

SUSTAINABLE INFORMATION TECHNOLOGY GOVERNANCE TO SUPPORT THE PERFORMANCE OF STATE – OWNED ENTERPRISES

Mochamad Muslih*), Dedi Rianto Rahadi, Iis Sugianti

STIE Tri Bhakti, President University

**Email: Mochamadmuslih@stietribhakti.ac.id, dedi1968@president.ac.id,
Iissugianti578@gmail.com*

ABSTRACT

The use of information technology has become a necessity and at the same time a must in this 4th millennium era. Companies that do not try to use technology that suits their needs will be crushed. The Indonesian government has also required the use of appropriate information technology. The purpose of this study was to study the implementation of Ministry of SOE Regulation No. per 02 / 1VIBU / 2013 regarding guidelines for the management of information technology in state-owned enterprises. This research method uses quantitative methods. The variables are performance, information technology governance, corporate governance, and company size. The population is state-owned enterprises. The sample is SOEs in the Financial Sector from 2014 to 2018. The results showed that information technology governance has a significant positive effect on company performance, the application of corporate governance has no significant effect on company performance, and company size has a significant effect on company performance.

Keywords: Information technology, performance, governance, company size.

1. INTRODUCTION

In the digital era like now, the use of information technology in various organizational activities is a must. There are no activities that can be carried out properly without the help of information technology. BUMN as one of the motors of Indonesia's development must also use information technology in its various operations. Therefore, the government with the regulation of the Ministry of SOEs No. per 02 / 1VIBU / 2013 concerning guidelines for the preparation of information technology management of state-owned enterprises stipulates the arrangements for implementing information technology in State-Owned Enterprises. The government's consideration to regulate the application of information technology is that information technology has enormous benefits in

developing a company's business, so it needs to be directed and measured in SOEs to support SOE business strategies in line with the long-term, medium-term, and short-term goals that SOEs want to achieve; Furthermore, so that information technology can be utilized optimally, measured, directed and meets the principles of good corporate governance (GCG), the utilization and development of information technology in SOEs must be based on a governance system, contained in a master plan, and developed in synergy fellow BUMN. For this reason, the government established a Ministerial Regulation of the State-Owned Enterprises regarding Guidelines for the Preparation of Information Technology Management of State-Owned Enterprises. In addition, in the Decree of the Secretary of the Ministry

of State-Owned Enterprises Number: SK - 16 /S.MBU/2012 regarding indicators / parameters of evaluation and evaluation of the implementation of good corporate governance in State-Owned Enterprises in parameter 100 it is stated that directors implement a system of information technology in accordance with established policies. What the meters want is that there is a regulation about information technology in the company. The existence of information technology and its governance is believed to be able to improve company performance. In addition to information technology, the implementation of corporate governance and company size are also important variables to improve company performance. Companies with good governance will also improve their performance, both in the form of improved financial performance and corporate image. The amount of the company will also improve company performance. The greater the company's production capacity will be even greater, its relationships will be wider, and the work procedures will be better.

There have been many previous studies on IT governance, corporate governance, and company size. But the results are still inconsistent. There are still differences in the results of previous research on IT governance, corporate governance, and company size.

The question in this research is whether information technology governance influences company performance? Does corporate governance affect company performance? Does the size of the company affect the company's performance?

2. LITERATURE REVIEW

The grand theory of this research is agency theory. Agency theory regulates the

relationship between owners and managers. The relationship between the owner and the manager must be arranged so that the manager will decide and act in the interests of the owner or shareholder. The variables studied in this study are company performance as the dependent variable, with the independent variable information technology, corporate governance, and company size.

IT Governance

The management of information technology devices will improve the quality of company operations. Information technology governance will increase the efficiency and effectiveness of information technology support. The operation of information technology will also be easier, more economical, more efficient and more effective. BUMN Minister Regulation No. -02 / 1VIBU / 2013 stipulates that in the context of the utilization and development of information technology, each SOE must prepare an information technology master plan no later than 2 years after this regulation is established.

Hamsir, Mutia Apriyanti, Kelvin, Memen, Juardi, Muhammad Sapril Sardi (2017) conducted research aimed at finding out whether the application of IT Governance with COBIT and Sarbanes Oxley can support corporate financial performance, to find out the application of good information technology governance according to COBIT and to find out the implementation of Sarbanes Oxley on IT Governance so that it can support corporate financial performance. Research uses a case study approach, using qualitative methods. This research uses a case study approach, because it relies on several cases that have occurred before. Data collection is done through interviews and field observations. The results in this study

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indicate that PT Telkom has used IT Governance that has been controlled directly from the head office, as a supporter of the company's performance. Prasad et. al (2010) studies the relationship between the effectiveness of information technology steering committees driven by information technology governance initiatives and corporate information technology management and information technology capabilities related to infrastructure. It is further proposed that capabilities related to company information technology generated through information technology governance initiatives must improve business processes and performance at the company level. We test this relationship empirically with field surveys. The results show that the effectiveness of companies from the information technology steering committee encourages information technology governance initiatives that are positively related to their information technology level capabilities. Also found a positive relationship between information technology capabilities and the level of internal process performance. The results of this study also support that an increase in the performance of internal process levels is associated with improvements in customer service and company performance levels.

According to Lunardi, Guilherme Lerch, Becker, Joao Luiz, Macada, Antonio Carlos, Dolci, Pietro Cunha (2013) Much interest in many organizations on the concept of information technology governance to justify the need for information technology investment. Several studies have shown that companies that have good information technology governance models, produce higher returns on their information technology investments than their competitors. However, some are less scientific. Research confirms that effective

information technology governance leads to better financial performance. In this paper, we seek to determine whether companies that have adopted information technology governance mechanisms have improved their financial performance, by measuring pre and post performance indicators. We find that companies that adopt information technology governance practices have improved performance, especially in relation to profitability. The effect of adopting information technology governance mechanisms on financial performance is more visible in the year after adoption rather than in the year of adoption. Ye and Wang (2013) Investigate the effects of information technology alignment and information sharing on operational performance in the context of the supply chain. Based on a resource-based view, this study identifies information technology alignment and information sharing as specific resources / capabilities for partnership supply chains. Data came from 141 Chinese manufacturers, which were collected to examine the relationship between information technology alignment, information sharing, and operational performance. The results show that information technology alignment and information sharing have direct and positive effects on operational performance, IT alignment has an indirect effect on operational performance through information sharing, and information technology alignment and information sharing have different pressures in improving operational performance. Carla L. et. al. (2016) said that at this time corporate governance regarding information technology (CGIT) is targeted to maximize the achievement of the objectives and business value of information technology investments. This study explores the views of heads of

information officers and executive managers of Australian organizations that are smaller and larger, especially regarding information technology governance. Through surveys, we investigate their views on the perceived relevance, influential drivers, challenges and perceived benefits of using CGIT. Regardless of the size of the organization, our findings demonstrate substantially the same benefits, effects and challenges. In addition to recognizing the importance of strategic alignment of business and information technology, risk management turned out to be significant both in influencing the decision to adopt CGIT and as a key perceived ability to drive organizational performance and resource-based values. Thus, this study contributes new knowledge related to business value through information technology regulation.

Corporate Governance

Previous studies have shown the benefits of governance to improve performance. Meckling and Jensen (1976) stated from the results of his research that business companies owned by the public were extraordinary social discoveries. Millions of individuals voluntarily entrust billions of dollars, francs, pesos, etc. Personal wealth for the care of managers is based on a complex set of contractual relationships that describe the rights of the parties involved. The growth in the use of corporate forms and the growth in market value of established companies shows that at least, to date, creditors and investors in general have not been disappointed with the results, even though the costs are inherent in the company's form. The governance that was built among others in the form of management contracts turned out to be satisfying the owners of capital. Cahyani (2009) conducted a study aimed at investigating the effect of corporate

governance on company performance. The sample used in this study were 101 samples which were pooled data. The test results for the regression model with return on equity as the dependent variable show the CGPI variable has a significant positive effect on operating performance. Al Haddad et. al (2011) has conducted research on the relationship between corporate governance and the performance indicators of industrial companies in Jordan which are listed on the Amman Stock Exchange (ASE). The results showed a positive relationship between profitability measured by using EPS and ROA and Corporate Governance; positive relationship between liquidity, dividends per share, and company size with CG; and the positive relationship between CG and company performance. Todorovic (2013) concluded from the results of his research that there is a very clear relationship and the effect of the implementation of CG principles on company performance. Aggarwal (2013) concluded from the results of his research that governance has a positive and significant influence on the company's financial performance. Pillai and Al Malkawi (2017) examined the impact of internal corporate governance (CG) mechanisms on company performance in GCC countries. This study uses a set of company-level data panels from 349 financial and non-financial companies listed on the stock exchanges of the GCC countries. The results showed that governance variables such as government share ownership, audit type, board size, corporate social responsibility and leverage significantly affect FP in most countries in the GCC. Ararat, Black, B. Burcin (2016) concludes from the results of his research that there is a strong relationship between governance and the market value of the shares of public companies in Turkey.

Based on the discussion above, the

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hypothesis is as follows:

H2: Corporate governance has a positive effect on company performance.

Firm Size

Firm size is the level or size of the company. Company size indicators can be described in various sizes such as the value of assets and the amount of capital. Various studies have shown a relationship between company size and company profits. Alexander et. al (2005) concluded from the results of his research that there is a positive relationship between company size and capital structure. Amato et al (2007) conducted research on the effect of company size on the profitability of companies engaged in financial services by using various definitions of company size. The result is a positive relationship between company size and company profits. Gaur (2007) concluded from the results of his research that company size influences inventory levels and sales growth. Sales growth will ultimately increase company profits. Mesut Dogan (2013) conducted research on 200 companies listed on the Istanbul Stock Exchange, with data between 2008 and 2011. The result was a positive relationship between size indicators and firm profitability. So if the size of the company increases, the performance will also increase. Chang et. al (2013) shows from the results of his empirical study that there is a relationship between company size and financial performance. Abiodun (2013) conducted a study of the relationship between company size and company performance listed on the Nigerian Stock Exchange, using panel data for 2000-2009. The result is a positive relationship between the size of the company, in terms of the number of assets and sales, and the profitability of manufacturing companies

in Nigeria. Kumas et. al (2014) conducted research on the Turkish labor market. The result of the empirical study is that there is a relationship between company size and job qualifications. So there is a role for size.

Based on the above discussion the hypothesis is as follows:

H3: Firm size has a positive effect on company performance.

3. RESEARCH METHODS

This research uses quantitative research methods, with ordinary least squares (OLS). Processing is done with eviews 9. The quantitative research model is formulated as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Where:

Y = Performance;

X1 = IT Governance;

X2 = Corporate Governance;

X3 = Firm Size.

4. RESEARCH RESULTS AND DISCUSSION

The research population is a State-Owned Enterprise (BUMN). The sample is BUMN in the financial year 2014-2018.

Result

The data normality test results that have been done show that the data are normally distributed. Heterogeneity test results with BPG test showed that there was no heterogeneity in the research model. Multicollinearity test results show that the variance inflation factor (VIF) is smaller than 10. This means that there is no multicollinearity in the research model. This means that the research model passed the classical assumption test. The regression test results are as follows:

Dependent Variable: LABA

Method: Least Squares

Date: 10/11/19 Time: 20:30

Sample: 1 60

Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-8.303066	5.588297	-1.485795	0.1429
IT	1.750148	0.817963	2.139641	0.0368
CG	0.081580	0.064367	1.267415	0.2103
FS	0.695313	0.127576	5.450198	0.0000
R-squared	0.458953	Mean dependent var	7.956257	
Adjusted R-squared	0.429968	S.D. dependent var	2.488324	
S.E. of regression	1.878696	Akaike info criterion	4.163374	
Sum squared resid	197.6520	Schwarz criterion	4.302997	
Log likelihood	-120.9012	Hannan-Quinn criter.	4.217988	
F-statistic	15.83432	Durbin-Watson stat	0.645124	
Prob(F-statistic)	0.000000			

Discussion

Information technology governance has a positive effect on company performance. It means that hypothesis 1 is proven. Information technology governance will raise the company's commitments and rules. Regulation of the Minister of State-Owned Enterprises Number PER-02 / 1VIBU / 2013 Regarding the Guidelines for the Preparation of Information Technology Management of State-Owned Enterprises that information technology is very beneficial in developing a company's business. The decree states that information technology can support SOE business strategies that are in line with the long, medium and short-term goals to be achieved. Information technology development must be based on a governance system, contained in a master plan, and developed in synergy with fellow SOEs. It turns out that this information technology governance has been carried

out at State-Owned Enterprises (SOEs) so as to encourage the performance of SOEs.

Corporate governance has no significant effect on company performance. Means hypothesis 2 is not proven. This means that the application of corporate governance to SOEs has a positive but not significant effect. Need further study of corporate governance in SOEs. According to the results of Muslih's research (2019), corporate governance in SOEs in the Financial Sector has a significant effect on company performance.

The size of the company has a significant effect on the performance of BUMN. This means that the greater the SOE, the greater the driving force on SOE performance.

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5. CONCLUSIONS AND SUGGESTIONS

Conclusions

The Indonesian government has required the use of appropriate information technology. The purpose of this study was to study the implementation of the Ministry of SOE Regulation No. per02 / 1VIBU / 2013 regarding guidelines for the management of information technology in state-owned enterprises.

This research method uses quantitative methods with ordinary least square. The variables are performance, information technology governance, corporate governance, and company size. The population is state-owned enterprises. The sample is SOEs in the Financial Sector from 2014 to 2018.

The results showed that information technology governance had a significant positive effect on company performance, the application of corporate governance had no significant effect on company performance, and company size had a significant effect on company performance.

Suggestion

Based on the discussion above, it is recommended that:

1. The SOE Ministry must continue to refine the SOE information governance guidelines and monitor their implementation.
2. The Ministry of BUMN must establish parameters for evaluating information technology governance. An outline of the proposed parameters for information technology governance is attached.
3. Using existing parameters, a periodic evaluation of information technology governance from each SOE must be carried out.

REFERENCES

- Aggarwal, Priyanka. (2013). *Impact of Corporate Governance on Corporate Financial Performance*. IOSR Journal of Business and Management (IOSR-JBM). Volume 13, Issue 3. Sep. - Oct.
- Al-Haddad, W.M.Y., Alzurqan, S.T., Al-Sufy, F.J. (2011). *The Effect of Corporate Governance on the Performance of Jordanian Industrial Companies: An Empirical Study on Amman Stock Exchange*. International Journal of Humanities and Social Science. Vol. 1 No. 4, April.
- Ararat, Melsa, Black, Bernard S., Yurtoglu, B. Burcin. (2016). *The Effect of Corporate Governance on Firm Value and Profitability: TimeSeries Evidence from Turkey*. Emerging Market Review, 2016.
- Bhagat, S., Bolton, B. (2008). *Corporate Governance and Firm Performance*. Journal of Corporate Finance 14, April.
- Brown, Lawrence D. Caylor, Marcus L. (2006). *Corporate Governance and Firm Valuation*. Journal of Accounting and Public Policy 25, 409-434.
- Bushman, Robert. Chen, Qi. Engel, Ellen. Smith, Abbie. (2004). *Financial Accounting Information, Organizational Complexity, and Corporate Governance Systems*. Journal of Accounting and Economics 37, 167-201.
- Carla L., Wilkin, Carla L., Couchman, Paul K., Sohal, Amrik, Zutshi, Ambika. (.....). *Exploring differences between smaller and large organizations' corporate governance of information technology*.
- Dah, Abdullah; Beyrouti, Nouri; Showeiry, Michel. *The Effect of Independent*

- Directors on Firm Value.*
- Davies, A. *Best Practice in Corporate Governance: Building Reputation and Sustainable Success.* Gower.
- Desoky, Abdelmohsen M. Mousa, Gehan A. *Corporate Governance Practices: Transparency and Disclosure – Evidence From The Egyptian Exchange.* (2012). *Journal of Accounting, Finance, and Economics*, Vol. 2 No. 1 July, Pp. 49-72.
- Gupta, Pooja, Sharma, Aarti Mehta. (2014). *A study of the impact of corporate governance practices on firm performance in Indian and South Korean companies.* Elsevier.
- Hamsir, MutiaApriyanti, Suwandi, Memen, Juardi, Muhammad SaprilSardi.(.....). Analisis penerapan it governance menggunakan cobit framework dan sarbanesoxley dalam mendukung corporate financial performance (studikasis pada PT. TELKOM).
- Jensen, Michael C., Meckling, William H.(1976). *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure.* *Journal of Financial Economics*, October, V. 3, No. 4, pp. 305-360.
- Kementerian BUMN. Peraturan Menteri Negara Badan Usaha Milik Negara Nomor : PER — 01/MBU/2011 Tentang Penerapan Tata Kelola Perusahaan Yang Baik Pada Badan Usaha Milik Negara.
- Komite Nasional Kebijakan Governance. (2006). *Pedoman Umum Good Corporate Governance Indonesia.* KNKG.
- Lukviarman, Niki. (2016). *Corporate Governance: Menuju Penguatan Konseptual dan Implementasi di Indonesia.* The Governance Research Program Fakultas Ekonomi Universitas Andalas. PT Era Adicitra Intermedia, Solo.
- Lunardi, Guilherme Lerch, Becker, Joao Luiz, Macada, Antonio Carlos, Dolci, Pietro Cunh. (.....). *The impact of adopting IT governance on financial performance: An empirical analysis among Brazilian firms.*
- Lo, Huai-Chun; Wu, Ruei-Shian; Kweh, Qian Long. *Do institutional investors reinforce or reduce agency problems? Earnings management and the post-IPO performance.* *International Review of Financial Analysis*, 2016.
- Kementerian BUMN. (2011). *Peraturan Menteri Negara Badan Usaha Milik Negara Nomor: PER- 09 /MBU/2012 Tentang Perubahan Atas Peraturan Menteri Negara Badan Usaha Milik Negara Nomor PER-01/MBU/2011 Tentang Penerapan Tata Kelola Perusahaan Yang Baik Pada Badan Usaha Milik Negara.*
- Kementerian BUMN. (2012). *Keputusan Sekretaris Kementerian Badan Usaha Milik Negara Nomor: SK — 16 /S.MBU/2012 Tentang Indikator/Parameter Penilaian dan Evaluasi Atas Penerapan Tata Kelola Perusahaan Yang Baik (Good Corporate Governance) Pada Badan Usaha Milik Negara.*
- Murwaningsari, Ety. (2009). *Hubungan Corporate Governance, Corporate Social Responsibilities dan Corporate Financial Performance Dalam Satu Continuum.* *Jurnal Akuntansi Dan Keuangan*, Vol. 11, NO. 1, Mei: 30-41
- Murwaningsari, Ety; Parulian, Tobia. *Pengaruh faktor-faktor internal perusahaan terhadap income smoothing.* (2006). *Media Riset*

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Call for Paper – 2nd International Seminar on Accounting Society
“The Impact of Artificial Intelligence on Accounting for Society 5.0”

- Akuntansi, Auditing & Informasi*.
Vol. 6, No. 1 April 2006: 75 – 100.
- Muslih, Mochamad. (2019). Tata kelola berkelanjutan bagi BUMN bidang keuangan non publik. *Firm Journal of Management Studies*, volume 4 nomor 2.
- Muslih, Mochamad. (2018). Pengaruh Kompensasi Komisaris dan Direksi Terhadap Laba Perusahaan, Dengan *Corporate Governance* Sebagai Pemoderasi. *Jurnal Universitas Negeri Jember*.
- Nuswandari, Cahyani. (2009). Pengaruh Corporate Governance Perception Index Terhadap Kinerja Perusahaan Pada Perusahaan Yang Terdaftar Di Bursa Efek Jakarta. *Jurnal Bisnis dan Ekonomi (JBE)*, September.
- OECD. (2014). *Risk Management and Corporate Governance*. OECD Publication.
- Office of the Superintendent of Financial Institutions Canada. (2013). *Guideline of Corporate Governance*.
- Prasad, Acklesh, Heales, John, Green, Peter. A capabilities-based approach to obtaining a deeper understanding of information technology governance effectiveness: Evidence from IT steering committees.
- Scott, William R. *Financial Accounting Theory*. (2015). Pearson Canada Inc., edisi 7.
- Ye Fei, Wang Zhiqiang. (2013). *Effects of information technology alignment and information sharing on supply chain operational performance*.
- Yudiasra, Putu Pande, Darma, Gede Sri. (2015). *Pengaruh penggunaan teknologi informasi, disiplinkerja, insentif, dan turnover terhadap kinerja pegawai*. *Jurnal Manajemen dan Bisnis* ISSN: 1829-8486 (print)

Volume 12, No. 1, Pebruari.
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