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TOWARDS REGIONAL SUSTAINABLE DEVELOPMENT VIA GOVERNMENT FINANCIAL TRANSPARENCY: EVIDENCE FROM INDONESIA

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Abstract: We examine factors that influence financial transparency in local government website in Indonesia which is motivated by the low level of financial transparency displayed in the local government's official website. The purpose of this research is to obtain empirical evidence on the effect of entity characteristics represented by the size of local government & taxes per capita, political factors represented by political power & e-government, and environmental factors represented by internet visibility & income per capita, on financial transparency displayed in local government website. By using three dimensions of financial transparency constructed from the combination of NGO Transparency International and government regulation, we try to assess financial transparency displayed in local government website more comprehensively. The observation was conducted at the end of August 2017 until September 2017. Logistic regression analysis was applied to evaluate the model. Using 411 samples from 514 Indonesia local governments in 2015, our data show that the level of financial transparency in local government website is still very low. Furthermore, the findings show that size of the local government, internet visibility, and e-government are positively associated with local government's financial transparency, but other variables including taxes per capita, political power, and income per capita have no effect on financial transparency.

Keywords: local government, financial transparency, entity characteristic, political factors, environmental factors.

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JEL Classifications: M48, L38

1. Introduction

Transparency becomes a vital aspect along with the rapid development of information communication technology, especially internet. Based on the data from Association of Indonesian Internet Service Providers (Asosiasi Penyelenggara Jasa Internet Indonesia-APJII) 2016, the penetration of internet user in Indonesia has reached half of total Indonesia population. This number placed Indonesia in third place for largest internet user in Asia in 2016 after China and India¹.

The high growth of internet user provides opportunity for the government to fix and improve service for the people through the use of technology and information, one of them by improving transparency through publication of information in government's official website. Beside the publication of general information, the role of website is also important to provide financial information for stakeholders (Styles & Tennyson, 2007). The

¹ Source: <http://www.internetworldstats.com/stats3.htm#asia>

provision of financial information is important to achieve transparency and accessibility of information by tax payers (Ríos et al., 2013), auditors (UU No. 15 tahun 2004), and the people (UU No. 14 Tahun 2008).

However, even though e-government regulation in Indonesia has been issued for almost 15 years and several other supporting regulations that require local government to manage an official website (Instruction of Ministry of Interior No. 188.52/1797/SJ of 2012) has been issued, there are some local governments that do not own website as transparency media. The data from the Centre of Data, Information, Communication, and Telecommunication of Ministry of Interior (Pusdatinkomtel Kemendagri) of 2017 shows that from 514 districts and municipalities in Indonesia, only 87% districts and municipalities that have website and routinely managed as transparency media². Besides, 13% of districts and municipalities have not own ideal website as media of transparency. The problem with website including 14 local governments with no official website, 50 local governments with not accessible website, and five with website but never update it since 2015.

From functional perspective, the majority of local government websites are not utilized as financial transparency media. Martani & Fitriarsi (2014) find that financial transparency and performance index in local government website is very low, around 6%. This support Rose (2004) who finds that most of local government website do not provide detailed financial information such as local government budget. Besides, Hermana et al., (2012) also find that the disclosure of financial information in local government's website is not as good as the completeness of features and services of local government. These considerations emphasize the importance of financial transparency shared through local government website to be studied.

There are factors that affect financial transparency in local government website. The result from existing research shows that entity characteristics such as local government size has positive effect on financial transparency in local government website (García & García-García, 2010; Serrano-Cinca et al., 2009; Styles & Tennyson, 2007). Besides that, other entity characteristics such as local government incomes in the form of local government taxes and transfer, also positively affect financial transparency (Guillamon et al., 2011). In Indonesia context, Martani & Fitriarsi (2014) also find that size and types of local government have positive effect on financial transparency and performance in local government website.

Furthermore, political factors may affect financial transparency. Tejedo & Araujo (2015) find that political power in local government has negative effect on financial transparency. This means that the higher the political power owned by local government, the lower is the level of financial transparency in the area. While political factor in the form of e-government has positive effect on financial transparency (Serrano-Cinca et al., 2009).

Another factor that affect financial transparency in local government website is environment. Serrano-Cinca et al. (2009) find that the level of popularity of website has positive effect on financial transparency. Another environmental factor is Gross Regional Domestic Revenue per capita also has positive effect on financial transparency (Martani & Fitriarsi, 2014; Serrano-Cinca et al., 2009; Styles & Tennyson, 2007; Pasekova et al., 2016). This means that the higher the popularity of website and income per capita in a local government, the higher the level of financial transparency in the website owned by the local government.

This study refers to Serrano-Cinca et al. (2009) who employ the factors of entity characteristics, politic, and environment to test whether these factors affect financial transparency in local government website. This research is different from Serrano-Cinca et al. (2009) especially in the dependent variable using financial transparency as measurement. The new financial transparency indicators is the result of adjustment from the financial transparency indicator (international transparency) used by Guillamon et al. (2011) and Vicente et al., (2013) on the Instruction from the Ministry of Interior No. 188.52/1797/SJ of 2012 regarding The Improvement of Transparency in Local Government Funds Management. The use of new indicator aims to measure financial transparency more comprehensively because the indicator has 28 items compared to Serrano-Cinca et al. (2009) which only have 9 items. The use of new indicator also solve subjectivity in in-site financial transparency assessment in Serrano-Cinca et al. (2009) and Martani & Fitriarsi (2014). Besides that, the use of this new indicator is

² Source: <http://www.kemendagri.go.id/pages/links/pemerintah-daerah-kabkota>

expected to be more suitable in measuring financial transparency in local government website in Indonesia because it has adjusted with local regulation.

This study aims to test whether entity characteristic represented by size of local government and taxes per capita, politic represented by local government political power and e-government, and environment represented by internet visibility and income per capita; affect financial transparency in local government website. This study is expected to provide theoretical and practical benefits. Theoretically, this study is expected to increase knowledge for academicians and becomes reference for future studies on financial transparency in local government website. Practically, the result of this study can be used as input and evaluation in policy making, especially to improve financial transparency in local government website.

2. Literature Review and Hypothesis Development

a. Literature review

Agency theory is a theory that describe the relationship between a party that acts as agent who perform activities based on the interest of another party who acts as principal (Jensen & Meckling, 1976). In the agency relationship, it may leads to agency problem in the form of information asymmetry and conflict of interest. As an effort to solve agency problem, principal and agent will bear agency cost. According to Jensen & Meckling (1976), agency cost can be classified into three types: (1) monitoring cost, (2) bonding cost, and (3) residual loss.

In public sector, the agency relationship occurs when the government as agent acts on the interest of people who acts as principal. According to Halim & Abdullah (2010), government as executive is the agent for legislative and public (dual accountability) and legislative is the agent for public. Similar with private sector, agency problem also occurs in public sector. In legislative level, agency problem in the form of opportunistic behavior may occurs in two positions, legislative as principal and agent. As principal, legislative has potency to propose policy that does not directly related with public service or legislative function. As agent, legislative may propose the activities that do not defend voter's interest or accommodate public needs (Halim & Abdullah, 2010). In government context, one way to minimize agency cost is by performing information disclosure regularly. This is in line with Araujo & Francisca (2016) who state that transparency might reduce information asymmetry problem, limit agency problem (Laswad et al., 2005), and make the process more open.

Signalling Theory is a theory that explain that government as a party that receive trust from people will try to show positive signal to their people (Martani & Fitriasari, 2014). This is cause by information asymmetry between the government external parties. Information asymmetry is a condition in which government has more information than external parties regarding the general condition and prospect of the government. One of the solutions to reduce information asymmetry is by providing positive signal to the external parties. For example, positive signal that can be given is publishing achievement or disclosing more detailed financial and non-financial information through various media including website. Positive signals can minimize dissatisfaction on local government prospect and increase external party's trust to government performance.

In Indonesia local government context, there are two regulations that mentioned local government obligation to disclose financial transparency in website. The first regulation is Government Decree No. 56 of 2005 regarding Local Government Financial Information System and the second one is Intruction of Ministry of Interior No. 188.52/1797/SJ of 2012 regarding the Improvement of Transparency in Local Government Budget. These two regulations are in line with Presidential Instruction No. 3 of 2003 regarding National Policy and Strategy of e-Government Development that require all institutions to own website as media of publication and Law No. 14 of 2008 regarding The Openness of Public Information to get information periodically.

Previous research on financial transparency in local government website is started by Laswad et al. (2005) who study the factors that affect financial information disclosure in local government website in New Zealand. Their research uses local government size, local government assets, leverage, political competition, and types of local

government as independent variables. The result of their research is local government assets, leverage, press visibility, and types of local government affect the disclosure of financial information in local government website.

Serrano-Cinca et al. (2009) study the factors that affect voluntary internet financial reporting. The factors are grouped into three dimensions that are entity characteristics (size, issuing debt, financial feature), politic (internet visibility and e-government), and environment (income per capita, education level, and socio-political commitment). The result of their research shows that size of local government, political will, and income per capita affect the level of voluntary Internet financial reporting. Guillamon et al. (2011) study financial transparency in Spain using political and socio-economy factors as proxy. The result shows that population, tax, and transfer income have positive relationship with the level of financial transparency. Besides that, their study also conclude that left-wing party tend to be more transparent than right-wing party.

However, continuing the study conducted by Laswad et al. (2005), García & García-García (2010) study the factors that affect the disclosure of financial information in local government website in Spain. The factors they study are local government size, leverage, capital investment, political competition, and press visibility. This study does not only develop new measurement for dependent variables, but also re-testing the effect of several factors that have no significant relationship in the previous research. The result shows that the factors that affect voluntary disclosure are size of local government, capital investment, press visibility, and political competition.

From the studies described above, we can conclude that there is inconsistency in term of factors that affect financial transparency in local government website. Based on this conclusion, this study develops previous studies by adding new variable and re-testing the variables that have no significant relationship or have contradicting results. The development of hypothesis with financial transparency in local government website as dependent variable and local government size, taxes per capita, political power, e-government, internet visibility, and income per capita as independent variables are as follow.

b. Hypothesis development

Laswad et al. (2005) explain that local government size as the quantity of resources owned by local government, while Serrano-Cinca et al. (2009) put it as a variable that describe an entity. The quantity of resources owned by local governments is the performance result which local government wants to show to public. Thus, local government will perform higher financial transparency in local government with larger size (Styles & Tennyson, 2007). Besides that, local government that has large size usually has problems on resource management especially regarding program and public service activities that make local government to receive strong pressure from the people to publish information as a form of need to oversee government's performance. García and García-García (2010), Serrano-Cinca et al. (2009), and Styles & Tennyson (2007) find that local government size has positive effect on financial transparency. Besides that, study in Indonesia conducted by Martani & Fitriyani (2014) also find positive relationship between local government size and financial transparency and performance in local government website. Thus, the first hypothesis is:

Hypothesis 1: Local government size has positive effect on financial transparency in local government website.

Public sector is funded by taxpayers which is why they need information transparency to oversee every activities performed by government (Ríos et al., 2013). In local government context, tax per capita describe tax revenue and local government retribution from the populace. Each tax and retribution collected by local government and used to fund the governance is accountable to the public as a form of transparency. Thus, local government that manages large taxes will perform higher transparency (Guillamón et al., 2011). This is in line with principle-agent model developed by Ferejohn (1999), which indicates that the quantity of taxes managed is related with the high level of transparency. Guillamón et al. (2011) show that tax per capita has positive relationship with financial transparency in local government website. Therefore, our second hypothesis is:

Hypothesis 2: Tax per capita has positive effect on financial transparency in local government website.

Local government political power is one of variables in political factors that represent political effect from legislative side. According to Tejedo & Araujo (2015), local government with strong political power will tend to make policy easier because the pressure from opposition is low. The easiness in policy-making makes the local government tends to be shut and cover up policies that do not represent principal's interest (Marques & Pinto, 2018). Because of that, local government with strong political power will have low financial transparency in their website. Tejedo & Araujo (2015) show that political power has negative effect on transparency. Thus, our third hypothesis is:

Hypothesis 3: Political power has negative effect on financial transparency in local government website.

E-government is one of variables in political factor that represent the political effect from executive side. E-government is an effort to perform electronic based governance, in order to improve the quality of public service effectively and efficiently, transparently, and accountable (Inpres No. 3 of 2003). The implementation of e-government directly will encourage local government to utilize technology and information as transparency media (Kanapinskas et al., 2014). Therefore, local government that implements e-government will have better level of financial transparency. This is in line with the function of e-government to increase government openness and transparency (Tejedo & Araujo, 2015). Serrano-Cinca et al. (2009) find that e-government has positive relationship with financial transparency in local government website. Therefore, our fourth hypothesis is:

Hypothesis 4: E-Government affects financial transparency in local government website.

Internet visibility is one of the variables in environment factors in this study. According to Serrano-Cinca et al. (2009), the use of internet visibility is more appropriate to be used when we talk about transparency through the internet than press visibility used by Laswad et al. (2005). Serrano-Cinca et al. (2009) use popularity of website as one of the proxies of internet visibility which reflects the position/rank of a website in search engine such as Google, MSN, or Yahoo. The higher the rank/popularity of a website, then the website will appear in the highest position as search result in a search engine so that there will be more visitors who checked the website. The number of visitor will provide pressure to the local government to provide useful content such as financial information on regular basis in their website. Thus, local government that has popular website will perform higher financial transparency (Serrano-Cinca et al., 2009). Serrano-Cinca et al. (2009) and Alcaraz-Quiles et al., (2014) find that internet visibility has positive relationship with online transparency. Therefore, our fifth hypothesis is:

Hypothesis 5: Internet visibility has positive effect on financial transparency in local government website.

Income per capita is an indicator to measure public welfare. According to Styles & Tennyson (2007), local government that has high income per capita will get high public monitoring. This is due to this type of government tend to have more active populace. As a result, public needs more information in order to evaluate the performance of the local government (Rajnoha et al., 2017). Therefore, local government with higher income per capita will have higher financial transparency as a form of compliance with such public pressure. Styles & Tennyson (2007) and Serrano-Cinca et al. (2009) prove that income per capita has positive effect on financial transparency in government website. Besides that, Martani & Fitriasaki (2014) also find positive effect on financial transparency and performance in local government website in Indonesia. Thus, the sixth hypothesis in this study is:

Hypothesis 6: Income per capita has positive effect on financial transparency in local government website.

3. Research method

a. Sample

The population in this study is all local government at district and municipal level in Indonesia in 2015. The year of 2015 is selected because when this study is conducted, the last financial information update that can be performed by local government through the official website is in 2015. In this study, the sample frame is district and municipal governments that are included in the List of Autonomous Government in Indonesia 2015³. Meanwhile, samples are selected using purposive sampling technique with the following criteria: (1) district and municipal governments included in the List of Autonomous Government in Indonesia 2015, (2) local government is not administrative municipality/district which includes five administrative municipalities and one administrative district in Daerah Khusus Ibukota Jakarta, (3) local government has accessible website and conduct information updating minimum in 2015, (4) local government publish audited LKPD in 2015 and is accessible, and (5) local government with accessible result of legislative election in 2014. Based on the criterias, we use 411 local government of Indonesia.

b. Operational definition and variable measurement

The dependent variables in this study is financial transparency in local government website, referring to Guillamón et al. (2011) and Vicente et al. (2013) study that use financial transparency indicators from Global Civil Society Organization International Transparency. According to Guillamón et al. (2011), financial transparency can be defined as the availability of information that are accessible by public regarding budgets, income & expenses, as well as surplus & deficit. The indicator is then adjusted with the Instruction of Ministry of Interior No.188.52/1797/SJ of 2012 regarding Transparency of Local Government Budget Management to capture the condition in Indonesia better. The adjustment process can be seen in the appendix.

Based on the adjusted financial transparency indicator checklist, the next stage is conducting observation on each local government website to assess the availability of information based on the checklist. If the information is available, we assign 1 as score, and if the information is unavailable, we assign 0 as score. Financial transparency index in local government website will be obtained based on the division of score from each local government with total checklist of 28 items (appendix).

Furthermore, referring to the study conducted by Serrano-Cinca et al. (2009), we classified local government based on two categories. The classification is performed because, according to Martani & Fitriasaki (2014), local government financial transparency index is still very low. Besides that, based on the observation, there are more than 50% of the samples do not implement financial transparency based on the criteria in the index. Because of this, to avoid the reduction of samples more than 50%, this classification is made. The classification of local government is presented in Table 1.

Table 1. Classification of Local Government (Y)

No	Assessment Guidelines	Score (Y)	Predicate
1	Local government get financial transparency index of 0% based on the checklist for financial transparency indicators.	0	Do not perform financial transparency
2	Local government get financial transparency index above 0% based on checklist for financial transparency indicators.	1	Perform financial transparency

Source: composed by the authors

Meanwhile, the independent variables in this study are as follows; Local government size (SIZE) is defined as the size of local government (Laswad et al., 2005). Tax per capita (TAX) is the average income from tax paid by the population of an area, collected by the local government in certain period of time (Serrano-Cinca et al.,

³ Source: <http://otda.kemendagri.go.id/>

2009). Local government political power (POLSTRENGTH) is described as the presence of coalition in the government that might affect policy, especially transparency policy (Tejedo-Romero and de Araujo, 2015). E-government (EGOV) is an effort in governance through electronic media, in order to improve the quality of service effectively and efficiently, transparently, and accountably (Inpres No.3 of 2003). Internet visibility (LINKS) is defined as the popularity of a website that reflects the position/rank of the website in the search engine such as Google, MSN, or Yahoo (Serrano-Cinca et al., 2009), and Income per Capita (IPC) is the average income of the population in a country/local area that represent the level of community welfare in a country/local area (Martani and Fitriyani, 2014). The measurement of each variable in this study is presented in Table 2.

Table 2. Operational Definiton and Variable Measurement

Variable	Acronym	Measurement	Reference
Financial Transparency in Local Government Website	FTI	The adjustment from the indicators of financial transparency (International transparency) and TAPD (Instruction of Ministry of Interior), perform=1, does not perform=0	(Guillamón et al., 2011; Serrano-Cinca et al., 2009; Vicente et al., 2013)
Local Government Size	SIZE	Local government's total assets	(García and García-García, 2010; Martani and Fitriyani, 2014; Serrano-Cinca et al., 2009; Styles and Tennyson, 2007)
Tax per capita	TAX	Total local taxes and retribution divided by the total population in the area	(Guillamón et al., 2011)
Local government political power	POLSTRENGTH	The number of local legislative members of the regional government coalition divided by the number of regional legislative members	(Guillamón et al., 2011; María del Carmen, Bolivar, and Hernandez, 2014; Tejedo-Romero and de Araujo, 2015)
E-government	EGOV	Dummy variable, 1 if local government has been ranked in Pemeringkatan e-Government Indonesia (PeGI) and 0 if they have not during 2011-2015.	(Serrano-Cinca et al., 2009)
Internet visibility	LINKS	Link popularity, natural logarithm of total websites ranked higher on the search result than local government website	(Alcaraz-Quiles et al., 2014; Serrano-Cinca et al., 2009)
Income per capita	IPC	Gross Regional Revenue divided by the total population in the area	(Martani and Fitriyani, 2014; Styles and Tennyson, 2007)

Source: composed by the authors

c. Data analysis method

We use logistic regression analysis to test the hypothesis. Based on the formulation of problems and framework described previously, the logistic regression model used in this study is as follows.

$$\ln \left(\frac{P}{1-P} \right) = \alpha + \beta_1 \text{SIZE} + \beta_2 \text{TAX} - \beta_3 \text{POLSTRENGTH} + \beta_4 \text{EGOV} + \beta_5 \text{LINKS} + \beta_6 \text{IPC} + \varepsilon$$

Notes:

- $\ln \left(\frac{P}{1-P} \right)$: Probability of local government performing financial transparency in local government website.
- SIZE : Size of local government.
- TAX : Tax per capita.
- POLSTRENGTH : Local government political power.
- EGOV : Indonesia e-government ranking (Pemeringkatan *e-Government* Indonesia-PeGI).
- LINKS : Links Popularity.
- IPC : Income per capita.
- α : Constant.
- $\beta_1 - \beta_6$: Coefficient of regression.
- μ : Error.

Further, hypothesis testing is performed through the following stages: assessment of regression model fit, assessment of overall model, omnibus test of model coefficient, coefficient of determination (R^2), and coefficient of regression (partial test).

4. Results and Discussion

From the total of 411 samples, the data on minimum, maximum, mean, and standard of deviation are presented in Table 3.

Table 3. Descriptive Statistic and Correlation

	FTI	SIZE	TAX	POLSTRENGHT	EGOV	LINKS	IPC
N	411	411	411	411	411	411	411
Minimum	0.000	27.030	9.720	0.000	0.000	5.080	9.030
Maximum	1.000	31.330	15.290	1.000	1.000	15.080	12.910
Mean	0.460	28.400	11.650	0.350	0.510	10.060	10.400
Std. Deviation	0.500	0.650	0.820	0.190	0.500	2.180	0.630
FTI	1.000						
SIZE	0.187^b						
	0.0000						
TAX	0.139^b	0.471^b					
	0.0050	0.0000					
POLSTRENGHT	-0.0570	0.0310	-0.0170				
	0.2520	0.5250	0.7330				
EGOV	0.223^b	0.131^b	0.118^a	-0.0180			
	0.0000	0.0080	0.0160	0.7120			
LINKS	0.0930	0.185^b	0.176^b	-0.0390	0.0950		
	0.0580	0.0000	0.0000	0.4270	0.0540		
IPC	0.136^b	0.246^b	0.258^b	0.0030	0.0120	0.0370	1.000
	0.0060	0.0000	0.0000	0.3480	0.3050	0.4530	

Source: composed by the authors

Based on descriptive statistic data, we can know that financial transparency in local government website is still very low with mean score of 11% with standard deviation of 16%. The lowest score for the index is 0%, which is acquired by more than half of the samples or in 223 districts and municipalities. While the maximum score is 57.1% in seven districts and municipalities which includes Pekalongan, Banda Aceh, and Makassar municipalities and Gianyar, Jembrana, Jombang, and Trenggalek districts.

Then, hypothesis testing using logistic regression is performed to find if the probability of dependent variable to occur can be predicted based on the independent variables. The result of logistic regression is presented in Table 4.

Table 4. Result of Logistic Regression

	Exp. Sign	B	S.E.	Wald	Df	Sig.	Exp. (B)
SIZE	+	0.576	0.207	7.743	1	0.005^a	1.780
TAX	+	0.56	0.164	0.117	1	0.732	1.058
POLSTRENGTH	-	0.565	0.564	1.003	1	0.317	1.759
EGOV	+	0.613	0.217	8.448	1	0.004^a	1.879
LINKS	+	0.149	0.54	7.470	1	0.006^a	1.211
IPC	+	0.191	0.210	0.830	1	0.362	1.211
<i>Constant</i>		-21.212	5.350	15.722	1	0.000^a	0.000
<i>-2Loglikelihood</i>		54.989				0.000^a	
<i>Hosmer and Lemeshow</i>		5.406				0.713	
<i>Nagelkerke R Square</i>		0.167					

Source: composed by the authors

The result of regression model fit using Hosmer and Lemeshow goodness of fit and Omnibus Tests of Model Coefficients (-2Loglikelihood) show consistent result. The result of testing using Hosmer and Lemeshow shows no significant chi-square score (0.713) thus, we can conclude that the model is fit with the data. Meanwhile the result of testing using Omnibus Tests of Model Coefficients shows significant chi-square so that we can conclude that there is relationship between independent variables and dependent variable in this study. Further, the testing on coefficient of determination in logistic regression using the result of Nagelkerke R square shows coefficient of determination of 0.167 which means that independent variables explain 16.7% variations in dependent variable, while the 83.3% are affected by another factor that is not tested in this model.

Based on the result of regression testing in Table 4, local government size has coefficient of 0.576 with significance level of 0.005. The significance level is below $\alpha = 0.01$, thus the first hypothesis (H_1) is supported, which means local government size has positive effect on financial transparency in local government website. This supports the study conducted by García & García-García (2010), Serrano-Cinca et al. (2009), Styles & Tennyson (2007), and Martani & Fitriasari (2014) which prove that local government size has positive effect on financial transparency through website. Local government with large size usually have problem with the management of resources. This is because local government has a lot of programs/public services. Thus, local government with large size will faces strong pressure from large population regarding the openness of information in assets management which makes local government to perform financial transparency to reduce information asymmetry. Besides that, local government with large size will be easier in performing financial transparency because they have adequate facilities and infrastructures compared to local government with smaller size.

Tax per capita has coefficient of 0.56 with significance of 0.732. The significance level is above $\alpha = 0.01$, thus second hypothesis (H_2) is not supported, which means tax per capita does not affect financial transparency in local government website. This might be caused by local government budget to fund the government not only from income collected from the community, but also from transfer funds from the central government. Besides that, the comparison between locally generated revenue (Pendapatan Asli Daerah-PAD) and general allocation funds (Dana Alokasi Umum-DAU) is still low as presented in figure 1 below. This shows that most local government still depends on the fundings from the central government. The level of local government dependency on the central government may explain as why tax per capita does not affect the level of financial transparency in local government website.

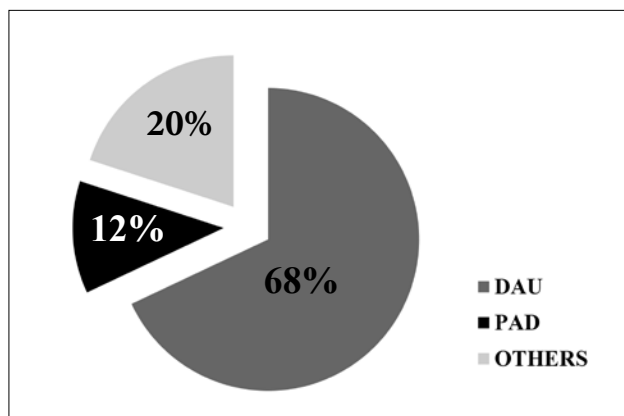


Fig. 1. The Composition of Local Government Income in 2015

Source: composed by the authors

The variable political power has coefficient of 0.565 and significance level of 0.317. The significance level is above $\alpha = 0.05$, thus the third hypothesis (H_3) is not supported, which means local government political power does not affect financial transparency in local government website. Local government political power, measured using the percentage of DPRD members from coalition parties that support current government. Based on Gallagher, Laver, & Mair (2011) there are two factors that encourage the formation of coalition, similarity in ideology (ideologically-connected coalition) and the necessity to win political battle (minimal-winning coalition). The formation of coalition at the local government level tends to follow the second type, minimal-winning coalition. This is reflected from the variations of coalition among political parties at the local government level. The second type coalition is more vulnerable because it has no ideological relationship in its formation process. Besides that, the narrowness of time in building coalition also degrade the quality of coalition formed and thus will only focused on pragmatist interest, such as distribution of political position in the government. The low quality of coalition may explain as why local government political power does not affect financial transparency in local government website.

E-government has coefficient of 0.613 and level of significance 0.004. The significance level is lower than $\alpha = 0.05$, thus the fourth hypothesis (H_4) is supported, which means e-government affects the financial transparency in local government website. This result supports Serrano-Cinca et al. (2009) study which find that the implementation of e-government will make local government to be more transparent. The implementations of e-government will encourage the improvement in financial transparency through internet as aimed by e-government, to improve public service effectively and efficiently, transparently, and accountably. Besides, the Presidential Instruction Number 3 of 2003 which specifically regulates the obligation to manage website and publication of financial document through local government website periodically. Because of that, through this result we can conclude that the implementation of e-government at local government level is very effective to encourage financial transparency in local government website.

Internet visibility has coefficient of 0.149 and level of significance of 0.006. The significance level is below $\alpha = 0.05$, thus the fifth hypothesis (H_5) is supported, which means internet visibility affects financial transparency in local government website. This result supports Serrano-Cinca et al. (2009) and Alcaraz-Quiles et al. (2014) studies which prove that internet visibility has positive effect on financial transparency through website. Using website popularity as proxy, local government with popular website will have large number of visitors. The large number of visitors will bring high pressure to the local government. The pressure may come as the demand to perform financial transparency regarding the governing activities or provision of useful contents for the people. Therefore, local government with popular website will perform financial transparency to fulfil these demands. This is done to reduce information asymmetry and maintain the popularity of the website.

Income per capita has coefficient of 0.191 and level of significance of 0.362. The level of significance is above $\alpha = 0.05$, therefore the sixth hypothesis (H_6) is not supported. This means that income per capita does not affect financial transparency in local government website. Income per capita is a proxy to measure the level of prosperity in an area by measuring the average income in the area. Income per capita does not reflect the average income in the area if the distribution of income in the area is uneven. Income inequality in an area can be seen from gini ratio. Based on the data from BPS, in 2015, gini ratio in Indonesia is quite large. The level of gini ratio can be seen in the figure 2 below.

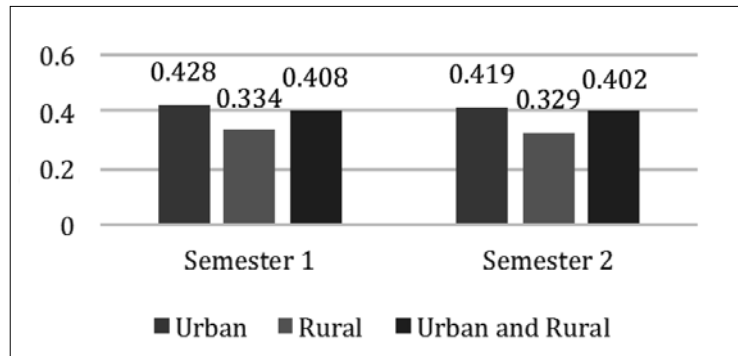


Fig. 2. Gini Ratios in Rural and Urban Area in Indonesia 2015

Source: composed by the authors

Gini ratio with 0 (zero) value shows that there is a perfect income distribution, which is every people has equal income. Meanwhile, the value 1 (one) shows that there is an income gap. Graphic 4.1 shows that there is an income gap in income distribution in Indonesia in 2015, with gini ratio reaching 0.402. This inequality shown mostly in urban area. While in rural area the inequality is smaller. The value of ratio gini the reason why income per capita does not affect financial transparency in Local Government website.

5. Additional Test

Robustness test is conducted because this research uses dummy variable to measure financial transparency in Local Government website, thus the quality of financial transparency is not reflected in the measurement. Therefore, the dependent variable that will be used in this robustness check is financial transparency index on the information disclosed in Local Government website. Moreover, a linear regression analysis will be used to evaluate the model.

That test will be conducted using smaller sample size as much as 188 Municipality or City Government in Indonesia, because most of the Municipality and City Governments do not conduct a financial transparency practice in their website. However, the result of regression analysis (F test) shows that the independent variables do not affect dependent variable, or the model is not fit. Moreover, the classical assumption test results show that the model does not distributed normally (normality test), even though other classical assumption tests has been met. The problem with model fit can be solved by adding a dummy variable namely 'LOCATION', which signifies the location of Local Government (on Java and outside Java). However, to meet the normality assumption, outlier sample should be deleted, which resulted with 130 Local Governments as research sample. Afterward, data transformation is conducted on the dependent variable, thus normality assumption can be met.

Based on the result of analysis result, as presented in table 5, the result of regression test using transparency index shows an inconsistent result with the initial research model. The result shows that tax per capita and e-government has an effect on financial transparency, while Local Government's size, Local Government's political power, internet visibility, income per capita, and location does not have an effect on financial transparency. The e-government variable shows a significant result in both regression models; thus, it can be concluded that e-government has a significant effect on financial transparency in Local Government's website. The size of sam-

ple, which is too small, might be one of the factors that affect the inconsistent result of robustness test. Therefore, if this research uses greater sample, thus there is a possibility that the factors will shows a significant effect on dependent variable. These factors are the reasons why further research on these topics should be conducted.

Table 5. Results of Multiple Regressions

Model	Sign	FTI-ADJUSTED	
		Coef.	P-Value
Constant		0.874	0.031^b
SIZE	+	-0.027	0.107
TAX	+	0.023	0.073^c
POLSTRENGTH	-	-0.053	0.315
EGOV		-0.075	0.000^a
LINKS	+	0.001	0.898
IPC	+	0.006	0.714
LOCATION		0.027	0.237
F Value		2.565	
Sig.		0.017	
R ²		0.128	
Adj. R ²		0.078	

Source: composed by the authors

6. Conclusion

This research aims to examine the effect of entity characteristics namely Local Government’s size and tax per capita, political factor namely political power and e-government, as well as environmental factor namely internet visibility and income per capita on financial transparency in Local Government’s website. Hypothesis test result shows that Local Government’s size, e-government, and internet visibility has a positive effect on financial transparency in Local Government’s website. Meanwhile, tax per capita, Local Government’s political power, and income per capita does not have a significant effect on financial transparency in Local Government’s website.

The result of this research is useful for: (1) regulator (policy maker), in this matter the Ministry of Internal Affairs, in revising the previous Ministerial of Internal Affairs Instruction Number 188.52/1797/SJ of 2012 regarding the Enhancement of Local Government Budget Management Transparency by adding financial information that needed to be disclosed in the website and additional clause or article about reward and punishment as a motivation for the Local Governments to publish more financial information through website, (2) Ministry of Communication and Informatics needs to conduct an assistance to encourage the implementation of e-government at Local Government level, thus the implementation of e-governement can reach fourth stage, that is utilization stage, which will leads to more transparent governance, and (3) the Ministry of Internal Affairs should establish an uniformed website interface for the local governments, thus the website will be more presentable, informative, and popular, which will facilitate local governments’ to enhance their transparency through the website.

This research uses dummy variable to measure financial transparency in local government websites and e-government, thus the next research is expected to use financial transparency index that based on financial transparency indicator along with the improvement in the level of financial transparency published in local governments’ website in Indonesia. Moreover, along with the PeGI survey conducted by Ministry of Communication and Informatics in the whole municipality and city governments in Indonesia, the next research can use the result of PeGI survey due to its quality that can represent the quality of the implementation of e-government in Indonesia. Addition of others variables such as entity characteristics, political stability as political proxy, and education level as environment factors can be done to get a more comprehensive result.

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Appendix 1. The Adjustment of Financial Transparency Indicator in Website

No	Indicators of Financial Transparency (NGO International Transparency)	Financial Transparency (Ministrial of Internal Affairs Instruction Number 188.52/1797/SJ of 2012)	The Adjustment of Financial Transparency Indicator in Local Government Website
1	<p>Accounting and Budget (11)</p> <ul style="list-style-type: none"> a. Annual financial report published b. Publication of the annual financial report approval date c. Publication of the Local Government budget d. Publication of the budget approval date e. Publication of budget changes approved f. Publication of the budget of the decentralized entities and municipal corporations g. Regularly publication of information on budget execution (minimum monthly) <p>Publication of audit reports of:</p> <ul style="list-style-type: none"> h. Local government i. Companies and other municipal agencies <p>The following financial and budgetary indicators is published:</p> <ul style="list-style-type: none"> j. Surplus (deficit) per capita k. Fiscal autonomy (tax revenue / total revenues) 	<p>Publication in current data in menu “Local Government Budget Management Transparency” including:</p> <ul style="list-style-type: none"> a. Summary of Regional Work Unit Work Plan and Budget (Rencana Kerja dan Anggaran Satuan Kerja Perangkat Daerah - RKA-SKPD) and Summary of Regional Finance Manager Work Plan and Budget (Rencana Kerja dan Anggaran Pejabat Pengelola Keuangan Daerah - RKA-PPKD); b. Regional Regulation Draft on APBD (Anggaran Pendapatan dan Belanja Daerah-APBD) and Regional Regulation Draft on APBD amendment delivered to the Head of Local Government and Regional People’s Representative Assembly (Dewan Perwakilan Rakyat Daerah-DPRD). c. Regional Regulation on APBD and its amendment d. Summary of SKPD Budget Implementation Document (Dokumen Pelaksanaan Anggaran/DPA-SKPD) and Summary of PPKD Budget Implementation Document (Dokumen pelaksanaan Anggaran PPKD/DPA-PPKD) e. Budget Realization Report (Laporan Realisasi Anggaran-LRA) of all SKPDs and PPKDs f. Audited Local Government Financial Statements (Laporan Keuangan Pemerintah Daerah-LKPD) and Auditor’s opinion on LKPD 	<p>Accounting and Budget (19)</p> <ul style="list-style-type: none"> a. Audited Local Government Financial Statements; b. Publication of Local Government Financial Statements Approval; c. Regional Work Unit Work Plan and Budget (Rencana Kerja dan Anggaran Satuan Kerja Perangkat Daerah - RKA-SKPD); d. Regional Finance Manager Work Plan and Budget (Rencana Kerja dan Anggaran Pejabat Pengelola Keuangan Daerah - RKA-PPKD); e. Regional Regulation Draft on APBD (Anggaran Pendapatan dan Belanja Daerah-APBD) delivered by the Head of Local Government to DPRD f. Regional Regulation Draft on APBD amendment delivered by the Head of Local Government to DPRD g. Regional Regulation on APBD h. Regional Regulation on APBD amendment i. Summary of SKPD Budget Implementation Document (DPA-SKPD) j. Summary of PPKD Budget Implementation Document (DPA-PPKD) k. Publication of APBD approval l. Publication of APBD amendment approval m. Publication of Regional Owned Enterprise (Badan Usaha Milik Daerah-BUMD) Budget n. Regular Publication of Budget Realization Report of all SKPDs o. Regular Publication of Budget Realization Report of all PPKDs p. Publication of Auditor’s opinion on LKPD q. Publication of Auditor’s opinion on BUMD r. Surplus (deficit) per capita s. Fiscal autonomy (tax revenue / total revenues)

No	Indicators of Financial Transparency (NGO International Transparency)	Financial Transparency (Ministrial of Internal Affairs Instruction Number 188.52/1797/SJ of 2012)	The Adjustment of Financial Transparency Indicator in Local Government Website
2	<p>Transparency on municipal revenues and expenditures (5)</p> <p>The following indicators related to income and expenditure of the municipality are published:</p> <ol style="list-style-type: none"> Tax revenue per capita (income tax/population) Expenditure per capita (expenditure/population) Investment per capita (investment expenditure/ population) Average payment period (outstanding liabilities x 365 / total expenditures) Average collection period (outstanding credits x 365 / total revenues) 		<p>Transparency on municipal revenues and expenditures (5)</p> <ol style="list-style-type: none"> Tax revenue per capita (income tax/ population) Expenditure per capita (expenditure/ population) Investment per capita (investment expenditure/ population) Average payment period (outstanding liabilities x 365/ total expenditures) Average collection period (outstanding credits x 365/ total revenues)
3	<p>Transparency on municipal debt (4)</p> <ol style="list-style-type: none"> Publication of the municipal debt Data provided on the yearly evolution of debt Disclosure of the following indicators: Debt per capita (current financial liabilities/ population) Relative debt (debt/ total budget) 		<p>Transparency on municipal debt (4)</p> <ol style="list-style-type: none"> Publication of the municipal debt Data provided on the yearly evolution of debt Disclosure of the following indicators: Debt per capita (current financial liabilities / population) Relative debt (debt / total budget)

Source: composed by the authors

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