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Article

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ACCOUNTING, CORPORATE GOVERNANCE & BUSINESS ETHICS | RESEARCH ARTICLE

The impact of local government characteristics on the accomplishment of Sustainable Development Goals (SDGs)

Nafila Dwi Mutiarani¹ and Dodik Siswanto^{1*}

Abstract: The research aims to analyze the impact of local government's characteristic on the accomplishment of Sustainable Development Goals (SDGs) in Indonesia. The United Nations's Sustainable Development Goals (SDGs) represent a global action plan, approved by world leaders, intended to put an end to poverty, diminish social discrepancies, and protect the environment. The SDGs consist of 17 objectives and 169 targets that are scheduled to be achieved by 2030. Indonesia began to implement these SDGs in 2015. This present study involves 34 provinces as samples with the observation period being 2015–2016. Multiple regression analysis is used here for testing the research hypothesis which is in relation to the scoring of the accomplishment of the Sustainable Development Goals within the provinces studied. The results obtained by this study represent the characteristics of local government in terms of region size, the number of



Nafila Dwi Mutiarani

ABOUT THE AUTHOR

Dodik Siswanto graduated from Universitas Indonesia in Accounting (Bachelor Degree) and Public Administration (Doctoral degree). His Master's degree was from International Islamic University Malaysia in Master of Science in Accounting. His research area is in Islamic accounting, finance, zakat, waqf, and climate change. Previously, he worked as a researcher in a big securities company and as an investment manager in Islamic Insurance. Currently, he is an Assistant Professor in the Faculty of Economics and Business at Universitas Indonesia. He also contributed to many social public activities promoting social welfare and education. His two notable books are *Islamic Principles in the Public Sector Budget and Wealth Management of Prophet PBUH*.

Nafila is a bachelor's degree graduate who has actively worked in government agencies as a civil servant. Although Sustainable Development Goals (SDGs) are a hot topic, no research has been conducted in this area, especially in relation to the effect of local government characteristics on the level of achievement of SDGs in Indonesia. Nafila has conducted research as a bachelor's thesis requirement, which has been supervised by Dr. Dodik Siswanto. She has received a satisfactory grade for her thesis.

PUBLIC INTEREST STATEMENT

The implementation of Sustainable Development Goals (SDGs) in a developing country like Indonesia requires a big effort. Given the lack of regulatory support, SDGs may not be implemented properly. As occurred with the Millennium Development Goals (MGDs), previous SDGs were not well implemented in Indonesia. Our research will identify factors that can support the achievement of SDGs in Indonesia. We focused on 34 provinces in Indonesia for the year 2015–2016 for this research. The results show that region size, number of regional work units, and local own-source revenue are significant factors in the achievement of the SDGs in each province.

the regional work units, and the existence of local own-source revenue, impacting the accomplishment of the SDGs. The implication of this research is that local government needs a great effort and resource to fulfill the SDGs. This must be supported by a strong leader of local government and good infrastructure as well as the system.

Subjects: Accounting; Corporate Governance & Business Ethics

Keywords: sustainable; government; size; unit; revenue

1. Introduction

Countries throughout the world are competing in terms of how developed they can become. This trend is particularly prevalent in developing countries in the expectation of improving public welfare. Such development is intended to meet human needs on large scales. On the one hand, this circumstance has very successfully increased economic growth. On the other hand, the attention given to the social pillar and the natural environment has, so far, been inadequate. Both large-scale social discrepancies and significant damage to the natural world has resulted from this inadequate attention being made to ecological conservation and sustainability in the development process. This concern has led to the establishment (by the UN) of the idea of the *Sustainable Development Goals* (SDGs).

The SDGs are intended to balance the development process by focusing on what has been termed the Triple E (Economy, Equality, and Ecology). This is because the current global community has started to pay more attention to the necessity for balance with regard to these. Indeed, many consider that, unless proper action is taken, human life will be extinguished. The paradigm represented by SDGs is not entirely new since this is essentially a revised form of the paradigm of the Millennium Development Goals (MDGs). This revision has seen the number of targets increased from 67 (in the MDGs) to 169 for the SDGs. In the terms of the implementation of the MDGs, Indonesia achieved 49 of the stipulated 67 (Badan Perencanaan Pembangunan Nasional (Bappenas), 2015). However, three goals from eight may be still under target such as (a) improve maternal health (b) combat HIV/AIDS and tuberculosis and (c) ensure environmental sustainability (Ministry of health, 2020). There is still a big homework in achieving MDGs for Indonesia.

The SDGs were established on the 25 September 2015. They consist of 17 global objectives which stipulate 169 targets. They were proposed for the purpose of serving as guidelines for policies and funding for the next 15 years and so the goals are intended to be achieved by 2030. As a member of the United Nations, Indonesia has approved the SDGs as a new paradigm for development. However, this paradigm does require changes to the mindsets and behaviors relating to development. Thus, the Indonesian government has issued some regulations which are intended to assist in the accomplishment of the SDGs in Indonesia. In fact, no obligatory regulation to achieve specific target of SDGs for central government and local governments.

The contribution of this research is that of analyzing a number of factors relating to local government in Indonesia and the accomplishment of the Sustainable Development Goals (SDGs). No research of this kind has been conducted before in Indonesia or perhaps in relation to any other country. No paper has been found which has discussed this issue, thus, this may well be the first paper which discusses the impact of local government characteristics on the accomplishment of the UN's Sustainable Development Goals (SDGs).

2. Background

To further the accomplishment of the SDGs, the collaboration and cooperation of all state bodies are required. The SDGs in this unitary nation (Indonesia) are implemented by the central government via

the delegation of this task to the local governments. Accordingly, all agendas relating to the SDGs have to be translated into, and integrated into, both the national and local development programs.

It would seem that Indonesian geographical circumstances and the governmental system have created complexities with regard to the accomplishment of the SDGs. Therefore, the present author has identified the issue of whether the characteristics of various local governments in Indonesia affect their accomplishment levels with regard to the SDGs.

Several studies have described the characteristics of local government in relation to economic development. Nevertheless, none of these studies have set out to explain the effects of the characteristics of local government on the accomplishment of the SDGs. Previously Hammond and Tosun (2009) have studied economic growth as a component of the SDGs. Their study analyzed the effects of local autonomy, as one of the characteristics of local government, on economic growth in metropolitan and non-metropolitan cities.

In Indonesia, there have been some studies that describe the effects of local characteristics on some variables currently known as indicators relating to the SDGs. Setiyawati and Hamzah (2007) have studied the effects of the following factors: Local Own-Source Revenue (PAD), Generally Allocated Funds (DAU), Specially Allocated Funds (DAK), and Development Expenditure on Economic growth, Poverty, and Unemployment.

The results of that study showed that PAD had a positive effect on economic growth. On the other hand, they demonstrated that DAU had a negative effect on economic growth. Besides this, Setyaningrum and Syafitri (2012) have studied the effects of the characteristics of local government on the levels of disclosure present in financial reports (produced by such governmental institutions).

3. Theory-based literature review

This study employs some theoretical concepts as a basis for its analyses. The theories used are those relating to stakeholders, legitimacy, and local government; this is in order to study the correlation between the characteristics of local government and SDG accomplishment levels.

Freeman and McVea (2001) defined a *stakeholder* as a group of individuals that may affect or be affected by the accomplishment of organizational goals. Further, it is explained by Freeman (1984), that the stakeholder theory describes to what parties the enterprises are held responsible. Enterprises have to maintain a good relationship with their *stakeholders* by meeting their needs and wants, particularly the *stakeholders* that have resource capacities needed for the operation of the enterprise, such as the workforce, the market for the products of an enterprise (Chairiri & Ghozali, 2007).

Adhima and Hariadi (2012) confirmed that according to the legitimacy theory, enterprises must consistently ensure that they operate in such a way as to comply with the prevailing norms in the society or environment wherein the enterprise is located. They explained further that by engaging in social disclosure, the existence and activities of the enterprise can obtain status or legitimacy from the societies within which it is embedded.

The Resource-based (RB) theory, as put forward by Penrose (1959) argues that enterprises can improve their competitive advantages by developing the resources to survive in the long term (Astuti & Sabeni, 2005). The key to the RB approach is the strategy of understanding the relationship between resources, capabilities, competitive advantages, and profitability. In particular, it is important to understand the mechanisms by which it is possible to sustain competitive advantages over time.

3.1. Sustainable Development Goals (SDGs)

The 70th General Meeting of the United Nations (UN) in September 2015 in New York, United States of America, marked a new beginning in global development. Some 193 countries approved the new agenda promoting universal development contained in the document entitled “Transforming

Our World: the 2030 Agenda for Sustainable Development”, describing 17 objectives and 169 goals which are to be considered valid from 2016 to 2030.

The SDGs are a follow-up from the Millennium Development Goals (MDGs) approved by the UN member countries in 2000 (that program ended in 2015). However, there are fundamental differences between the SDGs and the MDGs. The MDGs were approved more than 15 years ago and specified only 8 objectives, 21 goals, and 60 Indicators. The main goal is to reduce to half, the development issues addressed by its objectives and goals.

In contrast to the MDGs, the SDGs accommodate a comprehensive view of development. In particular, the qualitative aspects of development (not accommodated at all by the MDGs) are addressed along with the quantitative aspects—by the targeting of a comprehensive solution for each of the objectives and goals. The SDGs ensure universally balanced roles for all countries, developed, developing, and underdeveloped countries—so that all can fully contribute to global development. Therefore, all countries have their respective roles and responsibility in relation to the accomplishment of the SDGs.

The SDGs inhere 5 fundamental principles (the 5 Ps) that are focused on balancing the economic, social, and environmental dimensions. The 5 Ps are *People, Planet, Prosperity, Peace, and Partnership*. These five fundamental principles are inseparable from and integrated to the 17 objectives and 169 goals for a better human life which constitute the SDGs. The state leaders approved the SDGs as a collective commitment to eradicate poverty, eliminate hunger, improve health quality, improve education, and reduce social discrepancy. This development agenda is also committed to ensuring that nobody is left behind and that, therefore, all groups can take part in, and obtain benefits from, the SDGs.

3.2. Local characteristics

The word “characteristic,” here, is used to mean a special feature with specific nature conforming to a particular disposition that differentiates one individual from another (Poerwadarminta, 2006). Therefore, the characteristics of a local government consist of the special features embedded in that local government which characterizes a region and differentiates it from other regions. The characteristics of local governments examined in this study are region size, functional differentiation, and Local Own-Source Revenues.

According to the Governmental Regulation of 47/1997 included in the National Spatial Plan, an area is a united geographical unit and relevant elements, whose borders and systems are based on the administrative and functional aspects of that region (Government of Indonesia, 1997). Functional differentiation refers to the extent that an organization is divided into functional departments. In the structure of the Indonesian government, the division into functional departments is overseen by SKPD (Satuan Kerja Perangkat Daerah). SKPD serves the executive function, establishing coordination between and with other governmental entities in order to ensure good governance. The legal basis of the SKPD is Article 120 Act. No. 32/2004 on Local Government (Government of Indonesia, 2004a). Based on the Act. 33/2004, regarding the financial balance between the central government and the local government, Local Own-Source Revenue is defined as the revenue collected by the region, based on the prevailing local and other regulations (Government of Indonesia, 2004b).

4. Empirical literature review and hypotheses development

The term, region size, refers to the size of the region under a local government’s control. Region size is a variable frequently used to explain various aspects of studies on local government. According to Act. 33/2004, region size is a variable that indicates the extent to which facilities and infrastructures are needed in a regional unit. The larger the size of a governmental region the greater the need for facilities and infrastructure which must be provided by the local government

to ensure the availability of good public services. The study conducted by Meianto (2014) showed that region size has a positive and significant effect on capital expenditure.

The effects of capital expenditure on economic growth has been studied by Waryanto (2017). The objective of that study was to identify the impact of government expenditure on economic growth using panel data from 30 developing countries from the 1970s to the 1980s. The study focused on government expenditure separately. It developed previous methods of study by explicitly acknowledging the role of a limited budget and the bias resulting from the excluded variable. This study concludes that capital expenditure has a positive and significant effect on economic growth.

Based on the results of the aforementioned studies, it can be concluded that the larger the size of a local government and the larger the capital expenditure, the higher the SDG accomplishment levels of that local government—because economic growth is an indicator of the attainment of SDGs. Based on the supporting literature, the following hypotheses are proposed:

H₁: Region size has a positive effect on SDGs accomplishment level

The Regional Work Unit (SKPD) represents a functional differentiation within Indonesia's government. Patrick (2007) suggested that the Pennsylvanian local governments, which had high levels of functional differentiation, were more likely to adopt new regulations than local governments with lower functional differentiation (Setyaningrum & Syafitri, 2012).

Further, it was explained by Damanpour (1991) that the level of functional differentiation will not only result in an increased likelihood that such regulations would be implemented, but also in an increased likelihood that administrative innovations, relating to new thinking, information, and ideas, would emerge (Suhardjanto & Yulianingtyas, 2011).

Therefore, it can be concluded that local governments with a larger number of SKPDs will, albeit indirectly, be more likely to have a greater commitment to implementing SDG regulations that are intended to solve problems and so accomplish SKPD's functions, such as the attainment of SDG targets (which is an economic sustainability commitment). Based on this research, the following hypothesis is developed:

H₂: The Number of SKPDs has a positive effect on the SDG accomplishment levels.

Local Own-Source Revenue (PAD) is revenue (as the name suggests) that derives only from local sources and represents local independence levels (Santosa & Rahayu, 2005). The main sources of PAD are local taxation and retribution collected from the people in the region in question. Therefore, larger PAD revenues will result from higher public participation in the local payment of tax and retribution. Accordingly, the government will be motivated to bring prosperity to the people in return for the tax and retribution payments. This is in line with the stakeholder theory's proposition that enterprises, i.e., in this case, local governments, should maintain a good relationship with their stakeholders by accommodating their wants and needs.

In addition, according to the aforementioned *resources based theory*, the greater the resources an organization owns, the more flexible the entity can be in making various efforts to accomplish its objectives. Based on these factors, the following hypothesis is developed:

H₃: PAD has a positive effect on SDG accomplishment levels.

5. Research design

The population of this study consists of the 34 provinces in Indonesia, the population of this study is also the sample to be studied. This study constructed a regression, using the following model:

$$SDGs_{hit/ali} = \alpha + \beta_1 LUAS_i + \beta_2 SKPD_i + \beta_3 PAD_i + \beta_4 PDK_i + \epsilon$$

$SDGs_{hit}$ represents the accomplishment of SDGs in province i , according to *scoring* via own-scoring; $SDGs_{ali}$ represents the accomplishment of SDGs in province i , according to *scoring*—Alisjahbana et al. (2018); LUAS represents the region size of province i ; SKPD represents the number of SKPD in province i ; PAD represents the Local Own-Source Revenue of province i ; PDK represents the population of province i ; α represents a constant; β represents the regression coefficient; ϵ represents the *error term* (the assumed error in the study).

In this study, the dependent variable is the accomplishment level of SDGs of the local government in question. The dependent variable deriving from the result of own-scoring is measured via the total of all the individual scores of the provincial government, and the individual provincial scores were “0” if the criterion/indicator was not met and “1” if the indicator was met. For example, if the government of province A meets 5 indicators that represent 5 of the 17 objectives of the SDGs, then the score for the government of province A is 5. The score is then divided by 17 to get the ratio of accomplishment of SDGs in the province. The scoring is based on Performance Evaluation on Local Government (Evaluasi Kinerja Penyelenggaraan Pemerintah Daerah-EKPPD). The indicator is based on local government indicator. On the other hand, the dependent variable deriving from the other sources is the score representing SDGs accomplishment levels in the article written by Alisjahbana et al. (2018), entitled “Menyongsong SDGs Kesiapan Daerah-daerah di Indonesia” (Preparing Indonesian Local Governments in Accomplishment of SDGs). The indicators are based on general indicator.

The independent variables in this present study are local characteristics: (1) region sizes; (2) number of SKPD; and (3) The Local Own-Source Revenues of the Indonesian Province governments. The control variable in this study is the population in the various provinces represented by its PDK. Based on the result of the study conducted by Safitri and Aliasuddin (2016), it can be understood that the population has a positive and significant effect on economic growth. The population comprises human resources who are engaged in economic activities. Therefore, a larger population will generally result in a higher level of economic growth, which is one of the indicators of the accomplishment of the SDGs.

6. Empirical results and discussion

The biggest SDGs goals achievement is Goal 7: Affordable and Clean Energy (28 score, Goal 2: Zero Hunger (27 score) and Goal 3: Good Health and Well-being (21 goal). Each province has good program to achieve these goals especially Goal 7 which focuses on clean energy. The lowest SDGs’s score is Goal 6: Clean Water and Sanitation, not all provinces can achieve the standard target for this.

| Variable | Smallest | Largest | Mean | Standard Deviation |
|-------------------------|-------------|----------------|------------------|--------------------|
| LUAS (Km ²) | 644.01 | 319,036.05 | 56,281.73 | 60,990.28946 |
| SKPD (unit) | 25 | 43 | 35.1471 | 3.7183603 |
| PAD (Rp) | 277,686,126 | 36,888,017,588 | 3,917,029,744.62 | 7,089,002,926.01 |
| PDK (people) | 639,639 | 46,668,214 | 7,505,357.18 | 10,787,106.36 |
| SDGs _{hit} (%) | 11.76 | 41.18 | 24.74 | 6.60114 |
| SDGs _{ali} | 1.17 | 2.49 | 1.8918 | 0.27489 |

In this study, the dependent variable is the accomplishment level relating to SDGs as measured by the score of a province in terms of the number of the 17 indicators/criteria of SDG accomplishment which it has met. The independent variables in this study represent the province governments' characteristics: region size, SKPD, and PAD. Population size is the control variable.

The result of the descriptive analysis of these variables is presented in Table 1. In this analysis, the logarithm (Ln) is used to reduce the excessive data fluctuation; applying this method, the data used is simplified without having to change the proportion of the initial score. Ln is employed in the analysis of the descriptive statistics for the variables LUAS and PAD. Based on the results of the analysis of these descriptive statistics, the largest region size is Papua Province (319,036.05 Km²), and the smallest province, in area, is DKI Jakarta (664.01 Km²).

Table 1 illustrates that the largest number of SKPDs (43) are owned by Banda Aceh while the smallest number of SKPDs (25) are owned by Gorontalo. Further, DKI Jakarta has the largest PAD (Rp 3.917.029.744,62), while West Sulawesi has the smallest PAD (Rp277.686.126). The province of Kalimantan Utara, which is Indonesia's most recently established province, was founded in 2012 based on Act. of 20/2012 and has the smallest population (639.639) while the province of West Java has the largest population (46.668.214).

The province of South Sulawesi yielded the highest SDGs_{hit} accomplishment level (0.4118) with 7 indicators out of the 17 being accomplished. In contrast, the provinces of Bangka Belitung, DKI Jakarta, and East Java had the smallest SDGs_{hit} (0.1176) scores; both only accomplished 2 of the 17 indicators. In relation to the other measure, the province of East Kalimantan had the highest SDGs_{all} score (2.49), and the province of Papua had the lowest (1.17). The model used in the present study has undergone a multicollinearity test, a heteroskedasticity test, and an autocorrelation test in order to ensure that it meets all the requirements of *Best Linear Unbiased* (BLUE).

6.1. SDGs_{hit}

Table 2 presents the results of the regression test made using SPSS 21. The result of the F test shows a score of 0.087 which is smaller than the alpha of 0.1. This implies that the independent variables of LUAS, SKPD, and PAD all, simultaneously, had an effect on the attainment of the SDGs. The adjusted value of R² is 0.132 (13.2%); this implies that the independent variables and the control variable can explain 13.25% of the dependent variables' behaviors while, of course, the remaining 86.8% would have to be explained by other factors beyond the scope of this study.

The hypothesis suggesting that region size has a positive effect on the SDGs accomplishment level is accepted. The probability score of LUAS in the t-test is 0.021, which is smaller than the alpha value of 0.05, and this implies that LUAS had a significant effect on the SDGs accomplishment level. Also, the beta value of LUAS in the regression test is 0.024, implying a positive correlation between LUAS and SDGs. These findings are in line with the results of the studies

Table 2. Result of hypothesis testing of SDGs_{hit}

| Variable | Coefficient | Prob. | Sign. |
|-------------------------|-------------|-------|-------|
| (Constant) | -0.100 | | |
| LUAS | 0.024 | 0.021 | ** |
| SKPD | 0.003 | 0.291 | |
| PAD | -0.006 | 0.800 | |
| PDK | 0.006 | 0.817 | |
| Adjusted R ² | 0.132 | | |
| F | 2.256 | 0.087 | * |

*** Significant at 1%; ** significant at 5%; * significant at 10%.

conducted by Kusnandar and Dan Siswanto (2012) and Meianto (2014), where the results show that region size has a positive and significant effect on capital expenditure. They are also in line with the study conducted by Waryanto (2017) on the effect of capital expenditure on economic growth—as one of the indicators of SDGs attainment.

The result of this test is also in line with the resource-based theory’s suggestion that the larger the size of the resources owned by an enterprise, the larger the opportunity the enterprise has to accomplish its objectives and bring prosperity to the stakeholders.

The independent variable, SKPD, as can be seen from the Beta of the regression test, has a positive correlation to the attainment of SDGs. This finding is in line with the studies conducted by Patrick (2007) and Damanpour (1991) which found that the number of SKPDs has a positive correlation to the level of compliance with regulations, and the accomplishment of targets that may lead to innovative administration.

However, the above effect is not significant. This can be seen from the probability value associated with it in Table 2 of 0.291—which is larger than the alpha values of 0.1, 0.05, and 0.01. This is possible because the SDGs represented a new concept when the study was conducted. Therefore, SKPD was not familiar with SDGs at that time. SDGs have not been fully implemented in SKPD and have not been adequately and optimally socialized to SKPD. Therefore, the hypothesis suggesting that the number of SKPDs has a positive effect on the SDGs accomplishment level is rejected.

The final independent variable, PAD, yielded the beta value of -0.006 in the regression test, implying a negative correlation with SDGs. In addition, the score of the t-test related to PAD yielded the probability value of 0.8, larger than the alpha values of 0.1, 0.05; and 0.01. This finding is not in line with the resource-based theory which suggests that the larger the resources owned by an enterprise, the more likely the enterprise will be to accomplish its objectives and provide benefits to its stakeholders.

The above may result from the fact that the Local Own-Source Revenue (PAD) is not the only component of local revenue to be used for financing local activities. There are other components, such as Generally Allocated Funds, Specially Allocated Funds, and others, that are included in the total local revenue.

6.2. $SDGs_{ali}$

Just like the two previously mentioned indicators, this indicator was tested to identify if LUAS, SKPD, and PAD either partially or individually or collectively or simultaneously had an effect on the

Table 3. Result of hypothesis testing of $SDGs_{ali}$

| Variable | Beta/Coefficient | Sig. | Sign. |
|-------------------------|------------------|-------|-------|
| (Constant) | 0.751 | | |
| LUAS | −0.044 | 0.221 | |
| SKPD | −0.025 | 0.028 | ** |
| PAD | 0.237 | 0.007 | *** |
| PDK | −0.169 | 0.074 | * |
| Adjusted R ² | 0.354 | | |
| F | 5.523 | 0.002 | *** |

*** Significant at 1%; ** significant at 5%; * significant at 10%.

SDGs accomplishment level. The data giving the values of SDGs accomplishment levels as the dependent variable in the test is derived from the scoring conducted by Alisjahbana et al. (2018).

Table 3 shows that the probability value yielded by the F test was 0.002, which is smaller than the alpha value of 0.01. This means that the independent variables of LUAS, SKPD, and PAD simultaneously or collectively do indeed have an effect on SDGs accomplishment. The Adjusted R^2 value of 0.354 implies the ability of the independent variables and the control variable to explain the dependent variable. This implies that LUAS, SKPD, and PAD as independent variables can explain 35.4% of SDGs attainment (measured by $SDGs_{ait}$) as the dependent variable. The remaining 86.8% is explained by other factors beyond the scope of this study. The Adjusted R^2 value is higher than the Adjusted R^2 value obtained when using $SDGs_{hit}$.

The hypothesis suggesting that region size has a positive effect on SDGs accomplishment level is rejected. This is apparent in the beta value of LUAS shown in Table 3, which demonstrates a negative correlation to SDGs attainment (-0.044). The result of the t-test shows that the probability value of LUAS indicates a significant effect on SDGs attainment because the value is 0.221, which is larger than the alpha values of 0.1.

The above finding is not in line with the resource-based theory and also not in line with the combined results of the studies conducted by Kusnandar and Dan Siswanto (2012) and Meianto (2014) on the effect of region size on capital expenditure, and Waryanto (2017) on the effect of capital expenditure on economic growth (as one of the indicators of SDGs attainment).

The results of the t-test indicate that SKPD has a significant effect on SDGs attainment as shown by the probability value of 0.028 for SKPD, which is smaller than the alpha value of 0.05. However, the correlation shown by the beta in the regression test shown in Table 3 suggests a negative correlation to SDGs attainment (-0.025). This is very different from the result yielded by the hypothesis testing based on $SDGs_{hit}$ where SKPD has a positive correlation to SDGs attainment but has no significant effect.

Therefore, the hypothesis suggesting that the number of SKPDs has a positive effect on the SDGs accomplishment level is rejected, here, because the findings of this present study are not in line with those of the studies conducted by Patrick (2007) and Damanpour (1991), which argued that the number of SKPDs has a positive correlation with the implementation of regulations and the accomplishment of the other targets, and this may lead to innovations in administration. The discrepancy may result from the fact that the SDGs were a new concept in the year when the study was conducted and therefore SKPD was in the process of learning and implementing the SDGs. In addition, the target of accomplishment had not been optimally socialized.

The PAD independent variable also yields a result, here, which is far different from the result yielded by the testing of $SDGs_{hit}$. The beta value of 0.237 in the regression test indicates a positive correlation to SDGs attainment. The result of the t-test shows that PAD has a probability value of 0.007, smaller than the alpha value of 0.01. It can thus be concluded that PAD has a significant effect on SDGs attainment. This finding is at odds with the result yielded by the testing of $SDGs_{hit}$ which demonstrates an inverse correlation between PAD and SDGs attainment (with an insignificant effect on SDGs).

Based on the hypothesis testing relating to $SDGs_{ait}$, the hypothesis suggesting that PAD has a positive effect on SDGs is accepted, and this is in line with the resource-based theory suggestion that the larger the resources owned by an enterprise, the more likely the enterprise will be to accomplish its objectives. This is also in line with the stakeholder theory suggestion that an enterprise, e.g., a local government, has to be responsible and maintain a good relationship with the stakeholders who harbor the resources needed for operational activities. Here, the stakeholder is the society served because PAD derives from the taxation and retribution collected from that society.

The difference of SDG_{hit} and SDG_{ali} is caused by difference sources, SDG_{hit} is based on local government indicator so it reflects the real achievement for local government. While, SDG_{ali} the real is based on general indicator which may be flexible in achieving the target. The research has contributed to the finding for each calculation.

7. Summary and conclusion

Based on the result of this present study on the factors affecting SDGs accomplishment levels. examining the local government characteristics of region size, number of SKPD, and Local Own-Source Revenue with population as the control variable and employing the F test, it can be concluded that region size, and Local Own-Source Revenue simultaneously have an effect on SDGs accomplishment levels. This applies in relation to own-scoring and in relation to the scoring yielded by Alisjahbana et al. (2018).

With regard to own scoring, it can be concluded, to some extent, that only region size has a significant effect on the SDGs accomplishment level. Neither the number of SKPDs or the Local Own-Source Revenue have a significant effect on the SDGs accomplishment level. The results are different from SDG_{ali} which is based on general indicator.

This study has some limitations. Among others, the sample used in this study is limited to provinces in Indonesia as they were from 2015 to 2016. Further research for this paper can be extended for the period and increasing indicators of SDGs for each goal.

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