The Evaluation of Fiscal Decentralization in Indonesia Based on the Degree of Regional Autonomy

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Abstract: The implementation of regional autonomy in Indonesia has lasted almost 18 years. However, the success of regional autonomy has not been optimal. Some researchers discovered the existence of limitation of Regional Government Budget. This study investigates the presence of the degree of regional autonomy and its impact on social welfare using data covering all districts in Indonesia from 2013 to 2016. To test hypotheses, we first group districts based on the degree of regional autonomy and than test the existence of the degree of regional autonmy and its impact on social welfare simultaneously on each of regional autonomy degree. Partial Least Square release 6 is used to test hypotheses. The results show that the fiscal decentralization has a significant effect on capital expenditure in districts' APBD in Indonesia but has no significant effect on economic growth and social welfare of districts in Indonesia; capital expenditure in districts' APBD in Indonesia has a significant effect on the economic growth and social welfare of the districts in Indonesia; and economic growth has no significant effect on the social welfare of the districts in Indonesia. The significance of the influence between variables depends on the degree of regional autonomy.

Keywords: Fiscal decentralization, capital expenditure, growth, welfare, degree of regional autonomy.

1. INTRODUCTION

According to the Explanation of Law Number 23 Year 2014 concerning Regional Government, it is stated that according to the mandate of the 1945 Constitution of the Republic of Indonesia, the regional government has the authority to regulate and manage government affairs according to the principle of autonomy and co-administration. The provision of broad autonomy to the regions is directed at accelerating the realization of community welfare through improving services, empowerment, and community participation. In addition, through broad autonomy, the regions are expected to be able to increase competitiveness by paying attention to the principles of democracy, equity, justice, privilege and specificity as well as the potential and diversity of regions within the Unitary State of the Republic of Indonesia.

Regional autonomy in Indonesia, which has been running for almost 18 years since January 1, 2001, in reality has not succeeded in fulfilling the objectives of implementing regional autonomy, namely accelerating the realization of public welfare. The failure of the objectives of regional autonomy in improving community welfare is due to the ability of local governments to manage regional finances (Badrudin, Kusuma, & Wardan, 2018 and Badrudin & Kuncorojati, 2017). The ability of regional financial management is indicated by the degree of regional autonomy (Siregar

& Andriyani, 2013 and Tangkilisan, 2005). Various studies on the success of regional autonomy have been carried out. In general, only examining the series of variables of fiscal decentralization, capital expenditure, economic growth, and public welfare. However, research that links the degree of regional autonomy with the success of regional autonomy has not been done much. Therefore, the research was conducted with the aim of analyzing the successful implementation of regional autonomy in Indonesia based on the degree of regional autonomy.

2. LITERATURE REVIEW

Fiscal decentralization is a process of distributing the budget from a higher level of government to a lower government to support the functions or tasks of government and public services in accordance with the many authorities delegated. In implementing fiscal decentralization, the principle of money should follow function is a principle that must be considered and implemented, meaning that any transfer or delegation of government authority has consequences on the budget needed to carry out such authority (Badrudin & Siregar, 2015). Although there has been a delegation to manage the budget, most districts in Indonesia have regional financial dependence in the form of very high central government funding (Kamaroellah, 2017; Syahputra, 2017; Demora, 2016; Aulia, 2014; Sistiana, 2014;Tiyaningsih, 2009).

Government expenditures from time to time are increasing because of the increasing government activities that require financing or the Law of Ever Increasing State Activities or the law of increasing state

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or legal activities, increasing state or legal requirements, increasing state expenditure. One of the state expenditure is capital expenditure or expenditure (Vegirawati, 2012). Capital expenditures are investments in the form of procurement of useful assets of more than 12 (twelve) months and those assets are used in government activities that are economically, socially, and other benefits that can improve the government's ability to serve the community. Thus, capital expenditure is beneficial to improve the welfare of the community. To measure the administration of good governance, the government must be able to fulfill the basic principles or principles of regional financial management, namely transparent, efficient, effective, accountable and participatory. These five principles must be reflected in every implementation of regional financial management policies, both in the context of drafting the Regional Government Budget (APBD), the APBD determination process / APBD implementation, and the APBD accountability (Rante, Mire, & Paminto, 2017).

Economic growth is an increase in regional income (Gross Regional Domestic Product or GRDP) regardless of whether or not changes in economic structure occur, while economic development is a process that causes an increase in the real income per capita of a country in the long run by changes in institutional systems such as economics, politics, law, social, and culture that have an effect on structural change and institutional transformation. So, economic growth is a necessary but insufficient requirement for the economic development process. Due to the low degree of regional autonomy in most districts in Indonesia, the impact on economic growth is initially negative (Qomariyah, 2018; Wurangian, S.M.E, & D.T, 2017; Sumardi, 2014).

Economic growth will only occur if the government designs an expansive government budget policy, namely budget policy with a direct expenditure budget design greater than the indirect expenditure budget. Thus, contractionary regional government budget policies such as those that occur in many districts in Indonesia will not be able to encourage economic growth (Nurhemi & R, 2015; Aulia, 2014). If economic growth occurs it is a form of exclusive economic growth, namely economic growth that takes into account growth (pro-growth), employment (pro-job), reducing poverty (pro-poor), reducing inequality in income distribution (pro-equity), and pay attention to the environment (pro-environment).

Social welfare is a condition that shows the condition of people's lives which can be seen from the standard of living of the community (Todaro & Smith, 2006). Social welfare shows a measure of the results of community development in achieving a better life which includes increasing capacity and equitable distribution of basic needs such as food, housing, health, and protection, increasing living levels, levels income, better education, and increased attention to culture and human values, and expanding economies of scale and the availability of social choices from individuals and nations (Aulia, 2014; Taryono & Ekwarso, 2012).

To measure the latest social welfare, the United Nations Development Program (UNDP) introduces the formula for the Human Development Index (HDI) or also called the Human Development Index (HDI) in 1990. In addition to HDI, social welfare is also measured by the ratio of poor people. Poverty is one of the fundamental problems that is the center of attention of the government in any country. Reliable measurement of poverty can be a good instrument for policy makers in focusing attention on improving the living conditions of the poor. The measurement of poverty carried out uses the concept of ability to meet basic needs. With this approach, poverty is seen as an economic inability to meet basic food and non-food needs measured from the expenditure side (Aulia, 2014; Mirza, 2012; Yandri, 2012).

The successful implementation of regional autonomy in Indonesia is also influenced by the role of Human Resources (HR). Therefore, to improve the quality of human resources in Indonesia in implementing regional autonomy, it is necessary to re-engineer the government bureaucracy through input, process and output with a systems approach (Ratnasari, 2012). Input engineering is done through HR input when the government is planning and recruiting HR. Process engineering is carried out through updating policies, procedures, methods, and bureaucratic techniques in serving and producing products and services. Output engineering is carried out through the ownership of quality and quantity standards regarding the achievement of realistic, affordable and time-limited bureaucratic apparatus. All types of engineering will direct the bureaucracy into the administration of good governance. Based on these explanations, the research hypothesis are arranged as follows:

H1:   Fiscal decentralization has a significant effect on capital expenditure in districts budgets in Indonesia.

H2:   Fiscal decentralization has a significant effect on districts economic growth in Indonesia.

H3:   Fiscal decentralization has a significant effect on the social welfare of districts in Indonesia.

H4:   Capital expenditure has a significant effect on economic growth in districts in Indonesia.

H5:   Capital expenditure has a significant effect on the social welfare of districts in Indonesia.

H6:   Economic growth has a significant effect on the social welfare of districts in Indonesia.

3. METHODOLOGY/MATERIALS

This study uses districts as a unit of analysis because districts are the spearhead of the implementation of regional autonomy in Indonesia based on the 2013-2016 period. The sampling technique in the study used purposive sampling, that is, districts selected as research samples were taken based on criteria not the regions resulting from region expansion and were on one of the scales of regional autonomy.

The exogenous variable in this study is fiscal decentralization which is measured by the ratio between Own Source Revenue plus Tax and Non-Tax Revenue with Total Regional Expenditures in the Regional Government Budget which is expressed in units of percent. Intervening variables in this study include capital expenditure and economic growth, each measured in units of Rupiah and percent. The endogenous variable in this study is social welfare as measured by the Human Development Index (HDI) and the Poor Population Ratio (PM). In order for the results of data processing with an analysis tool in accordance with the purpose of using the indicators of social welfare, then in the input data for HDI data the higher the higher the score and vice versa. As for PM data, the lower the score the higher the score and vice versa.

The research model in Figure **1** illustrates the effect of Fiscal Decentralization (DF) on Social Welfare (KM) as measured by indicators of the Human Development Index (HDI) and the Poor Population Ratio (PM) with the intervening variable Capital Expenditure (BLM) and Economic Growth (PE). Based on Figure **1**, then in the study there is one independent variable (DF), one dependent variable (KM) measured by the indicators of HDI and PM, and two intervening variables, namely BLM and PE. Intervening variables of BLM and PE will

be variables that influence when exogenous variables (DF) affect endogenous variables (KM). Mathematically, the SEM equation model is:

1. Inner Model Equation:

$$\eta 1 = \gamma 1\ \xi 1 + \zeta 1$$

$$\eta 2 = \beta 1 \eta 1 + \gamma 2 \eta 1 + \zeta 2$$

$$\eta 3 = \beta 2 \eta 2 + \beta 1 \eta 1 + \gamma 3\ \xi 1 + \zeta 3$$

2. Outer Model Equation:

For exogenous latent variable (formative), $x1 = \lambda x1\ \xi 1 + \delta 1$

For endogenous latent variable intervening 1 (formative), $\xi 1 = \lambda y1\ \eta 1 + \varepsilon 1$

For endogenous latent variable intervening 2 (formative), $\xi 2 = \lambda y2\ \eta 2 + \varepsilon 2$

For dependent endogenous latent variable (reflective), $y31 = \lambda y31\ \eta 3 + \varepsilon 3$

η = dependent (endogenous) latent variable vector

ξ = exogenous latent variable vector

ζ = residual variable vector (*unexplained variance*)

β_{ji} and γ_{ib} = path coefficients that connect endogenous predictors and variables latent exogenous

η and ξ along the index range i and b

ζ_j = inner variabel residuals

x and y = indicators or manifest variables for exogenous latent variables and endogenous ξ and η

ε_x and ε_y = residuals that can be interpreted as measurement errors

This model was built based on the development of the theory of social welfare (Todaro & Smith, 2006). The social welfare theory is then developed by incorporating external variables identified from previous studies, and modifying with several existing models, namely Fiscal Decentralization, Capital Expenditure, and Economic Growth. The basic concept used is shown in Figure **1**.

In this study, the typology of districts in Indonesia are grouped based on the degree of regional autonomy (Tangkilisan, 2005). The degree of regional autonomy
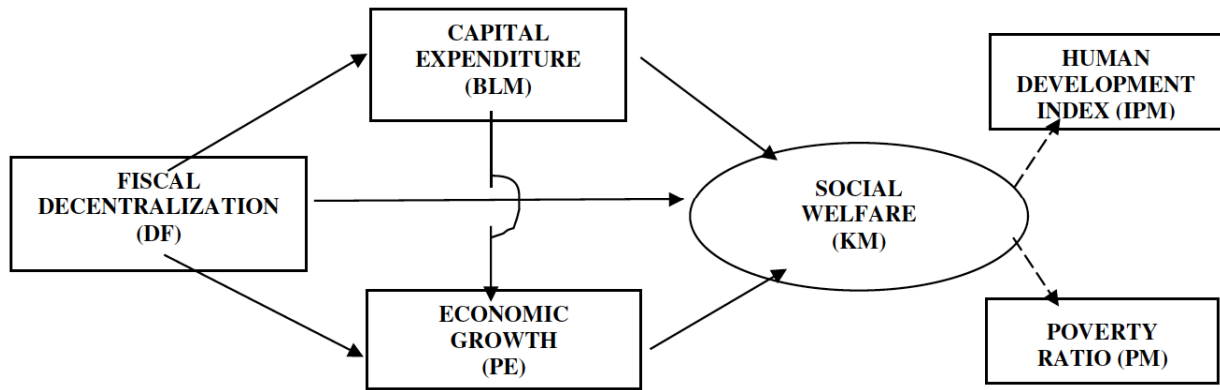
Figure 1: Concepts of Research.

is measured based on Own Source Revenue, regional revenue-sharing funds, and total expenditure. The number of degrees of regional autonomy is obtained from a comparison between the amount of Own Source Revenue and profit sharing funds to total regional expenditure. As explained earlier, the level of fiscal decentralization is divided into six categories. The six categories are very low, lacking, low, slightly moderate, moderate, high, and very high. The following description presents descriptive statistics for each category of regional autonomy.

Table 1:   The Degree of Regional Autonomy

Percentage	The Degree of Regional Autonomy
0 – 10,00	Very Low
10,01 – 20,00	Low
20,01 – 30,00	Slightly Moderate
30,01 – 40,00	Moderate
40,01 – 50,00	High
>50,00	Very High

 Source: Tangkilisan, 2005.

4. RESULTS AND FINDINGS

Regional autonomy does not merely lie in the delegation of greater authority from the central government to local governments, but also to the extent that the regions are able to exercise the authority granted. Independent regions are regions that are capable of running the government and managing their finances without depending too much on the central government. Regional capacity to finance development activities independently can be seen based on the degree of regional autonomy. The following is presented in Table **2** about the composition of the district/city regional autonomy in Indonesia based on the observation period of 2013-2016.

Based on Table **2**, it appears that around 71.06% of districts have a degree of regional autonomy in the category of very less and less. In general, districts in Indonesia are in the classification of fiscal degrees with a total of 44.62%. A total of 10.61% of districts are in the classification of good and very good regional autonomy. The number of districts is considered independent in carrying out regional development. Regions that have very high fiscal degrees are only 6.96%. The description of the degree of regional autonomy shows that generally districts in Indonesia are not independent in carrying out government and development. Most districts in Indonesia are still very dependent on transfer funds from the central government. The districts receive substantial authority to develop their respective regions. However, in order to implement this authority they are still dependent on financial resources from the central government

Table 2:   The Composition of Degree of Regional Autonomy

The Degree of Regional Autonomy	Observation	Percentage
Very Low	391	26.44%
Low	660	44.62%
Slightly Moderate	196	13.25%
Moderate	75	5.07%
High	54	3.65%
Very High	103	6.96%
Total	1.479	100.00%

Source: data processed.

The description of the four research variables, namely fiscal decentralization, capital expenditure, economic growth, and social welfare in the form of mean values and standard deviations obtained from

Table 3: Descriptive Statistic of Analysis Results

Variable	Observation	Average	Min.	Max.	Standard Deviation
DF	1,479	19.89%	3.63%	116.92%	16.87%
BLM	1,479	Rp186.77 billion	Rp16.83 billion	Rp1.419.31 billion	Rp6.39 billion
PE	1,479	6.40%	-21.85%	73.13%	3.35%
IPM	1,479	71.44	6.58	80.17	4.76
PM	1,479	14.28%	0.85%	47.82%	8.58%

Source: data processed.

research variable data in the districts in Indonesia are presented in Table **3**.

Based on Table **3**, it appears that there were 1,479 observations for the 2013 to 2016. The average level of fiscal decentralization was 19.89%. There are regions that have a very low level of fiscal decentralization, which is only 3.63%. The lowest fiscal decentralization is in North Toraja Regency and Lanny Jaya Regency. Meanwhile there are regions that have a very high level of fiscal decentralization, which is 116.92%. The highest level of fiscal decentralization is in regions such as Bengkalis Regency, Bulungan Regency, and Anambas Islands Regency. This data shows that the ability of regions to implement autonomy varies greatly. Most regions have below average fiscal decentralization. These regions that have fiscal decentralization rely on development funding for transfers from the central government.

The findings on capital expenditure do not differ greatly from the findings of fiscal decentralization. Most regions are not able to carry out adequate development. This can be seen from capital expenditures which have an average value of IDR 186.77 billion. There are even regions that have capital expenditure of only IDR 16.83 billion. The cities of Gunung Sitoli and Sabu Raijua Regency are examples of two regions that have the lowest capital expenditure. Meanwhile, there are regions that have very high capital expenditure, which is Rp1,1419.31 billion. East Kutai Regency and Surabaya City are the two regions that have the highest capital expenditure. Variation in capital expenditure is very high between regions. Most regions have insufficient capital expenditure to carry out development.

Nationally, the average economic growth in the region is 6.40%. But economic growth is very lame. Some regions have economic growth with a minus score, even up to -21.85%. Conversely there are regions with very high economic growth, up to 73.13%.

The highest economic growth is found in Merauke Regency in 2015 and the lowest is in Keerom Regency in 2016. Although the average economic growth is good, the variation in economic growth between regions is relatively poor. Regional capacity to improve the economy is not balanced.

HDI is an indicator of community welfare. National average HDI is 71.44. The lowest HDI value is 6.58 and the highest is 80.17. This shows that generally regions have relatively high HDI. But the variation of HDI is very wide. The highest HDI is in Banjarnegara Regency. While the lowest HDI is in Sorong Regency. Meanwhile, the average poor educator is 14.28%. There are regions that have a poor population that are relatively small, even only 0.85%. While there are regions that have very high poor population of up to 47.82%. This data shows that the poor are not evenly distributed in regions in Indonesia.

Based on Table **4**, there are 391 observations for districts that have a very low level of fiscal decentralization. The fiscal decentralization range starts from the minimum value of 3.63% to a maximum value of 10.04%. The average fiscal decentralization is 8.21%. The regions that have the highest decentralization values are Seluma, Tual City, and East Flores Regency. Whereas the regions with the lowest fiscal decentralization capability are Sigi Regency, Kepahiang Regency, and Pontianak City. The value of the standard deviation of fiscal decentralization of 1.34% indicates that the ability of the regions to manage autonomy is not evenly distributed.

The average district capital expenditure with a category of fiscal decentralization is very low at Rp25.58 billion. There is a standard deviation of capital expenditures of IDR 0.40 billion with the difference between the lowest capital expenditure of IDR 24.19 billion and the highest IDR 26.91 billion. The highest capital expenditure is in the city of Tasikmalaya. While the lowest capital expenditure is in Ciamis Regency.

Table 4:   Descriptive Statistic of Variable - The Degree of Regional Autonomy (Very Low)

Variable	Observation	Average	Min.	Max.	Standard Deviation
DF	391	8.21%	3.63%	10.04%	1.34%
BLM	391	Rp25.58 billion	Rp24.19 billion	Rp26.91 billion	Rp0.40 billion
PE	391	6.92%	-14.60%	32.79%	3.50%
IPM	391	70.39	48.54	79.41	5.18
PM	391	17.76%	2.07%	46.55%	9.66%

Source: data processed.

The very low condition of fiscal decentralization was also followed by a very low value of capital expenditure. The average economic growth is 6.92%. The highest economic growth rate is 32.79% and the lowest economic growth rate is -14.60%. There is a huge economic growth gap with a standard deviation of 3.5%. Whereas HDI has an average value of 70.39 with the lowest value of 48.54 and the highest of 79.41. The HDI standard deviation is 5.18. Poor people in regions with very low fiscal decentralization are 17.76% on average. The lowest number of poor people is 2.07% and the highest is 46.55%.

Based on Table **5**, the number of observations for districts with less fiscal decentralization is 660. The fiscal decentralization variable has an average of 13.94%. The regions included in the top three in fiscal decentralization are Semarang Regency in 2016, Seruyan Regency in 2013, and Jombang Regency in 2015. While the lowest entered regions are Pasaman Regency in 2015, Melawi Regency in 2011, and Pontianak City in 2016. The standard deviation of fiscal decentralization is 2.66%. The average value of fiscal decentralization for regions with less fiscal decentralization capability is 13.94%. The average capital expenditure is IDR 148.99 billion. There are regions that have very high capital expenditure value, namely Garut Regency in 2016. Whereas the region that has very low capital expenditure value is Gunung Sitoli City in 2013. Regional capacity in carrying out development is very lame which can be seen from the standard deviation of Rupiah. On average, districts have low capital expenditure values so that the regions are less able to carry out development to the maximum.

Economic growth for regions that fall into the category with less degree of autonomy has an average value of 6.32%. Very high economic growth is found in Merauke Regency in 2015 and the lowest is in Keerom Regency in 2013. The standard deviation of economic growth is 3.84%. The value of more economic growth below the average indicates that economic activity in the area is still low. The average HDI is 71.34. The region that has the highest HDI value is Banjarnegara Regency in 2016 with the amount of 80.17. The region with the lowest HDI value was Nduga Regency in 2013 with a total of 47.94. From the highest and lowest number, it can be seen that the standard deviation of the HDI is 4.30. On the other hand the average poor population is 17.76%. Supiori Regency in 2013 was the region that had the highest ratio of poor population at 46.55%. The city of Sawahlunto in 2015 was the region with the lowest ratio of poor people at 2.07%. The standard deviation ratio of the poor population is 9.66%.

Based on Table **6**, there are 196 observations for regions with sufficient fiscal decentralization categories. The average value of fiscal decentralization is 24.03%.

Table 5:   Descriptive Statistic of Variable - The Degree of Regional Autonomy (Low)

Variable	Observation	Average	Min.	Max.	Standard Deviation
DF	660	13.94%	10.05%	20.04%	2.66%
BLM	660	Rp148.99 billion	Rp16.83 billion	Rp692.37 billion	Rp77.87 billion
PE	660	6.32%	-21.83%	73.13%	3.84%
IPM	660	71.34	47.94	80.17	4.30
PM	660	14.87%	2.17%	45.75%	7.82%

Source: data processed.

Table 6: Descriptive Statistic of Variable - The Degree of Regional Autonomy (Slightly Moderate)

Variable	Observation	Average	Min.	Max.	Standard Deviation
DF	196	24.03%	20.05%	29.99%	2.79%
BLM	196	Rp179.41 billion	Rp47.66 billion	Rp612.39 billion	Rp96.46 billion
PE	196	5.96%	-4.17%	14.59%	1.72%
IPM	196	71.76	6.58	78.74	6.07
PM	196	10.12%	0.85%	47.82%	6.49%

Source: data processed.

The highest fiscal decentralization is in Sukabumi City, South Hulu Sungai Regency, and Serang Regency. While the lowest fiscal decentralization was in the East Seram Regency, Aceh Tamiang Regency, and Deli Serdang Regency. The fiscal decentralization standard is 2.79%.

Capital expenditure has an average capital expenditure of Rp. 179.41 billion. There are regions that have very high capital expenditure, namely Bogor Regency, amounting to Rp. 612.39 billion. While there are regions that are unable to carry out development because of the low capital expenditure, namely Magelang City, which is only Rp.47.66 billion. Regional capacity in terms of development is very lame, this can be seen from the high standard deviation of capital expenditures which is equal to Rp96.46 billion.

The average economic growth level of regional autonomy is quite 5.96%. The highest economic growth is in Intan Jaya Regency, which is 14.59%. This is very different from the city of Lhokseumawe with a negative economic growth of -4.17%. This very high difference shows that economic growth is still uneven in Indonesia. On the other hand, the lowest HDI is in Sorong City, which is 6.58. While the highest HDI is in Banyumas with a number 78.74. The highest ratio of poor people is in the area of Intan Jaya Regency with 47.82%. While the lowest poor population is in Merangin Regency with a figure of 0.85%. With this ratio, the welfare of the population in Intan Jaya Regency is still very low compared to Merangin Regency. The average ratio of poor people is 10.12%.

Based on Table **7**, the number of observations for regions with moderate regional autonomy is 75. Fiscal decentralization has the minimum value of 30.08% and has a maximum value of 39.98%. The average value of fiscal decentralization is 34.93%. The regions that have the greatest value of fiscal decentralization are Sidoarjo Regency in 2016, North Aceh Regency in 2014, and Tangerang City area in 2013. Regions that have low fiscal decentralization values are Sarolangun Regency in 2013, Gianyar Regency in 2015, and South Bangka Regency in 2014.

While the capital expenditure variable has a standard deviation value of Rp163.94 billion. Nearly 50% of the regions have below-average capital expenditure value of Rp240.18 billion. This is indicated by three regions that have the smallest capital expenditure values such as Yogyakarta City, Tegal City, and Bangka Regency. Economic growth has an average value of 6.36%. While the average HDI is 72.43 with a standard deviation of 3.63. The ratio of poor population has an average value of 10.27%. The standard deviation of the poor is 6.55.

Based on Table **8**, there are 54 observations for regions with good degrees of fiscal decentralization.

Table 7: Descriptive Statistic of Variable - The Degree of Regional Autonomy (Moderate)

Variable	Observation	Average	Min.	Max.	Standard Deviation
DF	75	34.93%	30.08%	39.98%	2.91%
BLM	75	Rp240.18 billion	Rp54.04 billion	Rp1.035.47 billion	Rp163.94 billion
PE	75	6.36%	1.61%	11.87%	1.36%
IPM	75	72.44	63.81	79.39	3.63
PM	75	10.27%	2.75%	47.44	6.55

Source: data processed.

Table 8:   Descriptive Statistic of Variable - The Degree of Regional Autonomy (High)

Variable	Observation	Average	Min.	Max.	Standard Deviation
DF	54	44.49%	40.11%	50.%	2.88%
BLM	54	Rp432.29 billion	Rp27.24 billion	Rp1.280.54 billion	Rp333.61 billion
PE	54	6.14%	1.26%	11.18%	1.77%
IPM	54	72.87	65.51	79.16	3.16
PM	54	11.25%	2.07%	47.53%	8.26%

Source: data processed.

Fiscal decentralization has an average of 44.49% with the highest value (50.00%) and the lowest (40.11%). The three regions that have the highest fiscal decentralization are in Tanah Bumbu Regecy, Musi Waras Regency, and Bintuni Bay Regency. While there are some areas with the lowest regional autonomy, namely Bojonegoro Regency, Pagar Alam Regency, and Cilegon Regency. The fiscal decentralization deviation standard is 2.88%.

The average capital expenditure is Rp432.29 billion. The highest capital expenditure was Rp1,280.54 billion and the lowest was Rp27.24 billion. The highest capital expenditure is in Samarinda City, while there are regions that are unable to finance the area because of low capital expenditure, namely Ogan Hilir Regency. The three regions with the largest capital expenditure are Samarinda City, West Kutai City, and Tangerang City. Whereas the regions with the smallest capital expenditure are Ogan Ilir Regency, Denpasar City, and Pagar Alam Regency.

Economic growth, HDI, and the poor have an average value of 6.14%, 72.87, and 11.25 respectively. Variations in these indicators are relatively very high which can be seen from the lowest and highest value ranges. The low and highest values for economic growth are 1.26% and 11.18%, for HDI respectively 65.51 and 79.16, and for the poor each of them is 2.07% and 47.53%.

Based on Table **9**, there are 103 observations for regions with fiscal decentralization that are very good. The average ratio of fiscal decentralization is 69.64%. The highest value of the ratio of fiscal decentralization in Bengkalis Regency in 2014 was 116.92%, followed by Bulungan Regency in 2015 of 116.71% and Ananmbas Islands Regency in 2010 of 115.91%. While the three lowest regions of the fiscal decentralization decentralization ratio are Cilegon City in 2015 which amounted to 50.76%, Palembang City in 2013 was 50.88% and Tanjung Jabung Timur District in 2013 was 50.91%. The distribution of fiscal decentralization data indicated by the standard deviation is classified as low or not too varied, which is 16.31%.

The budget allocation for capital expenditure is quite extreme, namely the highest Rp1,419.31 billion and the lowest Rp62.22 billion. The average capital expenditure is Rp.437.12 billion and the standard deviation is Rp.299.11 billion. The highest capital expenditure is in East Kutai Regency and Surabaya City. While the lowest capital expenditure is in Indragiri Hulu and Anambas Regencies. The average economic growth is 5.98%. The lowest economic growth occurred in Siak Regency in 2011, which was -8.81%. While the highest economic growth occurred in Penajam Paser Utara Regency in 2014 which was 17.31%.

Meanwhile HDI has an average value of 73.67. While the average poverty rate is 9.51%. The use of

Table 9:   Descriptive Statistic of Variable - The Degree of Regional Autonomy (Very High)

Variable	Observation	Average	Min.	Max.	Standard Deviation
DF	103	69.64%	50.76%	116.92%	16.31%
BLM	103	Rp437.12 billion	Rp62.22 billion	Rp1.419.31 billion	Rp299.11 billion
PE	103	5.98%	-8.81%	17.31%	3.29%
IPM	103	73.79	64.79	79.30	3.10
PM	103	9.51%	2.16%	35.74%	5.19%

Source: data processed.

the two indicators of social welfare (HDI and PM) to determine the effect of fiscal decentralization, capital expenditure, and economic growth on the social welfare from the positive side (HDI indicator) and the negative side (PM indicator). The positive side of the HDI indicator shows that the higher the HDI rate, the better of social welfare, on the contrary the lower the HDI rate, the lower of social welfare. The negative side of the PM indicator shows that the higher the PM number, the lower of social welfare, on the contrary the lower the PM number, the better of social welfare. Thus, HDI and PM as indicators of the social welfare variable have a contribution.

The magnitude of the contribution of each indicator to latent variables can be seen from the coefficient of loading factors. The higher the loading factor coefficient in absolute numbers indicates that the greater the contribution in determining latent variables, on the contrary the lower the coefficient of loading factor in absolute numbers indicates that the smaller the contribution in determining latent variables.

The results of running data for loading factors are shown in Table **10**. A positive sign (+) or negative sign (-) on the loading factor coefficient shows the direction of contribution. In general, it appears that the contribution of the PM indicator is greater than the HDI indicator for all categories of regional autonomy, except for the very poor category. Thus, the PM indicator is stronger as a measure of the variable social welfare compared to the HDI indicator.

The positive (+) sign on the HDM loading factor coefficient shows that the HDI contribution to the social welfare variable is in the same direction, meaning that if the HDI contribution increases, the social welfare value variable increases, whereas if the HDI

contribution decreases, the social welfare value variable decreases. The negative sign (-) on the PM loading factor coefficient indicates that the PM contribution to the social welfare is not in the same direction, meaning that if the contribution of PM increases, the variable welfare value decreases, whereas if the contribution of PM decreases, the variable welfare value increases.

Evaluation of the goodness of fit model is carried out on the Outer Model which is measured using convergent validity for validity tests indicating that the loading factor in absolute numbers, both for HDI and PM (Table **10**) is greater than 0.7. This means, the measurement model to test construct validity in order to know the ability of study instruments to measure what should be measured using convergent validity and Average Variance Extracted (AVE) is valid.

The validity of the HDI and PM as indicators for measuring the social welfare variable is also indicated by the results of outer weights, the results of which are smaller or equal to 5%. Thus, the HDI and PM indicators are valid for measuring the social welfare variables. Evaluation of the goodness of fit model is carried out on the Outer Model which is measured by using composite reliability to test reliability. It means that the measurement model that can measure the consistency of measuring instruments in measuring a concept is reliable. But actually, the internal consistency test is not absolutely done if the construct validity has been fulfilled, because a valid construct is a reliable construct.

Conversely, a reliable construct is not necessarily valid. Based on the evaluation of the goodness of fit model performed on the Outer Model, it meets the requirements for validity and reliability. To clarify the

Table 10: Loading Factor of Social Welfare

The Degree of Regional Autonomy	Loading Factor*)		Validity
	IPM	PM	
Very Low	0.846	-0.795	Valid **)
Low	0.940	-0.946	Valid **)
Slightly Moderate	0.942	-0.952	Valid **)
Moderate	0.958	-0.958	Valid **)
High	0.813	-0.972	Valid **)
Very High	0.938	-0.991	Valid **)

Note:
*) *loading factor* more than 0.7.
**) p-values for the HDI and PM indicators are smaller or equal to 5%.

results of the evaluation of the goodness of fit model conducted on the Outer Model, then the results of outer loading are presented from the PLS test in the form of a path diagram. The variables of fiscal decentralization, capital expenditure, and economic growth remain as measured variables, while the welfare variable remains a latent variable.

Based on the Research Model in Figure **1**, data processing using the PLS program obtained the results of the study as shown in Table **11**. Based on Table **11**, it appears that fiscal decentralization has a significant effect on capital expenditure but has no significant effect on economic growth and social welfare in districts in Indonesia; capital expenditure has a significant effect on the economic growth and social welfare in districts in Indonesia; and economic growth has no significant effect on social welfare in districts in Indonesia. Based on Table **12**, it appears that the influence of fiscal decentralization on capital expenditure, economic growth, and social welfare in districts in Indonesia; capital expenditures on economic growth and social welfare in districts in Indonesia; and economic growth towards the social welfare in districts in Indonesia depending on the degree of regional autonomy.

The higher the degree of regional autonomy, the effect of fiscal decentralization on capital expenditure, economic growth, and social welfare in districts in Indonesia; capital expenditures on economic growth and social welfare in districts in Indonesia; and economic growth towards the social welfare in districts in Indonesia is increasingly in a significant direction.

Fiscal decentralization has a significant effect on capital expenditure in districts in Indonesia. This can be seen from the path coefficient value of 0.506 and p-value <0.001 which is smaller than the specified significance level (α) which is 5%. The path coefficient

of 0.506 (positive) indicates that the increasing degree of fiscal decentralization, the more capital expenditure increases, and vice versa. The results of this test indicate that fiscal decentralization has a significant effect on capital expenditure in districts in Indonesia. That is, even though the proceeds of PAD and Tax Revenue and Non-Tax Revenue on Total Regional Expenditures in APBD districts in Indonesia are relatively small and the portion of Indirect Expenditures to Regional Expenditures in districts in Indonesia is relatively large, the ability of regional autonomy to influence capital expenditure in districts in Indonesia is getting bigger. This happens because even though the proceeds of PAD and Tax and Non-Tax Revenue Sharing on the Total Regional Expenditures in districts in Indonesia are relatively small, the percentage is increasing over time.

On the contrary, even though the portion of Indirect Expenditures to Total Regional Expenditures in districts in Indonesia is relatively large, the percentage is decreasing over time. During 2013 to 2016, the average ratio of routine expenditure for districts employees to total regional expenditure was 61.59% and the ratio of personnel expenditure to total central government expenditure increased from 15% to 20.1%. This finding supports the results of Kamaroellah (2017); Syahputra (2017); Demora (2016); Aulia (2014); Sistiana (2014); and Tiyaningsih (2009).

Fiscal decentralization has no significant effect on the economic growth of districts in Indonesia. This can be seen from the path coefficient value of -0.132 and p-value <0.001 which is smaller than the specified level (α) which is 5%. The path coefficient of -0.132 (negative) indicates that the more the degree of fiscal decentralization increases, the lower the economic growth, and vice versa. The results of this test indicate that fiscal decentralization has no significant effect on the economic growth of districts in Indonesia. This

Table 11: Research Hypothesis Testing Results

Relationship Between Variables	Path Coefficient	*P-Value*	Prediction	Finding	Conclusion
DF → BLM	0.506	<0.001	+	+	Accepted *)
DF → PE	-0.132	<0.001	+	-	Rejected
DF → KM	-0.161	<0.001	+	-	Rejected
BLM → PE	0.121	<0.001	+	+	Accepted *)
BLM → KM	0.086	<0.001	+	+	Accepted *)
PE → KM	-0.040	0.060	+	-	Rejected

Source: data processed.
*) Significant at alpha ≤ 5%.

Table 12: Research Hypothesis Testing Results Base on The Degree of Regional Autonomy

Relationship Between Variables	The Degree of Regional Autonomy	Path Coefficient	*P-Value*	Prediction	Finding	Conclusion
DF → BLM	Very Low	-0,248	<0,001	+	-	Rejected
	Low	0,147	<0,001	+	+	Accepted *)
	Slightly Moderate	0,130	0,080	+	+	Accepted *)
	Moderate	0,283	0,005	+	+	Accepted *)
	High	0,076	0,401	+	+	Rejected
	Very High	0,208	0,01	+	+	Accepted *)
DF → PE	Very Low	-0,134	0,004	+	-	Rejected
	Low	-0,102	0,004	+	-	Rejected
	Slightly Moderate	-0,140	0,420	+	-	Rejected
	Moderate	-0,272	0,006	+	-	Rejected
	High	-0,070	0,413	+	-	Rejected
	Very High	-0,216	0,01	+	-	Rejected
DF → KM	Very Low	-0,178	<0,001	+	-	Rejected
	Low	-0,069	0,038	+	-	Rejected
	Slightly Moderate	-0,140	0,420	+	-	Rejected
	Moderate	-0,227	0,019	+	-	Rejected
	High	-0,250	0,460	+	-	Rejected
	Very High	0,131	0,009	+	+	Accepted *)
BLM → PE	Very Low	0,041	0,175	+	+	Rejected
	Low	0,195	<0,001	+	+	Accepted *)
	Slightly Moderate	0,210	0,020	+	+	Accepted *)
	Moderate	0,268	0,007	+	+	Accepted *)
	High	0,294	0,009	+	+	Accepted *)
	Very High	0,090	0,170	+	+	Rejected
BLM → KM	Very Low	-0,024	0,376	+	-	Rejected
	Low	-0,150	<0,001	+	-	Rejected
	Slightly Moderate	-0,140	0,360	+	-	Rejected
	Moderate	0,170	0,063	+	+	Rejected
	High	0,198	0,465	+	+	Rejected
	Very High	0,242	0,010	+	+	Accepted *)
PE → KM	Very Low	-0,142	0,001	+	-	Rejected
	Low	-0,068	0,039	+	-	Rejected
	Slightly Moderate	0,230	0,300	+	+	Rejected
	Moderate	-0,285	0,004	+	-	Rejected
	High	0,160	0,442	+	+	Rejected
	Very High	0,178	0,030	+	+	Accepted *)

Source: data processed.
*) Significant at alpha ≤ 5%.

means that in the era of regional autonomy, the existence of fiscal decentralization on the capital expenditure side has an impact on discretion (freedom) to spend funds, the existence of less productive capital expenditure, and long-term government investment resulting in decreasing economic growth in districts in

Indonesia. Declining economic growth can mean that economic growth that occurs in the era of regional autonomy is exclusive economic growth or economic growth that has not been qualified. This finding does not support the results of research by Rante, Mire, & Paminto (2017) and Vegirawati (2012).

Based on Table **1**, there are 71.06% of districts have a degree of regional autonomy in the category of very less and less. In general, districts in Indonesia are in the classification of fiscal degrees with a total of 44.62%. A total of 10.61% of districts in the classification of high and very high regional autonomy. The number of districts is considered independent in carrying out regional development. Regions that have very high fiscal degrees are only 6.96%. The description of the degree of regional autonomy shows that generally districts in Indonesia are not independent in carrying out government and development. Most districts in Indonesia are still very dependent on transfer funds from the central government. The districts receive substantial authority to develop their respective regions. However, in order to implement this authority they are still dependent on financial resources from the central government.

Fiscal decentralization has no significant effect on social welfare in districts in Indonesia. This can be seen from the path coefficient value of -0.161 and p-value <0.001 which is smaller than the specified level (α) which is 5%. The path coefficient of -0.161 (negative) indicates that the more the degree of fiscal decentralization increases, the lower of the social welfare, and vice versa. The results of this test indicate that fiscal decentralization has no significant effect on social welfare in districts in Indonesia. This means that the efficiency aspect is the raison d'etre for regional autonomy. Because individual preferences for public goods are different, then in a decentralized fiscal system, each individual can choose to live in a community or community that matches his preferences in order to maximize the social welfare. However, the facts show that people's preferences for achieving successful development in the era of regional autonomy have not been optimally fulfilled. This finding does not support the results of Qomariyah (2018); Wurangian, S.M.E, & D.T. (2017); and Sumardi (2014).

As much 71.06% of districts have a degree of regional autonomy in the category of very low and low, whereas generally districts in Indonesia are in the classification of low fiscal degrees with a total of 44.62% (Table **2**). A total of 10.61% of districts are in

the classification of high and very high regional autonomy. Regions that have very high fiscal degrees are only 6.96%. This degree of regional autonomy in the high and very high category is considered independent for the districts in carrying out regional development to realize social welfare. The description of the degree of regional autonomy shows that generally districts in Indonesia are not independent in carrying out government and development. Most districts in Indonesia are still very dependent on transfer funds from the central government. The districts receive substantial authority to develop their respective regions. However, in order to implement this authority they are still dependent on financial resources from the central government. This is a factor why fiscal decentralization has no significant effect on social welfare in districts in Indonesia.

Capital expenditure has a significant effect on economic growth in districts in Indonesia. This can be seen from the path coefficient value of 0.121 and p-value <0.001 which is smaller than the specified level (α) which is 5%. The path coefficient of 0.121 (positive) indicates that the more capital expenditure increases, the more economic growth increases, and vice versa. The results of this test indicate that capital expenditure in districts has a significant effect on the economic growth in districts in Indonesia. This means that even though the large APBD portion for Indirect Expenditures, unproductive capital expenditure, capital expenditure is allocated for long-term investment, budget deviations, so that all of these minimize the role of capital expenditure in districts for the economic growth of districts in Indonesia, but in its development from year to year various conditions have receded. This is due to the determination of the central and regional governments to optimize the allocation of capital expenditures with the basis of the latest regulations to support this optimization. This finding supports the results of Nurhemi & R, (2015) and Aulia (2014) research.

Capital expenditure has a significant effect on social welfare in districts in Indonesia. This can be seen from the path coefficient value of 0.086 and p-value <0.001 which is smaller than the specified level (α) which is 5%. The path coefficient of 0.086 (positive) indicates that the more capital expenditure increases, the more the social welfare increases, and vice versa. The results of this test indicate that capital expenditure has a significant effect on social welfare in districts in Indonesia. This means that capital expenditures as a component of direct expenditures on Total Regional

Expenditures which will be allocated by regional governments to fund the construction of public facilities such as roads, bridges, telecommunications, electricity, school buildings, hospital buildings, markets, and various other public facilities will be utilized by the community to be achieved. This is due to various conditions such as less productive capital expenditure, capital expenditure allocated for long-term investments, and budget deviations that have occurred from year to year, but in its development various conditions have receded. This is due to the determination of the central and regional governments to optimize the allocation of capital expenditures with the basis of the latest regulations to support this optimization. This finding supports the research results of Aulia (2014) and Taryono & Ekwarso (2012).

The economic growth has no significant effect on social welfare in districts in Indonesia. This can be seen from the path coefficient value of -0.040 and p-value of 0.060 which is greater than the specified level (α) which is 5%. The path coefficient of -0.040 (negative) indicates that the more economic growth, the lower the social welfare, and vice versa. The results of this test indicate that the economic growth has no significant effect on the social welfare in districts in Indonesia. This means that all districts governments in Indonesia when developing economic development targets always use one of the assumptions, namely achieving a certain percentage of economic growth. The success of economic development is not only determined by the acceleration of economic growth, but more on improving the welfare of society as a whole. The economic growth of districts in Indonesia is meaningless when HDI increases but PM remains high, unemployment remains high, the Gini Index remains high and tends to increase.

The economic growth has no significant effect on social welfare in districts in Indonesia. It can also be explained by the phenomenon of the ability of limited regional autonomy and the factor in the occurrence of budget collusion that has an impact on the capital expenditure allocation for infrastructure development. As much of 71.06% of districts have a degree of regional autonomy in the category of very low and low, whereas generally districts in Indonesia are in the classification of low fiscal degrees with a total of 44.62% (Table **2**). A total of 10.61% of districts are in the classification of high and very high in degree of regional autonomy. Regions that have very high fiscal degrees are only 6.96%. This degree of regional autonomy in the high and very high category is considered independent for the districts in carrying out regional development to realize social welfare. The description of the degree of regional autonomy shows that generally districts in Indonesia are not independent in carrying out government and development. Most districts in Indonesia are still very dependent on transfer funds from the central government. The districts receive substantial authority to develop their respective regions. However, in order to implement this authority they are still dependent on financial resources from the central government. This finding does not support the results of Aulia (2014); Mirza (2012); and Yandri (2012).

5. CONCLUSION

Based on the findings and discussion, it was concluded that fiscal decentralization had a significant effect on capital expenditure in districts in Indonesia but had no significant effect on economic growth and social welfare in districts in Indonesia; capital expenditure has a significant effect on the economic growth and social welfare in districts in Indonesia; and economic growth has no significant effect on social welfare in districts in Indonesia. Significant whether or not the influence of fiscal decentralization on capital expenditure, economic growth, and social welfare in districts in Indonesia; capital expenditures on economic growth and social welfare in districts in Indonesia; and economic growth towards the social welfare in districts in Indonesia depending on the degree of regional autonomy. The higher the degree of regional autonomy, the influence of fiscal decentralization on capital expenditure, economic growth, and social welfare in districts in Indonesia; capital expenditures on economic growth and social welfare in districts in Indonesia; and economic growth towards the social welfare in districts in Indonesia is increasingly evident. The implication of this research is that re-engineering of the government bureaucracy needs to be done through input, process, and output with a system approach. Input engineering is done through HR input when the government is planning and recruiting HR. Process engineering is carried out through updating policies, procedures, methods, and bureaucratic techniques in serving and producing products and services. Output engineering is carried out through the ownership of quality and quantity standards regarding the achievement of realistic, affordable and time-limited bureaucratic apparatus. All types of engineering will direct the bureaucracy into the administration of good government governance.

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