insurance. To achieve these objectives, this study uses a factor analysis test and canonical correlation analysis test.

3.4 Factor Analysis Test

Factor analysis is a technique of interdependence that aims to determine the underlying structure between variables in the analysis. Malhotra (1999) in Fuadati (2009) explains that the factor analysis technique is a multivariate statistical analysis technique used to reduce and infer variables into factors. In this study, to draw conclusions, data processing will use SPSS 22 software tools.

3.5 Canonical Correlation Analysis

Irianingsih et al (2016) states, "Canonical correlation analysis is a multivariate technique used to estimate the relationship between two or more dependent variables with two or more independent variables together". In this research a canonical correlation analysis is needed to find out whether the new factors formed can influence the financial performance of SOEs in addition to financial and accounting services during the period of 2015 to 2017 with two different sample groups.

4. DISCUSSION

4.1 Overview of Research Samples

The population in this study are all SOEs either Persero and Persero Tbk. in addition to the financial services and insurance sectors from 2015 to 2017. The population is 83 SOEs. The sample
selection method used is the purposive sampling method, namely the determination of the sample using certain criteria. Based on the research data collection, it was found that there were a number of SOEs that did not meet the data needed in the study and only 47 SOEs had complete data. Therefore this study only retrieves data from SOEs that have data in accordance with the needs of this study. Table 1 presents a list of names of SOEs used as research samples.

<table>
<thead>
<tr>
<th>Name of SOE</th>
<th>Name of SOE</th>
<th>Name of SOE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PT Adhi Karya Tbk.</td>
<td>17. PT Jasa Marga Tbk</td>
<td>33. PT PLN (Persero)</td>
</tr>
<tr>
<td>2. PT Pengembangan Pariwisata Indonesia</td>
<td>18. PT Kasawan Berikat Nusantara</td>
<td>34. PT Pupuk Indonesia (Persero)</td>
</tr>
<tr>
<td>3. PT Angkasapura I (Persero)</td>
<td>19. PT Kawasan Industri WijayaKusuma</td>
<td>35. PT Rajawali Nusantara Indonesia (Persero)</td>
</tr>
<tr>
<td>4. PT Angkasapura II (Persero)</td>
<td>20. PT Kereta Api Indonesia</td>
<td>36. PT Sarinah</td>
</tr>
<tr>
<td>5. PT ASDP Indonesia Ferry (Persero)</td>
<td>21. PT Kimia Farma (Persero) Tbk.</td>
<td>37. PT Semen Baturaja</td>
</tr>
<tr>
<td>6. PT Barata Indonesia (Persero)</td>
<td>22. PT Krakatau Steel Tbk.</td>
<td>38. PT Semen Indonesia (Persero) Tbk.</td>
</tr>
<tr>
<td>7. PT Bio Farma (Persero)</td>
<td>23. PT Len Industri (Persero)</td>
<td>39. PT Sucofindo</td>
</tr>
<tr>
<td>8. PT Biro Klasifikasi Indonesia</td>
<td>24. PT Pelabuhan Indonesia I</td>
<td>40. PT Surveyor Indonesia</td>
</tr>
<tr>
<td>9. PT Brantas Abipraya</td>
<td>25. PT Pelabuhan Indonesia II</td>
<td>41. PT TWC BPR (Persero)</td>
</tr>
<tr>
<td>10. PT Garam (Persero)</td>
<td>26. PT Pelabuhan Indonesia III</td>
<td>42. PT Telkom Tbk</td>
</tr>
<tr>
<td>11. PT Garuda Indonesia (Persero) Tbk</td>
<td>27. PT Pelabuhan Indonesia IV</td>
<td>43. PT Waskita Karya Tbk</td>
</tr>
<tr>
<td>12. PT Hutama Karya</td>
<td>28. PT Pelayaran Nasional Indonesia</td>
<td>44. PT Wijaya Karya Tbk</td>
</tr>
<tr>
<td>13. PT INALUM (Persero)</td>
<td>29. PT Pembangunan Perumahan Tbk.</td>
<td>45. PT Aneka Tambang Tbk</td>
</tr>
<tr>
<td>14. PT Indofarma Tbk.</td>
<td>30. PT Pertamina</td>
<td>46. PT Timah Tbk</td>
</tr>
<tr>
<td>15. PT INKA</td>
<td>31. PT Perusahaan Gas Negara</td>
<td>47. PT Bukit Asam Tbk</td>
</tr>
<tr>
<td>16. PT INTI (Persero)</td>
<td>32. PT Pindad</td>
<td></td>
</tr>
</tbody>
</table>

Source: Secondary Data (processed)
4.2 Descriptive statistics

In this section, the sample is separated into two groups, namely the SOE with the best performance and the SOE group with the worst performance. To separate, the Return On Equity (ROE) ratio is used to rank 24 SOEs with the highest ROE and 23 SOEs with the lowest ROE. The sample groups that are formed in each observation year can be different depending on the ROE generated by SOEs in each year. Standardization is done when the data from the variables used have different units and the structure of the data formed values there are distant / lame differences. Data standardization is done by using descriptive analysis with SPSS 22 software.

4.3 Analysis of Research Results

In the 2015 testing for the SOE group with top-ranking financial performance, two factors were formed, namely capital structure and cash adequacy. On the other hand, for the SOE group with lower-ranking financial performance, three factors were formed namely cash adequacy, company size and company age. All factors formed in 2016 are strong because they have diagonal values of more than 0.5 in the component transformation matrix table. If we look at the number of variables that meet the requirements for factor analysis, there are 8 (eight) viable SOE groups with top financial performance, namely leverage, capital structure, capital intensity, investment returns, TOCTA, cash ratios, liquidity, and rewards to holders stock. On the other hand, the SOE group with the lowest financial performance, 9 (nine) variables emerged that were feasible to be analyzed by factor analysis. These variables are leverage, cash ratio, TOCTA, liquidity, company size, HR, capital intensity, investment return, and age of the company.

In the 2016 testing for the SOE group with top-ranking financial performance, two factors were formed, namely the source of funds and sales. For the SOE group with lower-ranking financial performance, four factors were formed, namely liquidity, effectiveness, rewards to shareholders, and age of the company. All factors formed in 2016 are strong because they have diagonal values of more than 0.5 in the component transformation matrix table. When viewed from the number of variables that meet the requirements for a factor analysis, in the BUMN group with top-ranking financial performance in 2016 there are 7 (seven) viable variables, namely leverage, sales growth, capital turnover, capital structure, capital intensity, collection period, and TOCTA. In the SOE group with the lowest financial performance, 9 (nine) variables appeared that were feasible to be analyzed by factor analysis. These variables are shareholder rewards, liquidity, leverage, efficiency, company age, capital intensity, HR, cash ratio and collection period.

In the 2017 testing for the SOE group with top-ranking financial performance, three factors were formed, namely capital intensity, capital structure and liquidity. For the SOE group with lower-ranking financial performance, only two factors were formed, namely liquidity and company size. Based on the diagonal value in Table 4.46 Component Transformation Matrix, two of the factors formed in the SOE group with top ranking performance can stand on their own. Only the liquidity factor is potentially affected by other factors. On the other hand, the factors that are formed in the SOE group with lower overall performance can stand alone or are a strong factor. When viewed from the number of variables that meet the requirements for a factor analysis, in 2017, namely liquidity, leverage, sales growth, capital structure, capital intensity, investment return, ratio cash and TOCTA. In the SOE group with the lowest financial performance, 9 variables emerged that were feasible to be analyzed by factor analysis. These variables are liquidity, leverage, sales growth, efficiency, capital structure, company size, capital intensity, HR and cash ratio.

In the 2018 testing, the SOE group with top-ranking financial performance, three factors were formed, namely capital intensity, capital structure, and company size. For the SOE group with lower-ranking financial performance, two factors were formed, namely capital structure and company size. Based on the diagonal value in Table 4.46 Component Transformation Matrix, two of the factors formed in the SOE group with top ranking performance can stand on their own. Only the capital structure factor is potentially affected by other factors. On the other hand, the factors that are formed in the SOE group with lower overall performance can stand alone or are a strong factor. When viewed from the number of variables that meet the requirements for a factor analysis, in 2018, namely capital structure, capital intensity, investment return, ratio cash and TOCTA. In the SOE group with the lowest financial performance, 9 variables emerged that were feasible to be analyzed by factor analysis. These variables are liquidity, leverage, sales growth, efficiency, capital structure, company size, capital intensity, HR and cash ratio.

The results of the 6 times factor analysis testing can be seen which variables most often meet the eligibility criteria until the variables that most rarely meet the eligibility criteria. A summary of the variable eligibility history is shown in Table 4.65 Variable Eligibility History.

In this study canonical correlation analysis is used to see whether the factors that have formed have an influence on the financial performance of SOEs in addition to financial services and insurance. The canonical correlation analysis test was carried out twice, namely for the SOE sample group with
top-ranking financial performance and the SOE sample group with lower-ranking financial performance. This is done because each sample group has a different number of sample members.

To find out whether the canonical correlation formed is significant or not, the Wilks Lambda test is used using the SPSS 22 software. The results of the Wilks Lambda test for SOEs with top ranking performance are significant at alpha 0.05. This can be seen in Figure 4.1 Lambda Wilks Test (A) which shows that the whole test is the Pillais test, Hotellings test and Wilks test Sig. of F is below 0.05. This means that the canonical correlation formed is significant. In other words, in the BUMN group with top ranking performance, all the factors formed can influence financial performance.

**Figure 2. Wilks Lambda Test Results (A)**

Source: Secondary Data (processed)

The Wilks Lambda test was also applied to the SOE sample group with lower ranking performance. As a result, the canonical correlation between the factors formed by financial performance is significant. This can be seen in Figure 4.2 Results of the Wilks Lambda Test (B) which shows that the whole test is Pillais test, Hotellings test and Wilks test Sig. of F is below 0.05.

**Figure 4.2 Wilks Lambda Test Results (B)**

Source: Secondary Data (processed)

In 6 times the test found interesting things, among others, that for the SOE sample group with lower ranking performance, the number of variables that met the criteria was always more than the SOE sample group with top ranking performance. In fact, the number of samples of SOEs with lower ranking performance is 23 SOEs compared to SOEs with top ranking performance with 24.

Another interesting finding is that in the 6 times the significance test of the Bartlett test was always 0.000 both when the KMO MSA value was above 0.5 or below 0.5. In addition, in the SOE test with lower ranking performance in 2017, even though the number of samples was only 23 SOEs, the KMO MSA value has met the criteria of 0.527. In other words, the sample size of 23 SOEs has fulfilled the requirements for a factor analysis test.
4.4 Research Limitations

Limitations in this study are that a number of SOEs other than financial services have not yet published their full annual and financial reports. This has an impact on the number of samples that is less than optimal and is likely to affect the results of research.

5. CONCLUSION

The factors formed in each test on the data of the two sample groups have differences. Each variable has been stated to be eligible for testing by factor analysis, at least in one test. Variables that are always declared feasible to be tested with factor analysis are leverage and capital intensity. The SOE sample group with the lowest ranking performance, the number of variables that meet the criteria is always more than the SOE sample group with the top ranking performance even though the number of sample members is lower. From 6 tests, there were several variables that were declared feasible although initially the number of samples was stated to be inadequate. The canonical correlation analysis test shows that all factors formed have a significant influence on the financial performance of SOEs in addition to financial services and insurance.

6. REFERENCES


Undang-Undang Republik Indonesia Nomor 19 Tahun 2003 Tentang Badan Usaha Milik Negara.


© Copyright International Journal of Zambrut | Zambrut, Inc.