

THE IMPACTS OF FINANCIAL PERFORMANCE OF LOCAL GOVERNMENTS ON HUMAN DEVELOPMENT INDEX IN PAPUA

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ABSTRACT

This study aims to analyse the impacts of financial performance of local governments on Human Development Index (HDI) in regencies and cities in West Papua Province and Papua Province. These provinces are chosen because they are in the lowest level of HDI rank in Indonesia. In order to measure financial performance of local governments, this research uses 4 ratios: Fiscal Decentralisation Ratio, Regional Dependency Ratio, Effectiveness Ratio of Locally-generated Revenue (PAD), and Capital Expenditure Ratio. The data form is panel data that is a combination between time series data and cross-sectional data, and Fixed Effect Model (FEM) is the best regression model. Results of this study are that Fiscal Decentralisation Ratio has significant positive impact on HDI while Regional Dependency Ratio and Capital Expenditure Ratio have significant negative effect on HDI in both provinces. Other variable, Effectiveness Ratio of Locally-generated Revenue (PAD), has negatif impact on HDI; however, it is not significant.

Keyword: Local Government Financial Performance, Human Development Index

ABSTRAK

Penelitian ini membahas tentang dampak - dampak kinerja keuangan pemerintah daerah terhadap Indeks Pembangunan Manusia (IPM) pada Kabupaten dan Kota di Provinsi Papua Barat dan Provinsi Papua. Kedua provinsi diambil karena memiliki tingkat IPM terendah di Indonesia. Untuk mengukur kinerja keuangan pemerintah daerah, penelitian ini menggunakan beberapa rasio yaitu Rasio Desentralisasi Fiskal, Rasio Ketergantungan Keuangan Pemerintah Daerah, Rasio Efektifitas Pendapatan Asli Daerah (PAD), dan Rasio Belanja Modal. Data dalam penelitian ini berbentuk data panel yaitu gabungan antara cross section dan time series. Model regresi yang digunakan adalah Fixed Effect Model (FEM). Hasil studi adalah Rasio Desentralisasi Fiskal memiliki dampak positif signifikan terhadap IPM di Provinsi Papua Barat dan Provinsi Papua. Sedangkan Rasio Ketergantungan Keuangan Pemerintah Daerah, dan Rasio Belanja Modal memiliki dampak negatif signifikan terhadap IPM di kedua provinsi. Variabel Rasio Efektifitas Pendapatan Asli Daerah (PAD) berpengaruh negatif terhadap IPM, tetapi tidak signifikan.

Kata Kunci: Kinerja Keuangan Pemerintah Daerah, Indeks Pembangunan Manusia

1. INTRODUCTION

1.1. Background

Since 2001, the pattern of centralised government of the new order has been totally reformed into a regional autonomy. It gives opportunities for local governments to run governance based on their capacity, ability, and potential. Law No. 23 of 2014 on Local Government states that Regional Autonomy is the right, authority, and duties of the autonomous regions to set up and manage their own affairs and interests of local communities in the system of the Republic of Indonesia.

Moreover, the implementation of autonomy for region is expected to overcome several issues related to equality of regional development and a government independence (muda et al 2018).

The main principle of regional autonomy is decentralisation. Decentralisation is the process of reform in politics, economics, and socio-cultural to shift public services from authority of central government to local governments (Suyanto 2017). Based on Law No. 23 of 2014 on Local Government mentions that implementation of decentralisation has advantages such as accelerating the social welfare, rising the quality of public services, maximising the quality of governance at regional level, increasing the national and regional competitiveness, and preserving the uniqueness of local culture. Decentralisation provides not only right to local governments to develop their region but also authority related to manage their Local Government Revenue Budget (APBD). As a derivative of regional autonomy, decentralised budget (fiscal) through APBD will improve the quality of public services and the regional competitiveness with the ultimate goal of improving the people's welfare.

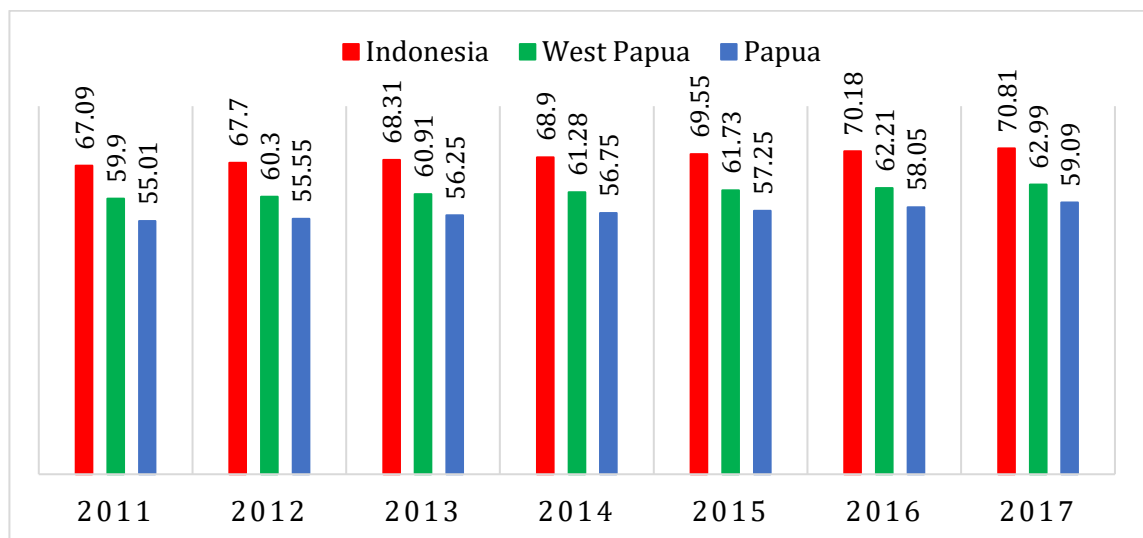
The rise of people prosperity is considered very important, and it becomes a necessity as the human quality has great influences to determine the success of development in a region (Amalia and Purbadharmaja 2014). Rofiqi et al (2012) argue that the paradigm of modern development put people as the goal of short term and long term development. Thus, the goals of development should include a decent living improvement, an increase in life span, and a rise of education quality. In order to increase people's welfare and quality of public services, regional governments must change proportion of spending for positive purposes such as carrying out development activities related to public services (Setyowati and Suparyati 2012).

An increase in social welfare can be described by Human Development Index (HDI). HDI is an alternative indicator to assess the success of development in a country or a region. HDI concept is different from the classical indicator such as Per Capita Income (PCI). The old method believes that high economic growth rises living standards of people. However, in many countries, it creates the social imbalance because people are placed as tools to reach the high economic growth. Therefore, currently, many countries believe in Human Development Index (HDI). The measurement emphasises the development of individual and community capabilities in all aspects such as economy, social, culture, and environment; in addition, HDI positions people as a main goal of development in a country or a region (BPS 2015).

Several previous research and studies have already tried to analyse the relationship between government financial performance and HDI. Harahap (2011) analyses the impact of General Allocation Funds (DAU), Special Allocation Funds (DAK), Revenue Sharing Funds (DBH) towards HDI in North Sumatra Province. Ardiansyah, et al (2014) examine the relationship between Locally-Generated Revenue (PAD), General Allocation Funds (DAU), Special Allocation Funds (DAK) and

HDI in regencies and cities in Central Java Province. Anggraini and Sutaryo (2015) analyse the financial ratio of regional governments towards HDI in Indonesia.

Based on this background, this research aims to find the correlation between the financial performance of local governments and people's welfare (HDI) in regencies and cities in West Papua Province and Papua Province. Financial performance will be measured by 4 ratios: Fiscal Decentralisation Ratio, Regional Dependency Ratio, Effectiveness Ratio of Locally-generated Revenue (PAD), and Capital Expenditure Ratio. Besides, both provinces are chosen because they are in the lowest position of HDI in Indonesia from 2011 to 2017. The graph of HDI in West Papua Province and Papua Province is as follows.



Graph 1. The comparison of HDI (Indonesia, West Papua Province, and Papua Province)

Source: The Indonesia Central Bureau of Statistics (BPS)

The Graph shows the comparison of HDI in Indonesia, West Papua Province, and Papua Province. Overall, HDI of both West Papua Province and Papua Province is lower than HDI of Indonesia. If the HDI of all provinces in Indonesia is ranked, the HDI of West Papua Province and Papua Province is in the lowest rank in Indonesia.

This research becomes essential for some reasons. First of all, this research tries to explain variables that have impacts to HDI in West Papua Province and Papua Province. Therefore, these variables will help stakeholders to boost the HDI in both provinces. Secondly, this research is a development of research limitations of Anggraini and Sutaryo (2015) since their research only examines the impacts of financial ratio of all provincial governments to HDI in Indonesia. However, it can not be generalised for all regencies and cities in Indonesia. Thirdly, this research is not only focus on the financial performance on revenue posts (see for Anggraini and

Sutaryo 2015; Ardiansyah, et al 2014; and Harahap 2011) but also the performance of expenditure post.

1.2. Research Question

This research is empirical research about financial performance of local governments which use Fiscal Decentralisation Ratio, Regional Dependency Ratio, Effectiveness Ratio of Locally-generated Revenue (PAD), and Capital Expenditure Ratio towards HDI in regencies and cities in Indonesia. Therefore, the research questions are: Are there any relationship between HDI and Fiscal Decentralisation Ratio, Regional Dependency Ratio, Effectiveness Ratio of Locally-generated Revenue (PAD), and Capital Expenditure Ratio in regencies and cities in West Papua Province and Papua Province?

1.3. Research Purpose

Based on the research question above, the purpose of this research is to examine the correlation between HDI and Fiscal Decentralisation Ratio, Regional Dependency Ratio, Effectiveness Ratio of Locally-generated Revenue (PAD), and Capital Expenditure Ratio in regencies and cities in West Papua Province and Papua Province.

2. THEORITICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

2.1. Theoritical Framework

2.1.1. Agency Theory

The agency relationship is a contract between one person or more (principal) and another person or people (agents) to do some services on behalf of principals (Jensen and Meckling 1976). Due to the delegation of authority from owners to managers, sometimes problems occur because of the differences in interests that are not aligned in an organisation. Therefore, agency theory emphasises on the separation between the owners (principal) and managers (agents) to abate their problems in the firms (Panda and Leepsa 2017).

Since the regional autonomy prevails in Indonesia (Law number 22 of 1999 replaced by Law number 23 of 2014), we can put agency theory perspective in public sector agencies (Anggraini and Sutaryo 2015). In the opinion of Badrudin (2017), people can be categorised as principle and government as agent in public sector. The relationship is depicted when people choose politicians to arrange budget (APBN/APBD) for them, and people give money by paying tax. Consequently, people hope that politicians represent public's interest when they allocate the budget (APBN/APBD). Furthermore, financial report of government given to public should be audited by independent parties (Halim and Abdullah 2006).

2.1.2. Financial Performance of Local Governments

Financial performance is a tool to assess the performance of a firm using financial indicators (Putra 2016). Analysis financial performance of regional governments provides an important information to arrange policies that have positive impacts for people, and analysis financial ratios can be used to measure the performance of local governments (Pangkey et al 2017). According to Mahmudi (2016), financial ratio analysis is a comparison of two numbers taken in financial report, and there are several government financial ratios: Fiscal Decentralisation Ratio, Regional Dependency Ratio, Effectiveness Ratio of Locally-generated Revenue (PAD), and Capital Expenditure Ratio.

2.1.3. Fiscal Decentralisation Ratio

Fiscal Decentralisation Ratio is a proportion of locally-generated revenue (PAD) towards total revenue (Mahmudi 2016). As stated by Siregar (2017), locally-generated revenue (PAD) is a part of local governments revenues which is obtained from regional tax, regional retribution, regional wealth managed by Regionally Owned Enterprises (BUMD), and other sources of legitimate the PAD. Therefore, this ratio shows the rate of people's participation to pay regional tax and regional retribution since they are the main source of locally-generated revenue as well (Suranta et al 2017). Furthermore, it illustrates that the higher of Fiscal Decentralisation Ratio, the lower of local government dependence on central government. The formulation and interval scale of Fiscal Decentralisation Ratio are as follows.

Table 1. The Formulation of Fiscal Decentralisation Ratio
Source: Mahmudi (2016)

$\text{Fiscal Decentralisation Ratio} = \frac{\text{Locally – generated Revenue (PAD)}}{\text{Total Revenue}} \times 100\%$

Table 2. The Interval Scale of Fiscal Decentralisation Ratio
Source: Wulandari (2001)

Fiscal Decentralisation Ratio (%)	Ability of Local Government Finance
0 - 10	Very Low
10,01 - 20	Low
20,01 - 30	Enough
30,01 - 40	Modest
40,01 - 50	Good
> 50,01	Very Good

2.1.4. Regional Financial Dependency Ratio

Regional Financial Dependency Ratio is a comparison between total transfer revenue and total revenue (Mahmudi 2016). This ratio describes that the higher of Regional Financial Dependency Ratio, the higher of dependency on the central government (Pandjaitan 2018). Total transfer revenue in West Papua Province and Papua Province consists of balance funds (General Allocation Funds/the DAU, Special Allocation Funds/ the DAK, Revenue Sharing Funds/ the DBH), other transfer funds, and special autonomy funds. Formulation and interval scale of Regional Financial Dependency Ratio are as follows.

Table 3. The Formulation of Regional Financial Dependency Ratio
Source: Mahmudi (2016)

$$\text{Regional Financial Dependency Ratio} = \frac{\text{Total Transfer Revenue}}{\text{Total Revenue}} \times 100\%$$

Table 4. The Interval scale of Fiscal Decentralisation Ratio
Source: Dwirandra (2008)

Dependency Ratio (%)	Dependency of Local Government Finance
0 – 25	Very Low
25,01 - 50	Low
50,01 - 75	Modest
75,01 - 100	High

2.1.5. Effectiveness Ratio of Locally-generated Revenue (PAD)

Effectiveness Ratio of Locally-generated Revenue (PAD) shows the ability of government to attain the target of the PAD (Mahmudi 2016). This ratio is calculated by comparing between the PAD and the target of PAD. As a result, it illustrates the performance of local governments to obtain the target of the PAD (regional tax, regional retribution, regional wealth managed by Regionally Owned Enterprises/BUMD, and other sources of legitimate the PAD). The formulation and interval scale of Effectiveness Ratio of Locally-generated Revenue (PAD) are as follows.

Table 5. The Formulation of Effectiveness Ratio of Locally-generated Revenue (PAD)
Source: Mahmudi (2016)

$$\text{Effectiveness Ratio of the PAD} = \frac{\text{Realisation of the PAD}}{\text{Target of the PAD}} \times 100\%$$

Table 6. The Interval scale of Effectiveness Ratio of Locally-generated Revenue (PAD)
Source: Mahmudi (2016)

Effectiveness Ratio (%)	Categories
< 75	Not Effective
75 - 89	Less Effective
90 - 99	Effective Enough
100	Effective
> 100	Very Effective

2.1.6. Capital Expenditure Ratio

Capital expenditure ratio is a comparison between realisation capital expenditure and total expenditure (Mahmudi 2016). Capital Expenditure is a government expenditure for people's interests to increase the regional economic growth and people's prosperity (Mustaqimah 2017). According to Muda and Naibaho (2018), there are two types of capital expenditure: Firstly, capital expenditure which has directly impacts for people such as building roads; Secondly, capital expenditure which does not have directly impacts for people such as purchasing new cars for local government agencies. Therefore, capital expenditure can be defined as investment of local governments. In this ratio, there is no interval scale to measure the good or bad level in its allocation. However, Mahmudi (2016) states that the average capital expenditure of local governments in Indonesia is from 5 to 20 percent. The formulation of capital expenditure ratio is as follows.

Table 7. The Formulation of Capital Expenditure Ratio
Source: Mahmudi (2016)

$$\text{Capital Expenditure Ratio} = \frac{\text{Total Realisation of Capital Expenditure}}{\text{Total Expenditures of Government}} \times 100\%$$

2.1.7. Human Development Index

Human Development Index (HDI) consists of 4 indicators, namely life expectancy, literacy rate, average length of study, and purchasing power (Marhaeni et al 2008). Life expectancy indicator represents long life and health. Average length of study and literacy rate reflect output of knowledge. In addition, purchasing power indicates to assess the decent life. HDI emphasises that people are not the tool to reach high economic growth and development, but HDI explains that people's

welfare is the main goal of development in a country or a region (BPS 2015). HDI rank is divided in to 3 categories is as follows.

Table 8. Category of Human Development Index (HDI)
Source: Kuncoro (2015)

Interval of Human Development Index (HDI)	Category
0 - 50	Low Human Development
51 - 79	Modest Human Development
80 - 100	High Human Development

Furthermore, a formula to count Human Development Index is as follows.

Table 9. The Formulation of Human Development Index (HDI)
Source: The Indonesia Central Bureau of Statistics (BPS)

$\text{HDI} = (\sqrt[3]{\text{Health Dimension} \times \text{Education Dimension} \times \text{Expenditure Dimension}}) \times 100$

However, this research does not manually calculate HDI data because it is available on the website of Indonesia Central Bureau of Statistics (BPS): www.ipm.bps.go.id.

2.2. Hypothesis Development

2.2.1. The Relationship Between Fiscal Decentralisation Ratio and HDI

Fiscal Decentralisation Ratio can be used to measure level of fiscal independence between central government and local governments. Sularso and Restianto (2011) suggest that this ratio describes the ability of local governments to fund development and public service activities. A research by Anggraini and Sutaryo (2015) indicates that Fiscal Decentralisation Ratio has positively affect on Human Development Index in provinces in Indonesia because the high of fiscal decentralisation ratio means the high of locally-generated revenue (PAD) to fund many projects that have benefits for people. Therefore, a hypothesis is projected as follows.

H1: Fiscal Decentralisation Ratio positively affects the HDI

2.2.2. The Relationship Between Regional Fiscal Dependence Ratio and HDI

Regional Fiscal Dependence Ratio gives information about the level of dependence between local governments and central government (Pandjaitan 2018). Anggraini and Sutaryo (2015) argue that if the regional fiscal dependence ratio is low, it means that a local government has good financial condition to maximise public service. Consequently, it gradually increases HDI level. Their opinion is in line with several studies. Firstly, research from Ardiansyah, et al (2014) which analyses the impacts of Locally-generated Revenue (PAD), General Allocation Funds (DAU), Special Allocation Funds (DAK) on HDI in cities and regencies in Central Java

Province. One of the results of their research is General Allocation Funds (DAU) and Special Allocation Funds (DAK) which are categorised as transfer funds have negative impacts on HDI in Central Java Province. Similarly, A study written by Sumardjoko (2014) explains that special autonomy funds through capital expenditure as intervening variable has significantly influence the HDI in West Papua Province and Papua Province from 2002 to 2012. Although the study does not mention the positive impact nor negative impact of special autonomy funds, the result of regression in the appendix shows that special autonomy funds through capital expenditure as intervening variable has significant negative impact because the standardised coefficients of regression indicates negative sign (-0.695), and the significant value is 0.021 (significant level at 0.05). As a result, the hypothesis is predicted as follows.

H2: Regional Fiscal Dependence Ratio negatively affects the HDI

2.2.3. The Relationship Between Effectiveness Ratio of Locally-generated Revenue (PAD) and HDI

Effectiveness Ratio of Locally-generated Revenue (PAD) is the ability of government to reach the target of the PAD (Mahmudi 2016). According to Sriyana (2015), achieving the target of government's revenue is essential since inability to meet the target will threaten not only government expenditures but also economic activities that effect people's income. Research conducted by Anggraini and Sutaryo (2015) reveals that Effectiveness Ratio of Locally-generated Revenue (PAD) has positive effect, but it is not significant on HDI in all provinces in Indonesia. Previous studies from Ardiansyah, et al (2014) and Adiputra et al (2014) show that Locally-generated Revenue (PAD) has significant positive impact on HDI in regencies and cities in Central Java Province and Bali Province, respectively. On this basis, hypothesis is proposed as follows.

H3: Effectiveness Ratio of Locally-generated Revenue (PAD) positively effects the HDI

2.2.4. The Relationship Between Capital Expenditure Ratio and HDI

Capital expenditure ratio compares between realisation capital expenditure and total expenditure (Mahmudi 2016). Muda and Naibaho (2018), there are two types of capital expenditure: Firstly, capital expenditure which have directly impacts for people such as building roads; Secondly, capital expenditure which do not have directly impacts for people such as purchasing new cars for local government agencies. A study by Ariza (2016) shows that Capital Expenditure has positive significant impact on Human Development Index in regencies and cities in West Kalimantan Province. Other study from Umiyati et al (2017) states that the higher the Capital Expenditure, the higher the HDI in regencies and cities in Jambi Province. Both studies reveal that local governments are success to allocate capital expenditure

in strategic areas such as education, health, and infrastructure that have direct impacts on people prosperity. Therefore, a hypothesis is projected as follows.

H4: Capital Expenditure Ratio positively effects the HDI

2.3. Research Framework

Research framework for the relationship of research variables is created based on the development of hypotheses. This research use 4 independent variables (Fiscal Decentralisation Ratio, Regional Dependency Ratio, Effectiveness Ratio of Locally-generated Revenue (PAD), and Capital Expenditure Ratio) and 1 dependent variable (Human Development Index/HDI). The research framework is as follows.

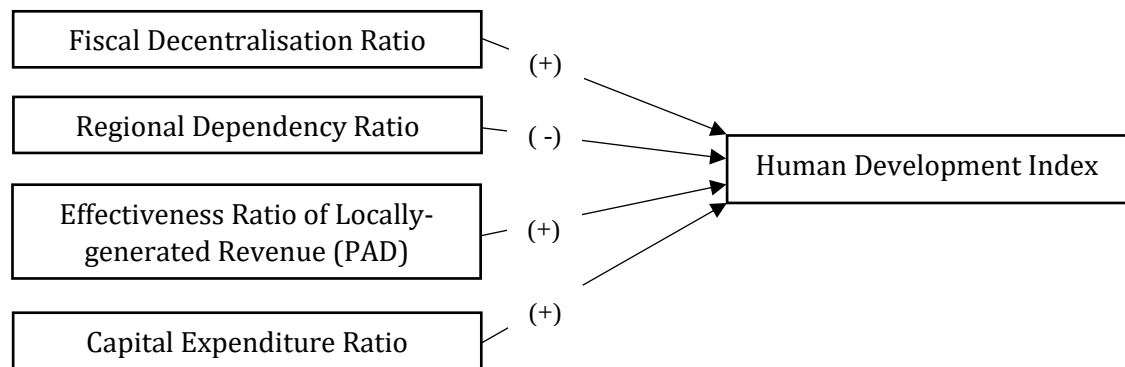


Image 1. Research Framework
Source: Original Figure

3. RESEARCH METHODOLOGY

3.1. Data Selection and Data Collection Methods

This study uses secondary quantitative data. Regional Budget Realisation Reports (LRA) are collected from website of Ministry of Finance of Indonesia (www.djpk.kemenkeu.go.id), and the HDI data is obtained from website of The Indonesia Central Bureau of Statistics/BPS (www.ipm.bps.go.id). Besides, the form of data in this research is panel data. According to Winarno (2015) panel data is a combination of time series data and cross-sectional data.

The research period is between 2011 and 2016. In reality, the research period can be prolonged since the newest formula of HDI is available from 2010. Nevertheless, HDI data of some regencies such as Intan Jaya Regency, Deiyai Regency, Tambrauw Regency, Maybrat Regency, Manokwari Selatan Regency, and Pegunungan Arfak Regency in 2010 are not available on website of BPS. Moreover, this research does not take data from the year 2017 as the Budget Realisation Report (LRA) for fiscal year 2017 is not available as well. Consequently, this research uses time series data from 2011 to 2016.

Cross-sectional data in this study consists of 40 regencies and cities in West Papua Province and Papua Province. Actually, there are 42 regencies and cities in both provinces; however, Manokwari Selatan Regency and Pegunungan Arfak Regency are excluded from this research as their data is not available on website of BPS between 2010 and 2012. Therefore, only 40 local governments are analysed in this study.

3.2. Variable Definitions

3.2.1. Dependent Variable (Y)

Dependent variable is a variable that is affected by independent variables (Sugiyono 2018). Dependent variable in this study is Human Development Index (HDI). The data of HDI in this research is not calculated manually because it is available on website of BPS (www.ipm.bps.go.id)

3.2.2. Independent Variables

Independent variable is a variable that affects dependent variable or causes changes in dependent variable (Sugiyono 2018). All independent variables in this research are counted manually since they are local governments financial ratios. Budget Realisation Reports (LRA) are available on website of Ministry of Finance of Indonesia (www.djpk.kemenkeu.go.id). This research analyses the following independent variables.

1. Fiscal Decentralisation Ratio (X1)

Fiscal Decentralisation Ratio is counted manually by comparing realisation of Locally-generated Revenue (PAD) and realisation of total revenue of local governments.

2. Regional Dependency Ratio (X2)

Regional Dependency Ratio is calculated manually by dividing realisation of transfer funds and realisation of total revenue of local governments. Transfer fund is enumerated by adding Balance Fund (the DAU, the DAK, the DBH), and Special Autonomy Fund.

3. Effectiveness Ratio of Locally-generated Revenue (PAD) (X3)

Effectiveness Ratio of Locally-generated Revenue (PAD) is manually computed by comparing realisation of the PAD and target of the PAD.

4. Capital Expenditure Ratio (X4)

Capital Expenditure Ratio is counted manually by dividing realisation of capital expenditure and realisation of total expenditure.

3.3. Data Analysis Method

3.3.1. Panel Data Regression

This study examines panel data regression using software Eviews 8. The tests that are conducted include: Descriptive Statistics, R Square Test, significant test for each independent variable towards dependent variable (T test), significant test for all independent variables towards dependent variable (F test).

Independent variables in this research are Fiscal Decentralisation Ratio, Regional Dependency Ratio, Effectiveness Ratio of Locally-generated Revenue (PAD), and Capital Expenditure Ratio. Besides, the independent variable of this study is Human Development Index (HDI) in West Papua and Papua Province from 2011 to 2016. The mathematical equation model is as follows.

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + e_{it}$$

Explanations:

- Y = Human Development Index (HDI)
- X1 = Fiscal Decentralisation Ratio
- X2 = Regional Dependency Ratio
- X3 = Effectiveness Ratio of Locally-generated Revenue (PAD)
- X4 = Capital Expenditure Ratio
- β_0 = Constant
- $\beta_1 - \beta_4$ = Coefficient Regression
- e = error
- i = cross section
- t = time series

According to Widarjono (2017), there are 3 models to estimate panel data regression: Common Effect, Fixed Effect, and Random Effect.

3.3.2. Common Effect Model

Common Effect Model (CEM) is an estimation model of panel data that ignores individual dimension and time dimension, and it assumes that all data both individuals and time are the same (Widarjono, 2017). The mathematical equation model of Common Effect Model (CEM) is as follows.

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + e_{it}$$

Explanations:

- Y = Human Development Index (HDI)
- X1 = Fiscal Decentralisation Ratio
- X2 = Regional Dependency Ratio
- X3 = Effectiveness Ratio of Locally-generated Revenue (PAD)
- X4 = Capital Expenditure Ratio
- β_0 = Constant
- $\beta_1 - \beta_4$ = Coefficient Regression
- e = error

- i = cross section
- t = time series

3.3.2. Fixed Effect Model

Fixed Effect Model (FEM) is an estimation model of panel data that uses dummy variables to find out the difference of individual intercepts; however, it estimates that the time intercepts and slopes are invariant (Widarjono 2017). The mathematical equation model of Fixed Effect Model (FEM) is as follows.

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 D_{1i} + \beta_6 D_{2i} + \beta_7 D_{3i} + \dots + \beta_{44} D_{40i} + e_{it}$$

Explanations:

- Y = Human Development Index (HDI)
- X_1 = Fiscal Decentralisation Ratio
- X_2 = Regional Dependency Ratio
- X_3 = Effectiveness Ratio of Locally-generated Revenue (PAD)
- X_4 = Capital Expenditure Ratio
- D_1 - D_{40} = Dummy Variable for each regency or city
- β_0 = Constant
- $\beta_1 - \beta_{44}$ = Coefficient Regression
- e = error
- i = cross section
- t = time series

3.3.2. Random Effect Model

Random Effect Model (REM) is an estimation of panel regression that uses disturbance term having relationship between individuals and time; in addition, this model is used to overcome the weakness of Fixed Effect Model (Winarno 2015). The disturbance term (v_{it}) is composed of two components: e that represents cross-section or individual-specific, error component, and μ that is the combination of time series and cross-section error component (Gujarati 2003). The mathematical equation model of Random Effect Model (REM) is as follows.

$$Y_{it} = \bar{\beta}_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + v_{it}$$

Explanations:

- Y = Human Development Index (HDI)
- X_1 = Fiscal Decentralisation Ratio
- X_2 = Regional Dependency Ratio
- X_3 = Effectiveness Ratio of Locally-generated Revenue (PAD)
- X_4 = Capital Expenditure Ratio

- $\bar{\beta}_0$ = Random Coeficient
- $\beta_1 - \beta_4$ = Coeficient Regression
- v_{it} = $e + \mu$
- i = cross section
- t = time series

3.4. Model Selection

Sriyana (2014) states that there is two stages to choose the best model of panel data regression. Firstly, F test that compares between common effect model and fixed effect model. Secondly, Hausman test is a comparison test to choose the best model (fixed effect or random effect).

3.4.1. F Test

F test is a test that gives information about the best model either common effect model or fixed effect model (Sriyana 2014). If the F test shows significant level of less than 5%, it means that fixed effect model is better than common effect model.

3.4.2. Hausman Test

Hausman test is a test that shows the best model either fixed effect or random effect (Sriyana 2014). If the probability is less than 5%, it means that fixed effect model is the best model.

3.5. Statistics Test

3.5.1. R Square Test (R^2)

R square shows the ability of regression model to explain the correlation between independent variables and dependent variable (Winarno 2015). The value range of R^2 is from 0 to 1. The higher the value, the higher correlation between independent variables and dependent variable.

3.5.2. F Coefficient Test

F Coefficient Test illustrates the influence level of all independent variables towards dependent variable (Sriyana 2015). If probability of F-statistics is lower than 1%, it means that all independent variables has effect on dependent variable.

3.5.2. T Test

T test is to assess individually the correlation between independent variable and dependent variable (Sriyana 2015). The significant level of T test is different for each independent variable (1%, 5%, and 10%). However, the smaller the level of significant, the higher the effect of independent variable on dependent variable.

4. RESULT AND DISCUSSION

The result and discussion section describes the data analysis result and discuss the result of regression model.

4.1. Descriptive Statistics

Descriptive statistics gives information about mean, deviation standard, maximum, minimum, median, sum, range, kurtosis, and skewness of all data (Ghozali 2011). However, this research uses maximum, minimum, and mean indicators.

Table 9. Descriptive Statistics
Source: Original Figure

	Human Development Index (HDI)	Fiscal Decentralisation Ratio	Regional Dependency Ratio	Effectiveness Ratio of Locally- generated Revenue (PAD)	Capital Expenditure Ratio
Minimum	21.12	0.35%	74.39%	18.10%	13.23%
Maximum	78.56	25.52%	99.52%	1585%	61.35%
Mean	55.38	2.96%	94.08%	202.84%	31.98%

The result of table above can be explained as follows:

- Human Development Index (HDI).** Minimum value of HDI from 2011 to 2016 in West Papua Province and Papua Province is 21.12 (Low Human Development). It is in Nduga Regency in 2011. In contrast, the maximum value of HDI in both provinces is 78.56 (Modest Human Development). It is in Jayapura City in 2016. Mean of HDI of regencies and cities in West Papua Province and Papua Province is 55.38. It can be categorised as Modest Human Development.
- Fiscal Decentralisation Ratio.** The lowest percentage of Fiscal Decentralisation Ratio in West Papua Province and Papua Province between 2011 and 2016 is 0.35% (Tamboraw Regency in 2014). It shows that the ability of local government finance is very low. However, the maximum percentage of Fiscal Decentralisation Ratio is 25.52% in Mimika Regency in 2012. It means the ability of local government finance is enough. The mean of Fiscal Decentralisation Ratio in both provinces is 2.96% (ability of local government finance is very low).
- Regional Dependency Ratio.** Minimum proportion of Regional Dependency Ratio from 2011 to 2016 in West Papua Province and Papua Province is 74.39% in Mimika Regency in 2012. It means that the dependency of local government towards central government is modest. Besides, the regional Dependency Ratio in both provinces is 99.52%. It is in Maybrat Regency in 2011 (high dependency of local government finance to central government). Average of Regional Dependency Ratio in both provinces is 94.08%, and it can be categorised as high regional dependency.

- d. **Effectiveness Ratio of Locally-generated Revenue (PAD).** Minimum percentage of Effectiveness Ratio of Locally-generated Revenue (PAD) in West Papua Province and Papua Province between 2011 and 2016 is 18.10% (not effective). It is in Biak Numfor Regency in 2016. In contrast, maximum proportion of this ratio is 1584% (very effective) in Deiyai Regency in 2011. Average of Effectiveness Ratio of Locally-generated Revenue (PAD) in both province is 202.84% (very effective).
- e. **Capital Expenditure Ratio.** The lowest proportion of Capital Expenditure Ratio in West Papua Province and Papua Province from 2011 to 2016 is 13.23% in Biak Numfor in 2013. However, the highest proportion of Capital Expenditure Ratio is 61.35% Mamberamo Tengah in 2012. Mean of this ratio is 31.98%.

4.2. Panel Data Regression and Result

In order to choose the best model of regression (Common Effect Model, Fixed Effect Model, or Random Effect Model), there are the result of F Test and Hausman Test.

4.2.1. F Test

In the opinion of Sriyana (2014), F test is a tool to assess the best model either common effect model or fixed effect model. The result is as follows.

Table 10. Result of F Test
Source: Original Figure (2018)

Effect Test	Probability	Alfa (α)
Cross-section F	0.0000	< 5%

The test result Cross-section F Probability is 0.000, and it is lower than $\alpha = 5\%$. Therefore, Fixed Effect Model is better than Common Effect Model.

4.2.2. Hausman Test

Hausman test is an indicator that gives information about the best model either fixed effect or random effect (Sriyana 2014). The result is as follows.

Table 11. Hausman Test
Source: Original Figure (2018)

Test Summary	Probability	Alfa (α)
Cross-section Random	0.0000	< 5%

The result of Cross-section Random Probability of Hausman Test is 0.0000 (lower than $\alpha = 5\%$). As a result, Fixed Effect Model is the best model.

4.3. Panel Data Regression Result

The best regression model for this study is Fixed Effect Model (FEM). In addition, there are several tests (R Square (R^2), F Coefficient Test, and T Test) to evaluate the result. Fixed Effect Model (FEM) result is as follows.

Table 12. R Square and F Statistic
Source: Original Figure (2018)

R-squared (R^2) : 0.99
Prob.(F Statistic) : 0.00

4.3.1. R Square (R^2)

The value of R Square (R^2) in this panel data regression is 0.99 (99%). Therefore, all independent variables (Fiscal Decentralisation Ratio, Regional Dependency Ratio, Effectiveness Ratio of Locally-generated Revenue (PAD), Capital Expenditure Ratio) have proximity to the regression line of Human Development Index (HDI) as dependent variable by 99%. Moreover, it means that independent variables have strong correlation to dependent variable.

4.3.2. F Coefficient Test

The value of F Coefficient Probability in this fixed effect model regression is 0.00. It is lower than $\alpha = 1\%$. Therefore, All independents variables (Fiscal Decentralisation Ratio, Regional Dependency Ratio, Effectiveness Ratio of Locally-generated Revenue (PAD), Capital Expenditure Ratio) significantly influence dependent variables (HDI).

4.3.3. T Test

T test gives information about the corelation between independent variable and dependent variable individually. The result of T Test in this regression is as follows.

Table 13. Result of T Test
Source: Original Figure (2018)

Variables	Coefficient	Prob.
C	69.06	0.00
X1/Fiscal Decentralisation Ratio	0.10	0.08 **
X2/Regional Dependency Ratio	-0.13	0.00 *
X3/Effectiveness Ratio of Locally-generated Revenue (PAD)	-0.0006	0.15

X4/ Capital Expenditure Ratio	-0.06	0.00 *
Independent Variable: Human Development Index (HDI)		
* Significant at 1%		
** Significant at 10%		

Based on table 13, it can be seen that 3 independent variables (Fiscal Decentralisation Ratio, Regional Dependency Ratio, and Capital Expenditure Ratio) that have direct impacts on HDI. Other variable, Effectiveness Ratio of Locally-generated Revenue (PAD), has no significant effect on HDI. There is only 1 independent variable (Fiscal Decentralisation Ratio) has positive coefficient (0.10). In contrast, other variables, Regional Dependency Ratio, Capital Expenditure Ratio, and Capital Expenditure Ratio, have negative coefficients (-0.13, -0.0006, -0.06) respectively. The result of Fiscal Decentralisation Ratio and Regional Dependency Ratio are consistent with Hypothesis 1 and 2. As a result, Hypothesis 1 and 2 can be accepted in this study. A detailed discussion about all variables is presented in the section below.

4.4. Discussion

4.4.1. Effect of Fiscal Decentralisation Ratio on HDI

Based on the results presented in Table 13, the probability of Fiscal Decentralisation Ratio is 0.08, and it is lower than $\alpha = 0.1$ (10%). Therefore, Hypothesis 1 is accepted that Fiscal Decentralisation Ratio has positive significant effect on HDI in regencies and cities in West Papua Province and Papua Province. This result is in line with several arguments. Sularso and Restianto (2011) and Anggraini and Sutaryo (2015) they believe that the high of fiscal decentralisation ratio means the high of locally-generated revenue (PAD) to fund many projects that have benefits for local people. Moreover, local potential has not been maximised yet in Papua because the highest percentage of Fiscal Decentralisation Ratio in both province is only 25.52%, and mean of this ratio is 2.96%. Therefore, if local governments can improve and develop local potential to increase Fiscal Decentralisation Ratio, the social welfare in regencies and cities in Papua is projected to increase.

4.4.2. Effect of Regional Dependency Ratio on HDI

Based on the results presented in Table 13, the probability of Regional Dependency Ratio is 0.00, and it is lower than $\alpha = 0.01$ (1%). Therefore, Hypothesis 2 is accepted that Regional Dependency Ratio has negative significant effect on HDI in regencies and cities in West Papua Province and Papua Province. Anggraini and Sutaryo (2015) state that if the regional fiscal dependence ratio is low, it means that a local government has good financial condition to maximise public service. Besides, a good financial condition makes local governments have many options to improve

their region, and they do not depend on central government to fund strategic projects anymore. As a result, the low dependency ratio will enhance social welfare in West Papua Province and Papua Province.

4.4.3. Effect of Effectiveness Ratio of Locally-generated Revenue (PAD) on HDI

Based on the results presented in Table 13, the coefficient of Effectiveness Ratio of Locally-generated Revenue (PAD) shows negative sign (-0.0006). however, its probability is 0.15. As the probability is higher than $\alpha = 0.1$ (10%), Hypothesis 3 is rejected. It means that an increase of Effectiveness Ratio of Locally-generated Revenue (PAD) does not have impact on HDI in regencies and cities in West Papua Province and Papua Province. This result is not in line with previous studies. Ardiansyah, et all (2014) and Adiputra et all (2014) illustrate that an increase of Locally-generated Revenue (PAD) has significant positive impact on HDI in local governments of Central Java Province and Bali Province. The negative coefficient of Effectiveness Ratio of Locally-generated Revenue (PAD) indicates that if local governments rise the PAD, it will decrease the HDI because a massive increase of the PAD is predicted to increase local tax, and local retribution that have negative impacts on people welfare.

4.4.4. Effect of Capital Expenditure Ratio on HDI

Based on the results presented in Table 13, the coefficient of Capital Expenditure Ratio is -0.06 and probability is 0.00. Since the probability is lower than $\alpha = 0.01$ (1%), Capital Expenditure Ratio has negative significant impact on HDI in regencies and cities in West Papua Province and Papua Province. Thus, hypothesis 4 is rejected. This result is not in line with previous studies conducted by Ariza (2016) and Umiyati et all (2017) that show Capital Expenditure has positive significant impact on HDI. The reason why capital expenditure ratio has negative impact on HDI because in this research period, many regions decrease their proportion of capital expenditure while the HDI escalates gradually. Moreover, Capital Expenditure is long term investment. Therefore, period of research should be extended to see the impact of capital expenditure in a region.

4.4.5. Coefficient Value

In Fixed Effect Model, the coefficient value of every regency or city is different. The table of coefficient value is as follows.

Table 14. Coefficient Value
Source: Original Figure (2018)

Number	Regencies or Cities	Coefficient
1	NABIRE--C	9.762.227
2	FAKFAK--C	8.750.792
3	KEPULAUANYAPEN--C	8.422.770
4	WAROPEN--C	7.045.349
5	KEEROM--C	6.892.642
6	TELUKBINTUNI--C	5.773.812
7	SARMI--C	5.265.757
8	KAIMANA--C	5.192.439
9	RAJAAMPAT--C	4.915.748
10	SUPIORI--C	4.807.542
11	SORONG--C	4.508.397
12	BOVENDIGOEL--C	3.449.514
13	SORONGSELATAN--C	2.428.296
14	KOTAJAYAPURA--C	1.891.693
15	KOTASORONG--C	1.828.829
16	BIAKNUMFOR--C	1.325.029
17	JAYAPURA--C	1.292.785
18	MANOKWARI--C	1.215.815
19	MIMIKA--C	1.204.952
20	MERAUKE--C	1.061.161
21	TELUKWONDAMA--C	0.78089
22	MAYBRAT--C	0.561544
23	MAPPI--C	0.261779
24	YAHUKIMO--C	-1.048.781
25	YALIMO--C	-1.098.701
26	INTANJAYA--C	-1.102.331
27	MAMBERAMOTENGAH--C	-1.108.207
28	LANNYJAYA--C	-1.189.295
29	PUNCAKJAYA--C	-1.277.319
30	PEGUNUNGANBINTANG--C	-1.587.022
31	PUNCAK--C	-1.681.546
32	PANIAI--C	-1.863.993
33	JAYAWIJAYA--C	-2.886.532
34	DOGIYAI--C	-2.989.029
35	NDUGA--C	-3.026.794
36	TAMBARAW--C	-5.366.155
37	MAMBERAMORAYA--C	-6.423.573
38	DEIYAI--C	-6.640.617
39	TOLIKARA--C	-9.740.909
40	ASMAT--C	-9.911.370

Table 14 sorts the highest to the lowest coefficients of regencies and cities in West Papua Province and Papua Province. It means that the result of this study can have significant impacts on HDI in regions that are in top position such as Nabire Regency, Fakfak Regency, and Kepulauan Yapen Regency. However, results of this study do not have direct impacts on regions that in lowest level in table above such as Asmat Regency, Tolikara Regency, and Deiyai Regency. Therefore, through coefficient value, it can be concluded that the higher the position of a region, the stronger the impacts of variables. In contrast, the lower the position of a regency or city, the weaker the effect of variables in this study.

5. CONCLUSIONS

From the result of panel data regression, there are 3 independent variables that have significant impacts on the HDI in West Papua Province and Papua Province namely, Fiscal Decentralisation Ratio, Regional Dependency Ratio, and Capital Expenditure Ratio. An increase of HDI in both provinces can be reached by rising the ability of fiscal decentralisation ratio, and it will automatically decline regional dependency ratio.

The ability of local governments to maximise regional potentials will escalate the HDI dramatically. It also helps local governments to fund important projects having benefits for local people. The allocation of Capital Expenditure is proposed to be directed at projects that open the access to remote areas. Therefore, although it has negative impacts in the short term, it gives positive effects in the long term.

Effectiveness Ratio of Locally-generated Revenue (PAD) is only one independent variable has no significant impact on the HDI. However, it shows negative coefficient. As a result, government should be careful when rising the PAD because a massive increase of the PAD will rise local tax and local retribution that have negative impacts on business climate and people welfare.

6. IMPLICATION AND LIMITATION

Implication of this study is that an increase of HDI can be achieved through regional independence. Maximising local potential is considered as a good way to rise local independence because it is predicted to boost Locally-generated Revenue (PAD). If a local government has good financial condition, they will have many options to fund projects that have direct impacts on people welfare. Although capital expenditure ratio has negative effect on HDI, it is needed to increase the number of local infrastructure. Therefore, capital expenditure will have benefits in the long term.

Limitation is that this research only applies 4 independent variables. However, there are several financial ratios that can be implemented in the next studies. In addition, next studies is proposed to analyse financial performance through government expenditure posts as well.

REFERENCES

- Amalia, F. R., & Purbadharmaja, I. B. (2014). *Pengaruh Kemandirian Keuangan Daerah Dan Keserasian Alokasi Belanja Terhadap Indeks Pembangunan Manusia*. E-Jurnal Ekonomi Pembangunan Universitas Udayana Vol. 3 No. 6, 257-264.
- Anggraini, T., & Sutaryo. (2015). *Pengaruh Rasio Keuangan Pemerintah Daerah Terhadap Indeks Pembangunan Manusia Pemerintah Provinsi di Indonesia*. Simposium Nasional Akuntansi (SNA) XVIII Universitas Sumatera Utara. Medan.
- Ardiansyah, Ari, V., & Widiyaningsih. (2014). *Pengaruh Pendapatan Asli Daerah, Dana Alokasi Umum Dan Dana Alokasi Khusus Terhadap Indeks Pembangunan Manusia Kabupaten/Kota Di Provinsi Jawa Tengah*. Simposium Nasional Akuntansi (SNA) XVII Universitas Mataram.
- Ariza, A. (2016). *Pengaruh Pertumbuhan Ekonomi dan Belanja Modal Terhadap Indeks Pembangunan Manusia (IPM) Dalam Perspektif Islam*. Al-Maslahah Jurnal Ilmu Syariah.
- Badan Pusat Statistik. (2015). *Indeks Pembangunan Manusia 2014*. Jakarta: Badan Pusat Statistik.
- Badrudin, R. (2017). *Ekonomika Otonomi Daerah*. Yogyakarta: UPP STIM YKPN.
- Dewan Perwakilan Rakyat. (2014). *UU Nomor 23 Tahun 2014 tentang Pemerintah Daerah*. Jakarta: Dewan Perwakilan Rakyat.
- Dwirandra, A. (2008). *Efektivitas Dan Kemandirian Keuangan Daerah Otonom Kabupaten/Kota Di Propinsi Bali Tahun 2002 – 2006*. Jurnal Ilmiah Akuntansi dan Bisnis.
- Ghozali, I. (2011). *Aplikasi Multivariate dengan Program IBM SPSS 19*. Semarang: Penerbit Universitas Diponegoro.
- Ghozali, I. (2017). *Ekonometrika Teori, Konsep, dan Aplikasi dengan IBM SPSS 24*. Semarang: Badan Penerbit Universitas Diponegoro.
- Gujarati, D. N. (2003). *Basic Econometrics Fourth Edition*. New York: McGraw-Hill/Irwin.
- Halim, A., & Abdullah, S. (2006). *Hubungan dan Masalah Keagenan di Pemerintahan Daerah*. Jurnal Akuntansi Pemerintahan Vol. 2 No. 1.
- Jensen, M., & Meckling, W. (1976). *Theory of the firm: Managerial Behaviour, Agency Cost and Ownership Structure*. Journal of Finance Economics, 305-360.
- Kuncoro, M. (2009). *Ekonomika Indonesia Dinamika Lingkungan Bisnis di Tengah Krisis GLocal*. Yogyakarta: UPP STIM YKPN.
- Kuncoro, M. (2016). *Mudah Memahami dan Menganalisa Indikator Ekonomi*. Yogyakarta: UPP STIM YKPN.

- Mahmudi. (2017). *Analisis Laporan Keuangan Pemerintah Daerah*. Yogyakarta: UPP STIM YKPN.
- Marhaeni, H., Yati, S., & M, B. T. (2008). *Indeks Pembangunan Manusia Tahun 2006-2007*. Jakarta: Badan Pusat Statistik.
- Muda, I., & all, e. (2018). *Factors of Quality of Financial Report of Local Government in Indonesia*. IOP Conf. Ser.: Earth Environ. Sci. 126 012067.
- Muda, I., & Naibaho, R. (2018). *Variables Influencing Allocation of Capital Expenditure in Indonesia*. IOP Conf. Ser.: Earth Environ. Sci. 126 012066.
- Mustaqimah, K., Hartoyo, S., & Fahmi, I. (2017). *Peran Belanja Modal Pemerintah dan Investasi Pembangunan Manusia dalam Mengurangi Tingkat Kemiskinan di Indonesia*. Jurnal Ekonomi dan Kebijakan Pembangunan Vol. 6 No. 2, 1-15.
- Nachrowi, N. D., & Usman, H. (2006). *Pendekatan Populer dan Praktis Ekonometrika Untuk Analisis Ekonomi dan Keuangan*. Jakarta: Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.
- Panda, B., & Leepsa, N. M. (2017). *Agency theory: Review of Theory and Evidence on Problems and Perspectives*. Indian Journal of Corporate Governance 10(1), 74-95.
- Pandjaitan, M., Tommy, P., & Untu, V. (2018). *Analisis Kinerja Keuangan Daerah Pemerintah Kota Manado Tahun 2011-2016*. Jurnal EMBA Vol. 6 No.3, 1398-1407.
- Pangkey, A. H., Saerang, I. S., & Tulung, J. E. (2017). *Analisis Kinerja Keuangan Pemerintah Daerah Kabupaten Minahasa Selatan Tahun Anggaran 2011-2015*. Jurnal EMBA Vol.5 No.2, 2848-2858.
- Putra, Z. (2016). *The Influence of Locally Generated Revenue, Public Allocation Funds and Specific To Financial Performance of The Region in The City/Regency Government in Aceh Province*. AFEBI Economic and Finance Review Vol. 1, No. 1.
- Rofiqi, A. N., Sutikno, & Wijanarko, A. (2012). *Analisis Pengaruh Pengeluaran Pemerintah, Pertumbuhan Ekonomi, Dan PDRB PerKapita Terhadap Indeks Pembangunan Manusia Di Kabupaten Pulau Madura Tahun 2002-2011*.
- Setyowati, L., & Suparwati, Y. K. (2012). *Pengaruh Pertumbuhan Ekonomi, DAU, DAK, PAD Terhadap Indeks Pembangunan Manusia dengan Pengalokasian Anggaran Belanja Modal Sebagai Variabel Intervening (Studi Empiris pada Pemerintah Kabupaten dan Kota se-Jawa Tengah)*. Prestasi Vol. 9 No. 1, 113-133.
- Siregar, H. A. (2017). *Analysis On The Influence Of The Growth Of Regionally-Generated Funds, Generally-Allocated Funds, And Specially-Allocated Funds On Human Development In Pekanbaru With Capital Expenditure Growth As The Moderator*. KURS Vol. 2 No. 1.

- Sriyana, J. (2014). *Metode Regresi Data Panel (Dilengkapi Analisis Kinerja Bank Syariah di Indonesia)*. Yogyakarta: Penerbit Ekonisia.
- Sriyana, J. (2015). *Dinamika Kinerja Fiskal di Indonesia*. Yogyakarta: UII Press.
- Statistik, B. P. (2015). *Indeks Pembangunan Manusia 2014*. Jakarta: Badan Pusat Statistik.
- Sugiyono. (2018). *Metode Penelitian Kuantitatif*. Bandung: Alfabeta.
- Sularso, H., & Restianto, Y. E. (2011). *Pengaruh Kinerja Keuangan Terhadap Alokasi Belanja Modal dan Pertumbuhan Ekonomi Kabupaten / kota di Jawa Tengah*. Media Riset Akuntansi Vol. 1 No. 2, 109-124.
- Sumardjoko, I. (2014). *Pengaruh Penerimaan Dana Otonomi Khusus Terhadap Indeks Pembangunan Manusia Papua Dan Papua Barat Dengan Belanja Modal Sebagai Intervening*. Simposium Nasional Akuntansi (SNA) XVII Universitas Mataram.
- Suranta, S., Bandi, Perdana, H. D., & Syafiqurrahman, M. (2017). *Analisis Kinerja Keuangan Pemerintah Daerah: Studi Komparasi Propinsi Jawa Tengah Dan Kalimantan Selatan*. Jurnal Akuntansi FE Universitas Sarjanawiyata Tamansiswa Vol. 5 No.2, 111-124.
- Suyanto. (2017). *Kajian Ketimpangan Fiskal (Fiscal Imbalance) dan Kebijakan Desentralisasi Fiskal pada Daerah Otonom*. Jurnal Develop ISSN: 2580-1767, Prodi Ekonomi Pembangunan Fakultas Ekonomi dan Bisnis UNITOMO.
- Umiyati, E., Amril, & Zulfanetti. (2017). *Pengaruh Belanja Modal, Pertumbuhan Ekonomi dan Jumlah Penduduk Miskin Terhadap Indeks Pembangunan Manusia di Kabupaten/Kota Provinsi Jambi*. Jurnal Sains Sosiohumaniora, 29-37.
- Widarjono, A. (2017). *Ekonometrika Pengantar dan Aplikasinya Disertai Panduan Eviews Edisi ke-4*. Yogyakarta: UPP STIM YKPN.
- Winarno, W. W. (2015). *Analisis Ekonometrika dan Statistika dengan EIEWS Edisi Ke-4*. Yogyakarta: UPP STIM YKPN.
- Wulandari, A. (2001). *Kemampuan Keuangan Daerah Studi Kasus Kota Jambi Dalam Pelaksanaan Otonomi Daerah*. JKAP Volume 5 No. 2, 17-33.

APPENDIX**A. F Test**

Redundant Fixed Effects Tests
 Pool: POOL_REG
 Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	356.341881	(39,196)	0.0000
Cross-section Chi-square	1026.082199	39	0.0000

B. Hausman Test

Correlated Random Effects - Hausman Test
 Pool: POOL_REG
 Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	27.958424	4	0.0000

C. Fixed Effect Model

Dependent Variable: Y?
 Method: Pooled Least Squares
 Sample: 2011 2016
 Included observations: 6
 Cross-sections included: 40
 Total pool (balanced) observations: 240

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	69.05649	1.993547	34.64000	0.0000
X1?	0.103050	0.060261	1.710058	0.0888
X2?	-0.126154	0.020251	-6.229521	0.0000
X3?	-0.000649	0.000454	-1.428638	0.1547
X4?	-0.061918	0.015463	-4.004216	0.0001
Fixed Effects (Cross)				
ASMAT--C	-9.911370			
BIAKNUMFOR--C	13.25029			
BOVENDIGOEL--C	3.449514			
DEIYAI--C	-6.640617			
DOGIYAI--C	-2.989029			
FAKFAK--C	8.750792			
INTANJAYA--C	-11.02331			
JAYAPURA--C	12.92785			
JAYAWIJAYA--C	-2.886532			
KAIMANA--C	5.192439			
KEEROM--C	6.892642			
KEPULAUANYAPEN--C	8.422770			
KOTAJAYAPURA--C	18.91693			

KOTASORONG--C	18.28829
LANNYJAYA--C	-11.89295
MAMBERAMORAYA--C	-6.423573
MAMBERAMOTENGAH--C	-11.08207
MANOKWARI--C	12.15815
MAPPI--C	0.261779
MAYBRAT--C	0.561544
MERAUKE--C	10.61161
MIMIKA--C	12.04952
NABIRE--C	9.762227
NDUGA--C	-30.26794
PANIAI--C	-1.863993
PEGUNUNGANBINTANG--C	-15.87022
PUNCAK--C	-16.81546
PUNCAKJAYA--C	-12.77319
RAJAAMPAT--C	4.915748
SARMI--C	5.265757
SORONG--C	4.508397
SORONGSELATAN--C	2.428296
SUPIORI--C	4.807542
TAMBARAW--C	-5.366155
TELUKBINTUNI--C	5.773812
TELUKWONDAMA--C	0.780890
TOLIKARA--C	-9.740909
WAROPEN--C	7.045349
YAHUKIMO--C	-10.48781
YALIMO--C	-10.98701

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.992217	Mean dependent var	55.38138
Adjusted R-squared	0.990510	S.D. dependent var	11.37910
S.E. of regression	1.108536	Akaike info criterion	3.208100
Sum squared resid	240.8550	Schwarz criterion	3.846217
Log likelihood	-340.9720	Hannan-Quinn criter.	3.465215
F-statistic	581.1016	Durbin-Watson stat	0.896169
Prob(F-statistic)	0.000000		