



Internet Financial Reporting of Public Institutions and E-Government as a Medium of Good Governance in Indonesia

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ABSTRACT

Objective – Transparency of financial reporting can be achieved through various media including the internet and is an important factor of good governance. The use of internet in government has been regulated to encourage the government to build and develop websites to present information to the public. This research analyzes the factors that influence the government's internet financial reporting (IFR) through e-government.

Methodology/Technique – The factors tested in this research are: size, leverage, capital expenditure, and audit opinion of the Republic Indonesia Audit Board (BPK). The population of this research is 25 ministries registered on the e-government ranking index (PeGI) between 2013 and 2015. Path analysis using the SPSS 21 application program is used.

Findings – The results show that size, capital expenditure and audit opinion of BPK affected the use of IFR through e-government, whereas leverage did not affect the use of IFR through e-government.

Novelty – These findings indicate that e-government is an important mediating factor in disclosing financial reports on the internet as a medium of good governance for public institutions in Indonesia.

Type of Paper: Empirical

Keywords: Internet Financial Reporting; Size; Leverage; Capital Expenditure; Audit opinion; E-government.

JEL Classification: G40, G48, G49.

1. Introduction

Internet Financial Reporting (IFR) is a method of disclosing financial reports through the internet. According to Oyerele et al. (2003), IFR is a combination of internet multimedia capacity and the ability to communicate financial information interactively. In Indonesia, particularly in the public sector, few institutions currently disclose financial reports through the internet.

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Verawaty (2015) states that of the 81.82% of provincial governments using e-government, only 25.93% conduct IFR. Further, of the 84.85% of district/city governments using e-government, only 39.29% conduct IFR. The use of the internet as a medium for information disclosure in supporting good governance has been regulated in several regulations, including Presidential Instruction No. 6 of 2001, Presidential Instruction No. 3 of 2003, and Law No. 14 of 2008 on Public Information Openness.

IFR through e-government is a very effective and efficient way to disclose financial information to stakeholders. Pina et al. (2010:351) suggests that IFR is considered by citizens as an improvement in financial transparency and accountability. Transparency and accountability can be effective if the information presented is relevant and accessible by all parties, one of which is through the internet.

Research conducted by Verawaty (2015) uses e-government as the dependent variable, while research conducted by Saming (2018) uses e-government as an intervening variable in several public institutions, namely the provincial government, local governments, ministerial institutions, and non-ministerial institutions. This research is an extension of Saming's (2018) research which uses e-government as an intervening variable on the use of IFR as a form of good governance, focusing only on ministerial institutions in Indonesia between 2013 and 2015 by considering the availability of data that can be obtained, namely the e-government rating index (PeGI) which is issued by the Ministry of Communication and Information. This research contributes to public sector information systems which show that e-government plays an important role in publicizing financial reports on the internet which will improve transparency and hence, good governance.

2. Literature Review

The role of e-government as a mediating variable in the use of IFR in improving good governance is supported by the availability of IFR in financial reports on the internet. This condition will reduce agency problems caused by public transparency and accountability and will reduce information asymmetry between principals and agents.

Large local governments have large amounts of wealth and transfer of wealth (Rahman et al. 2013). Large local governments are required to be transparent with their financial management as a form of public accountability through disclosure of financial information to reduce agency costs. One type the media that encourages transparency is e-government, which provides instant access to information. Rahman et al. (2013) states that a high amount of total assets encourages local governments to report financial information as evidence of good governance.

Previous studies that use size as one an independent variable, such as Tennyson and Styles (2007), Cinca et al. (2008), Pina et al. (2010), Garcia and Garcia (2010) and Bolivar (2014), have found that size has a positive effect on the government's disclosure of financial statements on the internet. However, according to Rahman et al. (2013) and Verawaty (2015), size does not influence disclosure on the internet. Furthermore, Saming (2018) has found that size influences the use of IFR both directly and through e-government. Therefore, the larger the size of the public institution, the higher the demand to disclose financial reports through e-government. Based on this, the following hypothesis is formulated:

H1: Size has a positive effect on IFR through e-government.

Leverage can be interpreted as a public institution's ability to guarantee borrowed funds using the number of assets owned by a public institution. The government uses IFR to reduce the cost of capital arising from debt financing for public activities (Zimmerman, 1977). This is supported by research conducted by Laswad et al. (2005), Style and Tennyson (2007), and Garcia and Garcia (2010) which state that debt has a positive effect on financial reporting on the internet.

Furthermore, Gore (2004) found that the incentives given by debt owners to publish financial reports are more dominant than regulatory and political costs or pressures related to the same, without disclosure on the

internet. This is because the debtor demands transparency and accountability in the most applicable way, through disclosure of financial reports on the internet. However, this statement is not supported by Verawaty (2014), Verawaty (2015), Prabowo (2016), and Saming (2018) who found that leverage has no effect on IFR accessibility. Therefore, the greater the leverage of a public institution, the higher the demand to disclose financial reports through e-government. Based on this, the following hypothesis is formulated:

H2: Leverage has a positive effect on IFR through e-government.

In supporting the implementation of IFR, it is necessary to procure adequate infrastructure to anticipate the limitations of information and communication technologies needed in the implementation of IFR. An increase in capital expenditure is expected to increase the allocation of capital expenditure for the procurement of information and communication equipment and machinery.

Research conducted by Sipahutar and Sutaryo (2016) supports the above statement. Capital expenditure has a positive effect on the implementation of Indonesia local government's e-government. However, Saming's (2018) states that capital expenditure has a negative effect on the use of IFR and does not affect IFR through e-government. The existence of good e-government will therefore encourage the realization of public institutions financial reports through the internet, as it is supported by adequate infrastructure. Based on this, the following hypothesis is formulated:

H3: Capital expenditure has a positive effect on IFR through e-government.

Auditor opinion is considered to be a reflection of the quality of financial reports. Styles and Tennyson (2007) state that local governments that are rewarded by external organizations for good financial reporting tend to present their financial reports on the internet. The form of appreciation received by public institutions in Indonesia can be seen from the opinions given by the Republic of Indonesia Audit Board (BPK).

Saming (2018) found that audit opinions of BPK directly affects the use of IFR as well as through e-government. The disclosure of financial reports on the internet will be even easier if it is supported by implementation of e-government by public institutions. Based on this, the following hypothesis is proposed:

H4: The audit opinion of the BPK has a positive effect on IFR through e-government.

3. Research Methodology

This research examines Ministries in the 2013-2015 period. This research uses secondary data obtained from BPK and the Ministry of Communication and Information Technology (www.kominfo.go.id). The samples in this research are 25 Ministries and 75 observations.

The factors tested in this research are: size, leverage, capital expenditure, and audit opinion of the BPK. The data used for size, leverage, capital expenditures, and audit opinion of BPK are sourced from financial reports of public institutions in Indonesia that have been audited by the BPK. IFR were obtained by directly observing public institutions' official website (www.kemendagri.go.id). E-government is measured as an intervening variable using the e-government ranking index (PeGI) consisting of four criteria: policy, institutional, infrastructure, and planning. The measurements of public institutions' IFR are performed by identifying the financial information included in the annual report: the Statement of Budget Realization (LRA), the Statement of Changes in More Budget Balances (SAL), the balance sheet, the operational reports (LO), the Statement of Change in Equity (LPE), the Statement of Cash Flows, and notes to the financial reports. The annual report was given a score based on the measurements used in the research of Garcia and Garcia (2010), as modified according to Government Regulation No. 71 of 2010 on Government Accounting Standards.

The size of a public institution is measured using the total realization of employee expenditure. Leverage is measured by comparing total liabilities to total assets. Capital expenditure is measured by using the total realization of capital expenditure of the public institution. Audit opinion of the BPK is a reflection of the quality of the financial reports. The proxy used in this study is the opinion given by the BPK of the public institution, namely (1) Statement of Refusing to Give Opinion or Not Giving Opinion (TMP), (2) Unreasonable Opinion (TW), (3) Fair Opinion with Exception (WDP), (4) Unqualified Opinion with Explanatory Paragraphs (DPP WTP), and (5) Unqualified Exceptions (WTP). The audit opinion of the BPK is measured based on the opinions obtained, divided by five (5), namely the total audit opinion available, so the audit opinion of BPK will have a minimum value of 0 and a maximum value of 1.

The analytical method used is the classical assumption test and path analysis. Based on the intervening variable regression with the causal step method of Baron and Kenny (1986), the research model uses three research models as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \quad (1)$$

$$M = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \quad (2)$$

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 M + \varepsilon \quad (3)$$

Notes:

Y= IFR, β_0 = constant, β_1 - β_5 = regression coefficients, X1= size, X2= leverage, X3= capital expenditure, X4= BPK audit opinion, M= e-government, ε = error term

4. Results

The result of the classical assumption test shows that the result of the normality test using Kolmogorov-Smirnov test at model 1, 2, and 3 shows the probability of the Z value is not significant. That is, model 1 is 0.514, model 2 is 0.846, and model 3 is 0.402 (sig >0.05). This means that the assumption of normality is met for each model, which means the residual has been normally distributed.

Furthermore, the multicollinearity test results in models 1, 2, and 3 show that the overall tolerance values are above 0.10 (>0.10) and the VIF are all below 10 (<10), so there is no multicollinearity, which means the independent variables are not interconnected. The result of the lesser test shows that the variable do not contain heteroscedasticity, because the whole value is sig >0.05, which means that there is no correlation between the amount of data with the residual. The results of hypothesis tests are shown in Table 1.

Table 1. Results of Hypothesis Tests

Hypothesis	B	Sig.	Note
H1 : UBP* → E-Gov → IFR	0,132	0,034	H1 accepted
H2 : TU → E-Gov → IFR	0,047	0,874	H2 rejected
H3 : BM* → E-Gov → IFR	-0,035	0,501	H3 accepted
H4 : OAB → E-Gov → IFR	0,447	0,113	H4 accepted

Notes: UBP*= log transformation of size, TU= leverage, BM*= log transformation of capital expenditure, OAB= BPK audit opinion, E-Gov= e-government

5. Discussion

Table 1 shows that the effect of size on IFR is not fully mediated by e-government (partial mediation). In other words, the better the e-government owned by the public institution, the greater mediatory effect e-government will have on the relationship between the size of the public institution towards the use of IFR. The results of this research are inconsistent with Verawaty (2015), who found that there is no positive relationship between the size of local government and the accessibility of financial reports on the internet through e-government. However, the results are consistent with Saming (2018), who found that the size of the public body has an indirect effect on the use of IFR through e-government. The greater the size of the public institution, the greater the demand for public accountability and the reduction of agency costs is. The results of this research further strengthen the application of agency theory to e-government. Agency problems arise in the public sector due to a lack of transparency in financial information.

Table 1 shows that leverage does not affect IFR through e-government. In other words, e-government owned by a public institution is not able to mediate the relationship between leverage and the use of IFR. This may be because the public institutions examined in this study have a low levels of debt (5.98%) (Kasmir, 2008, p.164), so there are no demands from debtors for increased transparency and financial accountability. Based on research conducted by Gore (2004), the incentives given by debt owners to publish financial reports are more dominant than regulatory or political costs or regulatory pressure.

Further, the results of this research do not support the agency theory of Zimmerman (1977), which states that the use of debt to finance public activities is a driver for public sector managers to reduce the cost of debt. This can be achieved with IFR because with the distribution of financial reports on the internet is more efficient and more effective, which necessarily reduces agency costs. These results are consistent with Verawaty (2015) and Saming (2018), who found that leverage does not affect financial reporting on the internet. Hence, e-government is not able to mediate the relationship between leverage and the use of IFR.

Table 1 shows that capital expenditure affects IFR through e-government. This means that e-government owned by a public institution can mediate the relationship between capital expenditure and the use of IFR. These results are inconsistent with Saming (2018) who states that the amount of capital expenditure does not affect the use of IFR through e-government. The difference in research results may be due to the fact that the current research focuses only on ministerial institutions, looking at the use of IFR from year to year.

Table 1 shows that the effect of audit opinion of the BPK is fully mediated by e-government, so the better the e-government owned by public institutions, the greater mediatory effect e-government has on the relationship between the audit opinion of the BPK and the use of IFR. The results of this research support Saming's (2018), which shows that the audit opinion of the BPK influences the use of IFR through e-government. The results indicate that a positive audit opinion will encourage public institutions to reveal their financial reports on the internet.

6. Conclusion

This research aims to identify the mediatory effect of e-government on the use of IFR as a form of good governance. The results show that e-government may mediate the influence of the size of public institutions, capital expenditure, and audit opinions of the BPK on IFR, whereas the effect of leverage on IFR is not mediated by e-government. This is because, based on the data available, leverage within ministerial institutions is low (5.98%). These results show that IFR and e-government can be used to promote public transparency and accountability.

Based on these results, further research should use measurements issued by the Ministry of Communication and Information as a measurement of e-government variables in Indonesia. In addition, this research has further implications for compliance with government regulations related to the optimization of the use of IFR through e-government for all public institutions in Indonesia.

The primary limitation of this research is the availability of data. E-government index data (PeGI) issued by the Ministry of Communication and Information Technology is only available up to 2015. Further studies should not use PeGI as a benchmark for measuring e-government, except if the Ministry of Communication and Information provides PeGi data after 2015.

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