

THE EFFECTS OF LOCALLY-GENERATED REVENUE (LGR) AND REVENUE SHARING FUNDS (RSF) ON REGIONAL MINIMUM WAGES TO PROMOTE HUMAN DEVELOPMENT INDEX (HDI) IN BANTEN PROVINCE

TB. M. Ali Ridho Azhari*, Universitas Padjadjaran, Bandung
Asep Sumaryana, Universitas Padjadjaran
R. Widya Setiabudi Sumadinata, Universitas Padjadjaran
Nandang Alamsah Deliarnoor, Universitas Padjadjaran

ABSTRACT

This study aims to analyze the effects of Revenue Sharing Funds (RSF) and Locally-Generated Revenue (LGR) on the Human Development Index (HDI) through Regional Minimum Wages (RMW) in Banten province. The data used is panel data, namely a combination of time series data and cross-section data. Time series data are taken from 2014 to 2019 while cross-section data are taken from all districts/cities in Banten Province. The total data obtained are 48. The data analysis technique used the Structural Equation Model (SEM) with Partial Least Square (PLS). The results show that LGR has positive effects on RMW and HDI, while RSF has negative effects on RMW and HDI. RMW has positive effects on HDI.

Keywords: LGR, RSF, RMW, HDI

INTRODUCTION

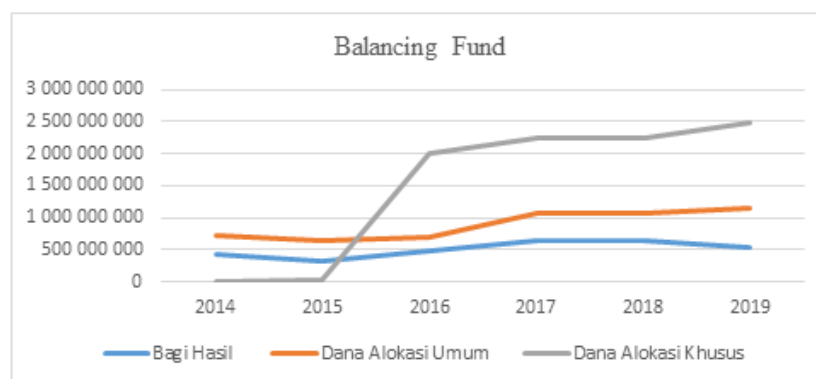
Human Development Index (HDI) is an instrument used to measure the achievement of human development in an area. Although it does not measure all dimensions of human development, HDI can measure the main dimensions of human development (Setiyawan, 2013). Decentralization has opened up the potentials for the region to develop actively and independently. Competition between regions is increasingly dynamic as a platform for effective and efficient human development policies.

Human Development Index correlates with a region's socio-economic capacity such as the level of the regional minimum wage; (Yaziz, et.al., 2019; Zainuddin, 2015), locally-generated revenue (Lugastoro, 2013; Setyowati & Suparwati, 2012; Williantara & Budiasih, 2016) and profit-sharing funds (Afif & Yulianti, 2019; Williantara & Budiasih, 2016).

According to the regulation of the Minister of Manpower, the minimum wage is the lowest monthly wage which consists of the basic wage including fixed allowances. The minimum wage is determined based on a standard of living by taking into account the productivity of economic growth (Wasilaputri, 2016). The minimum wage is an attempt to uplift the status of low-income people, especially the working poor. The main objective of establishing a minimum wage is to meet the minimum standard of living such as for health, efficiency, and welfare of the workers (Panjawa & Soebagiyo, 2014). Besides, the determination of the minimum wage also aims to equalize the income, increase the purchasing power of the workers and expand job opportunities (Kuswanto & Permata Dewi, 2016). With the existing minimum wage that has been determined based on the needs of a decent life, it is hoped that the community will be able to meet their basic needs so that welfare will be created.

To improve the income of workers, regions are required to have good financial governance, in line with the spirit of regional autonomy. The consequence of the implementation of regional autonomy is that local governments must explore their potential sources of income so that they can increase their LGR. LGR is the main source of revenue of a region. LGR obtained by a region comes from local taxes, regional levies, the results of separated regional wealth management, and other legal LGR. LGR is the main source of revenue for a region. LGR obtained by a region comes from local taxes, regional levies, the results of separated regional wealth management, and other legal LGR (Maryati & Endrawati, 2010; Ratmono, 2019).

Apart from LGR, the component of regional revenue is the balancing fund, namely RSF, GAF, and Special Allocation Funds (SAF). Each region has different financial capacities in funding its activities; this has resulted in fiscal imbalances between one region and another. Therefore, to address this fiscal imbalance, the government allocates funds sourced from the APBN to finance regional needs in implementing decentralization. The main objective of providing the balancing fund is for equalizing fiscal transfer in each region. Based on the data from BPS Banten, it appears that the proportion of RSF has been the largest compared to the proportion of GAF and SAF in Banten Province, mainly since 2016. The following is a graph of the proportion of RSF, GAF, and SAF of Banten Province in 2014-2019.



Source: BPS Banten, 2020

GRAPH 1

THE PROPORTION OF BALANCING FUNDS IN BANTEN PROVINCE

RSF is the largest proportion of balancing funds, while LGR is the main source of revenue from the provincial APBD. So, this research will examine the effects of RSF, LGR on HDI through RMW in Banten Province.

REVIEW LITERATURE

LGR, RSF, RMW, and HDI

Human Development Index (HDI) is an instrument used to measure the achievement of human development in a region. The high and the low of the HDI values cannot be separated from the development programs implemented by the government both at the central and the regional levels. As a measure of the quality of life, HDI is built through an approach of three basic dimensions, namely: 1. Dimensions of long life and health. 2. Dimension of knowledge. 3. Dimension of a decent life (BPS, 2019). Since Human Development Index is meant to measure the impact of efforts to increase the basic skills, thus the impact indicators are used as a basic component of the calculation, namely, life expectancy at birth, educational attainment as measured by literacy rates and the average length of schooling, and expenditure as well as the consumption.

It should be realized that changes or increases in the HDI number cannot happen instantly. Human development is a process and cannot be measured in a short time. Unlike economic development in general, the results of education and health development cannot be seen in the short term (Setiyawan, 2013). For this reason, human development programs must be carried out continuously and their implementation continues to be monitored so that they are more focused. The decentralization process seems to have unlocked the potential of the regions to develop actively and independently (Mardiasmo, 2018).

Profit-Sharing Funds are funds allocated to each region based on the percentage sourced from the APBN. RSF is allocated to finance regional needs in implementing regional autonomy. RSF is used to tackle vertical fiscal inequality. RSF has high enough potentials for the income of a region so that it can properly finance the regional expenditure which will have an impact on the welfare of the community.

According to Law no. 33 of 2004 on Financial Balance between the Central Government and the Regional Governments, the Revenue Sharing Fund (RSF) is fund sourced from APBN revenues allocated to regions by taking into account the potential of producing regions based on the percentage figures to fund the regional needs in the context of implementing decentralization. Based on this definition, the principle of RSF is that the allocation is carried out based on the principles by origin (producing area) and distribution is based on the actual revenue.

The minimum wage is the lowest wage that will be used as a standard by employers to determine the actual wages of workers/laborers who work in their company. This minimum wage

is generally determined by the government (cq. The Governor with due observance of the recommendation from the provincial wage council and/or regent/mayor), and every year it changes according to the objective of determining the minimum wage.

RESEARCH FRAMEWORK AND RESEARCH HYPOTHESIS

The Previous research results concluded that there was a significant effect of RSF on RMW (Azizi, 2018; Hayati & Achsa, 2017; Ratmono, 2019) and HDI (Afif & Yulianti, 2019; Hayati & Achsa, 2017; Williantara & Budiasih, 2016). Whereas several previous researchers have proven that LGR has a significant effect on RMW (Mirsan, Hamzah & Sjufri, 2019; Tahar & Zakhya, 2011) and HDI (Lugastoro, 2013; Mahendra Putra, 2015; Setyowati & Suparwati, 2012). Based on the results of the review of this theory, it can be stated that the framework and research hypothesis are as follows:

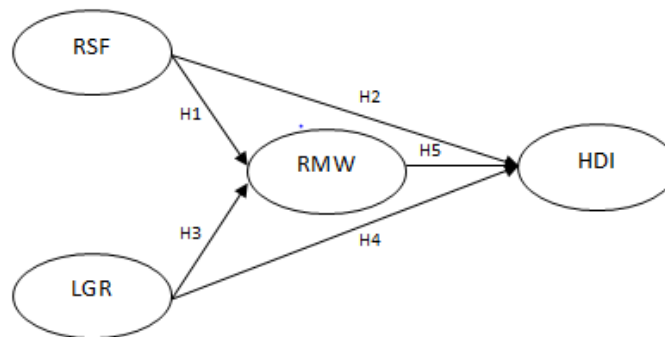


FIGURE 1

RESEARCH FRAMEWORK

Research hypothesis:

H1: RSF affects RMW

H2: RSF affects HDI

H3: LGR affects RMW

H4: LGR affects HDI

H5: RMW affects HDI

METHODOLOGY

Research Design

This research uses a causal design (causal study), namely a research study conducted to build a cause and effect relationship between variables (Rafailidis, Trivellas & Polychroniou, 2017). In a causal study, researchers are interested in describing one or more factors that cause

problems, in this study; it is the socio-economy that is believed to be the cause in determining the Human Development Index (HDI).

Data Analysis Technique

The population to be used in this study is all districts/cities in Banten Province with a span of 6 years, namely from 2014 to 2019, so that the number of observations is 8 districts/cities x 6 years=48 samples. So, that the data used in the study is a combination of time series data and cross-section data.

This study will analyze the effects of LGR and RSF on HDI through RMW in Banten Province. Thus, to analyze the effects of each variable, a path analysis model is used. To analyze the data, path analysis techniques are used, and the magnitude of the influence is shown by the path coefficient on each path diagram of the causal relationship between research variables, namely LGR, RSF, HDI, and RMW. The analysis technique uses Structural Equation Modeling (SEM) with Smart Partial Least Square (PLS).

RESULTS AND DISCUSSION

Research Result

This research uses Structural Equation Model (SEM) analysis technique with Partial Least Square (PLS). SEM analysis with PLS is carried out in three stages, namely outer model analysis, inner model analysis, and hypothesis testing.

Outer Model Analysis

The following is an analysis table of the outer research model:

	Cut Off	Company performance	External environment	Internal environment	Business strategy	Explanation
Cronbach's Alpha	>0.6	1	1	1	1	All aspects fulfill the standard
Composite Reliability	>0.7	1	1	1	1	
Average Variance Extracted (AVE)	>0.5	1	1	1	1	

Source: Output SmartPLS 3.0 (2020).

According to (Ghozali, 2014) the construct reliability test is measured by composite reliability and Cronbach's alpha. A construct is declared reliable if it has a composite reliability value above 0.70 and Cronbach's alpha is above 0.60. Meanwhile, the average variance extracted (AVE) value which is sufficient to measure the validity is 0.5. Based on the criteria of Table 2,

the output data processing shows the perfect results of all the criteria for the outer model, namely 1, therefore it can be continued to the inner model analysis.

Inner Model Analysis

Inner model analysis/structural model analysis is carried out to ensure that the structural model being built is robust and accurate. Robust regression is a regression method used when the data has an abnormal error distribution or several outliers affect the model (Ghozali, 2014). This method is an important tool to analyze data that is influenced by outliers to produce a model that is resistant to outliers. A resistant estimate is one that is not affected by a large change in a small part of the data or a small change in a large part of the data.

Inner model evaluation can be seen from several indicators which include; determination coefficient (R^2); Predictive Relevance (Q^2); the Goodness of Fit Index (GoF). The following is the calculation for each indicator.

The coefficient of determination (R^2)

The following figure shows the R^2 value of the smartPLS 3 software output

	R Square	R Square Adjusted
HDI	0.841	0.83
RMW	0.361	0.34

Source: Output smartPLS 3 (2021)

According to (Chin, 1998), R square values above 0.67 are strong, while between 0.67 and 0.18 are moderate, and below 0.19 are weak. So, among the relationship variables involved in this study, all of them are categorized as having a strong relationship.

Predictive Relevance (Q^2)

To calculate Q^2 a formula can be used

$$Q^2 = 1 - (1 - R_1^2) (1 - R_2^2) \dots (1 - R_n^2)$$

$$Q^2 = 1 - (1 - 0,830) (1 - 0,340)$$

$$Q^2 = 0.9$$

This test is performed to determine the predictive capability with the blindfolding procedure. According to (Chin, 1998), if the value obtained is between 0,02 and 0,15, then the model has little predictive ability. If the value obtained is between 0,15 and 0,35, the model has a moderate predictive ability. Finally, if the value obtained is above 0,35,

the model has high predictability. If the calculation of the value of Q^2 obtained a result of 0.9, then the model has a large predictive capability.

Goodness of Fit Index (GoF)

(Tenenhaus & Esposito, 2005) formulated that the GoF value is small when it is 0,1, moderate when it is 0.25, and large when it is 0.38. This study calculates the GoF value and finds that the model has a large GoF value. This means that the model can represent real phenomena. The GoF value in SEM with PLS is calculated manually (Tenenhaus, 2004) with the formula

$$\text{GoF} = \sqrt{\text{AVE}^2} \times R^2$$

$$\text{GoF} = 0.60$$

This study concludes that the calculation of the GoF value is 0,60. Therefore, it is concluded that the research model can capture a real phenomenon in the relationship between LGR, RSF, and RMW on HDI in Banten Province.

Hypothesis Test

Structural modeling in SEM-PLS was carried out utilizing a bootstrapping process that produced t-statistical values. If the t-statistic value is greater than the t-table with a 95% confidence level (> 1.96), it has a significant effect. The following table shows the output of PLS running results:

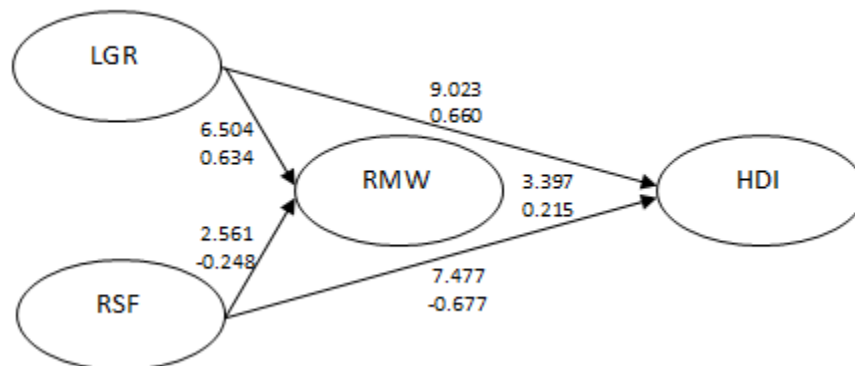


FIGURE 2
RESULTS OF THE RESEARCH MODEL RUNNING

(SmartPLS output, 2021)

From the output shown by figure 2, it can be concluded that all values of t-count are above 1,96. This means that all research hypotheses are proven. There are three positive hypotheses, namely LGR on RMW, LGR on HDI, and RMW on HDI. This means that the higher the LGR, the higher the RMW and the HDI, and the higher the RMW, the higher the HDI. There

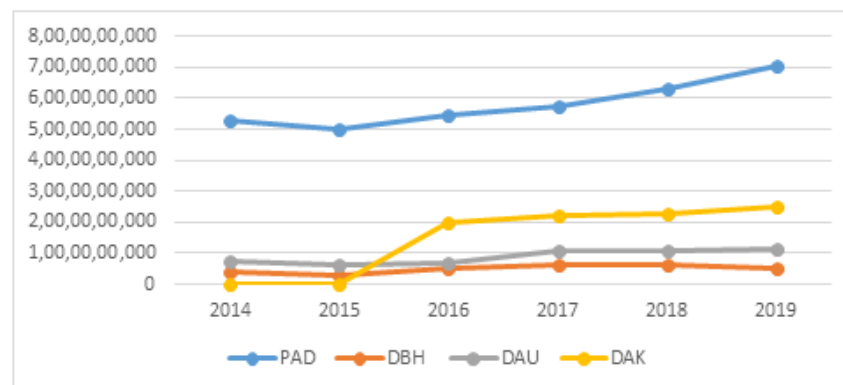
are two negative hypotheses, namely RSF on RMW and RSF on HDI, which means that the higher the RSF, the lower the RMW.

DISCUSSION

Regional autonomy provides broad authority to the regions in managing and regulating the interests of the community so that regional independence is the goal of decentralization (Treisman, 2007). The higher the ability of a region to explore economic potential into forms of economic activities, the region is said to be able to provide regional funding that will affect regional development including human development (Kuncoro, 2004).

Locally-Generated Revenue is the regional income that contributes the most to support regional capacity in the context of decentralization. Local governments are free to use LGR to finance government activities and regional development (Wijaya, 2007). LGR growth is sensitive to an increase in economic growth which has a direct impact on the Human Development Index in the region (Afif & Yulianti, 2019; Williantara & Budiasih, 2016).

In line with the research hypothesis, LGR has a significant effect on HDI. This is indicative that each region must explore the potential of their respective regions to improve the welfare of local communities. These results are supported by the results of research conducted by (Setyowati & Suparwati, 2012) which show that local revenue has a significant effect on HDI and (Raviyanti, Rahayu, & Mahardika, 2017) state that local revenue has a significant positive effect on HDI. Based on data from BPS (Banten Province, 2020), LGR is the highest proportion of the income compared to other sources of income. The following is a graphic comparison of the proportion of income in Banten Province



Source: BPS, 2020

GRAPH 2 COMPARISON OF REVENUE SOURCES IN THE BANTEN PROVINCE APBD

To finance their regional activities, regional governments have different capacities that cause fiscal imbalances between one region to another region. Efforts being made to tackle fiscal imbalances are by allocating funds originating from the state budget by the government which is used to finance regional activities in the framework of autonomy. RSF is one of the components

of the balanced fund in which its allocation prioritizes justice and equity which is in line with the activities carried out by the government (Law No. 32 of 2004).

RSF is used to finance regional needs in the context of implementing regional autonomy to reduce vertical fiscal imbalances between the levels of government by equalizing the fiscal capacity between local governments to stimulate regional spending in financing activities that have an impact on national development, achieve public infrastructure, and stimulating regional income.

The results show that GAF has negative effect on HDI. This is because the RSF allocation does not directly have an impact on the HDI increase. RSF directly impacts physical development, not human development. The results refute previous research which states that RSF has a significant positive effect on HDI (Lugastoro, 2013). Regional transfer funds that have a direct impact on community services and increase community welfare are GAF (Raviyanti et al., 2017).

Although further research is needed, based on this reality it can be said that the allocation of RSF in Banten province is allocated for physical development needs as seen from the increase in the construction sector to the GDP of the business fields. One measure of the success of decentralization is how much the regional dependence on the central government (Vazquez, Peñas & Sacchi, 2017). The results show that LGR has a positive effect on RMW and HDI, while on the other hand, RSF has negative effect on RMW and HDI. So it can be said that in terms of financial management, Banten province has been quite successful in implementing its fiscal decentralization.

CONCLUSION

This study proves that all research hypotheses are significant. There are three positive hypotheses, namely LGR on RMW, LGR on HDI, and RMW on HDI. This means that the higher the LGR, the higher the RMW and the HDI. The higher the RMW, the higher the HDI. These results strengthen the findings of previous research (Afif & Yulianti, 2019; Lugastoro, 2013; Williantara & Budiasih, 2016). There are two negative hypotheses, namely RSF on RMW and RSF on HDI, which means that the higher the RSF, the lower the RMW and HDI. The results of this study refute the results of previous studies which state that there is a positive relationship between RSF on HDI and RMW (Afif & Yulianti, 2019; Ladjin, 2008). The consequence of this research is that local government must stand alone to meet the RMW and increase the HDI. Banten Provincial Government cannot expect RSF to increase HDI. At the same time, it is a message to the central government to minimize the Regional Original Revenue (LGR) of the Banten province so that the provincial LGR increases to encourage the growth of HDI.

The results show that the RMW has a significant effect on HDI, in addition to the allocation of physical development, the Banten provincial budget could then be directed to provide more jobs and increase the salaries/RMW of the workers. Because the higher income of someone, the higher his/her ability to make transactions (Permana et al., 2019). In other words, the higher the income per capita in a region, the greater the potential source of revenue in that region, so that the HDI increases.

REFERENCE

- Afif, A.N., & Yulianti, Y. (2019). Determinants of the human development index in eastern Indonesia (Case study of the Regency/City Government of Papua Province, 2013-2016). *Solution*, 16(2), 154-175.
- Azizi, M. (2018). Impact of general allocation funds, special allocation funds, and profit sharing funds on gross regional domestic product inequality in the province of South Sulawesi for the period 2006-2014. *Journal Economic and Business of Islam*, 2(1), 1-32.
- Badan Pusat Statistik [BPS]. (2019). Official news statistics. Bps.Go.Id.
- Chin, W.W. (1998). The partial least squares approach to structural equation modeling. New Jersey: *Psychology Press*.
- Ghozali, I. (2014). *SEM alternative method by using Partial Least Squares (PLS)*. Semarang: Badan Penerbit Universitas Diponegoro.
- Hayati, H., & Achsa, A. (2017). The impact of fiscal decentralization on IPM in Indonesia. *Journal of REP (Economic Development Research)*, 2(2), 199-214.
- Kuncoro, M. (2004). *Regional autonomy and regional development: Reform, planning, strategy, and opportunities*. Jakarta: Erlangga.
- Kuswanto, K., & Permata, D.I.G. (2016). Analysis of education level, GRDP and regional minimum wage on poverty in Banten province. *Journal of Economics-Qu*, 6(1), 18-34.
- Ladjin, N. (2008). *Analysis of fiscal independence in the era of regional autonomy (Case Study in Central Sulawesi Province)*. Masters Program in Economics and Development Studies. Semarang: Diponegoro University.
- Lugastoro, D.P., & Ananda, C.F. (2013). Analysis of the influence of PAD and balance funds on the human development index of districts/cities in East Java. *Student Scientific Journal*, 1(2), 1-19.
- Mardiasmo. (2018). *Autonomy and regional financial management*. Autonomy and Regional Financial Management. Yogyakarta: Andi Press.
- Martinez, V.J., Peñas, L.S., & Sacchi, A. (2017). The impact of fiscal decentralization: A Survey. *Journal of Economic Surveys*, 31(4), 1095-1129.
- Maryati, U., & Endrawati. (2010). Effect of local revenue (PAD), General Allocation Fund (DAU) and Special Allocation Fund (DAK) on Economic Growth: A Case Study of West Sumatra. *Journal of Accounting and Management*, 5(2), 68-84.
- Mirsan, M.A., Hamzah, N., & Sjufri, M. (2019). The effect of investment, GDP per capita and original income is in the area of the degree of fiscal independence. *Paradox - Journal of Economics*, 2(2), 82-98.
- Panjawa, J., & Soebagiyo, D. (2014). The effect of an increase in the minimum wage on the unemployment rate. *Journal of Economics & Development Studies*, 15(1), 48-54.
- Permana, E., Maulina, E., Purnomo, M., Qosasi, A., & Miftahuddin, A. (2019). The impact of information technology capability to a company agility. *Proceedings of 1st Workshop on Environmental Science, Society, and Technology*.
- Putra, P.G.M., & Ulupui, I.G.K.A. (2015). Local own revenue, general allocation funds, special allocation funds, to increase the human development index. *E-Journal of Accounting*, 11 (3), 863-877.
- Rafailidis, A., Trivellas, P., & Polychroniou, P. (2017). The mediating role of quality on the relationship between cultural ambidexterity and innovation performance. *Total Quality Management & Business Excellence*, 28(2), 1-15.
- Ratmono, D. (2019). The Effect of Regional Original Income (PAD), General Allocation Funds (DAU), Special Allocation Funds (DAK), Revenue Sharing Funds (DBH), and Capital Expenditures on Economic Growth. *Journal of Chemical Information and Modeling*.
- Raviyanti, A.A., Rahayu, S., & Mahardika, D.P.K. (2017). The influence of PAD, DAU, DAK on IPM with capital expenditure as an intervening variable (studies on districts/cities in Papua Province, 2009-2013). *Journal of Economics*, 22(2), 243-256.
- Setiyawan, M.B., & Hakim, A. (2013). Indonesian human development index. *Journal of Economia*, 9(1), 18-26.
- Setyowati, L., & Suparwati, Y.K. (2012). The effect of economic growth, DA, DAK, PAD on the human development index with the allocation of the capital expenditure budget as an intervening variable. *Achievements*, 9(1), 113-133.
- Tahar, A., & Zakhiya, M. (2011). The effect of local revenue and general location funds on regional independence and regional economic growth. *Journal of Accounting and Investment*, 12(1), 88-99.
- Tenenhaus, M., & Esposito, V. (2005). PLS path modeling. *Computational Statistics & Data Analysis*, 48, 159-205.
- Treisman, D. (2007). *The architecture of government: Rethinking political decentralization*. The Architecture of Government: Rethinking Political Decentralization. Cambridge: Cambridge University Press.

- Wasilaputri, F.R. (2016). The Effect of Provincial Minimum Wages, GRDP and Investment on Labor Absorption in Java Island in 2010-2014. *Journal of Education and Economics*, 5 (3), 243-250.
- Williantara, G.F., & Budiasih, I.G.A.N. (2016). The effect of own-source revenue, general allocation funds, special allocation funds, and revenue-sharing funds on the human development index. *E-Journal of Accounting*, 16(3), 2044-2070.
- Yaziz, Kusnandar, D., & Rizki, S.W. (2019). Robust regression analysis of m-estimation using Bisquare Tukey and Welsch weighting in overcoming outlier data. *Bimaster: Bulletin of Scientific Mathematics, Statistics and Its Applications*, 8(4), 799-804.
- Zainuddin. (2015). Analysis of the impact of inflation, GDP and the development of regional minimum wages on the human development index of the community in Aceh Province. *Journal of Management and Accounting Economics*.