

The Influence of Local Revenue and Equalization Fund on Economic Growth in East Nusa Tenggara Province

Safira Dini Aini¹, Endah Kurnia^{2*}, Sunlip Wibisono²

¹ Department of Development Economics, Universitas Jember, Indonesia

* Correspondence author email: endahkurnia.feb@unej.ac.id

Article Info: Received: 2019-07-15; Accepted: 2019-10-10; Published: 2019-12-26

Abstract: Fiscal decentralization is a policy made by the government to reduce fiscal dependence on the central government and create financial independence in the region. The independence of regional finance itself can be reflected through the high percentage of PAD revenue to total regional revenues. Where the existence of regional financial independence is expected to help implement regional development that can affect economic growth in the region. The purpose of this study was to determine the influence of the local revenue and equalization fund on economic growth of districts/cities in East Nusa Tenggara Province during 2012-2017. The study uses secondary data with the quantitative approach using the data panel Fixed Effect Model (FEM). The finding of this study indicates that the local revenue has a positive and significant effect on economic growth, while equalization funds an insignificant effect on economic growth in East Nusa Tenggara Province.

Keywords: Local revenue, economic growth, equalization funds.

JEL Classification: H27, H60

How to Cite:

Aini, S. D., Kurnia, E., & Wibisono, S. (2019). The Influence of Local Revenue and Equalization Fund on Economic Growth in East Nusa Tenggara Province. *Jurnal Ekonomi Pembangunan*, 17(2): 125-134. DOI: <https://doi.org/10.29259/jep.v17i2.8992>.

1. INTRODUCTION

Indonesia enters a new era after implementation of regional autonomy policy with law number 23 of 2014 on local government. The regional autonomy policy is the central government that provides the authority to govern more responsibility for local governments to meet the interests of the local community, both in political, economic, and socio-cultural affairs. For the implementation of this policy, regional autonomy policy is supported by the balance of funds between the central and local governments, as stated in law number 33 of 2004 on the balance of finance between the centre and district to provide new strengths of autonomy local governments. The purpose of the fiscal decentralization is to increase regional autonomy and to reduce the region's fiscal dependence on the central government. According to Enceng *et al* (2012) Fiscal decentralization is expected to create equitable distribution of financial capabilities between regions in accordance with the magnitude of government authorities submitted to autonomous regions.

In the implementation of development, financial aspect is the basis to know the real ability of the area in regulating households. The regional financial self-reliance capability

can be seen from small local revenue (PAD) areas accepted by the region. Due to government policy in implementing Regional policies, PAD is a reference in measuring the dependence of an area to the central government. According to Halim (2001) to see the financial independence of the region is by local revenue ratio to the total revenue of the region. So it can be known how much local taxing power an area, and how the ability local revenue in funding the local expenditure in providing public services to the community (Bashir, 2011).

Acceptance of PAD and equalization fund of East Nusa Tenggara province's total revenue can be seen in Figure 1. Shows the proportion of the total largest local revenue sourced from the equalization fund, other legitimate revenues later with the PAD and SILPA. Where, the equalization fund annually increases in 2012-2015. But in the year 2015-2016 Realization of equalization Fund increased quite high which amounted to 47.12%. While the PAD of East Nusa Tenggara Province has been fluctuating, in 2012-2014 years increased and in 2015-2017 decreased. So it is indicated that the level of dependence of East Nusa Tenggara Province to the funds of the extern is still high (Suci & Asmara, 2014).

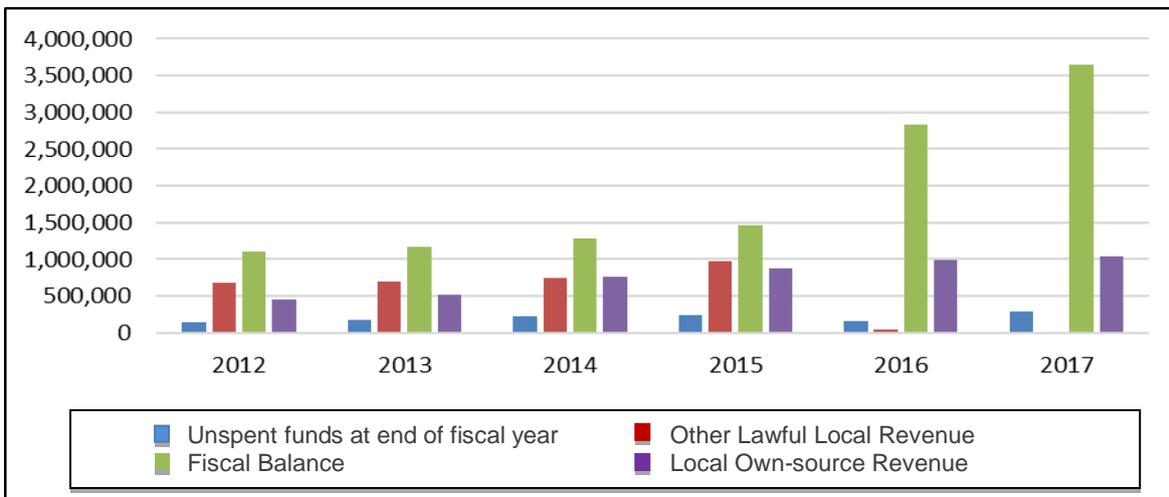


Figure 1. Revenue realization of East Nusa Tenggara Province in 2012-2017

Source: DJPK, 2018

The Government of East Nusa Tenggara Province has not been able to optimize the role of PAD in fulfilling the budget of APBD due to the ability to manage the potential of low capacity, so it can affect the proportion of revenue to be obtained. Indicators are used to measure the ability of an area in developing the potential owned by the growth of its economy (Suci & Asmara, 2014). The economic growth of Nusa Tenggara province has been shown in the period 2012-2017 in districts/cities that have increased and decreased the different economic growth. Fluctuations are derived from local revenues more dominated by the equalization fund and other legitimate revenues.

The main objectives of regional autonomy and fiscal decentralization to improve the regional ability to manage their finances and fulfill their household affairs where the regional financial capability will be realized and will provide Influence on economic growth. While the one in East Nusa Tenggara province is when the PAD is lower than the transfer funds obtained from the central government. However, economic growth reflected through PDRB growth annually is always fluctuating. Based on the phenomenon above, the authors are interested to do research on the relationship between local revenue and equalization fund on economic growth of district/city in East Nusa Tenggara.

2. LITERATURE REVIEW

Literally economic growth is a measure used to determine the increase in the ability of the economy to produce goods and services. It can be assumed, the economy of a region or region can be said to grow if the real income of the community in a certain year is greater than the previous year. As for the concept of economic growth there are several opinions of experts, including:

Harrod-Domar's theory in Taringan (2004). This theory is an extension of the Keynesian analysis of national economic activity and labor issues. As for their different calculation processes but the results obtained are the same. Thus, both theories are considered to have the same idea and are known as the Harrod-Domar theory. Based on the assumptions above this model explains an economy achieving growth in the long term growth. This assumption states that when capital goods have reached full capacity, savings have an ideal proportional to the level of national income, between the ratio of capital to production (capital output / COR), its value remains with the economy consisting of two sectors ($Y = C + I$). So Harrod-Domar makes an analysis and concludes that a steady long-term growth in which all production increases can be absorbed by the market will be achieved if it meets the following conditions:

$$G = K = N$$

Where: G (Growth) is output growth rate; K (Capital) is capital growth rate; and N is labor force growth rates.

According to Harrod-Domar the allowance for a certain proportion in each economy originating from national income is not only to replace damaged capital goods. However, in growing the economy it is necessary to have investments in addition to capital stock. The development of neo-classical economic growth theory was carried out by economists namely Solow-Swan in Sukirno (2004). According to this theory economic growth depends on the accretion of factors of production namely from the elements of capital accumulation, population growth, the amount of interacting output and technological progress. According to Solow-Swan there are many things about market mechanism in creating balance, so there is no need for too much interference from the government elements in it. The form of government involvement is limited to monetary policy and fiscal policy.

In this model there is flexibility in the capital-output ratio and the labor capital ratio caused in the Solow-Swan model of the production function which allows for substitution between labor and capital. Thus, the model produced in economic growth is less restrictive. The level of economic growth consists of three sources, including an increase in labor supply, capital accumulation and technological upgrading. Whereas the intended technology is seen from an increase in skills or technical progress so that the productivity of capital increases. Further analysis of neoclassical understanding shows that to create a steady growth, a high saving level is needed and all the profits of the entrepreneur are reinvested.

Fiscal decentralization based on Act Number 23 of 2014 concerning Regional Government Article 1 paragraph 7 and Act Number 33 Concerning Financial Balance between Central Government and Regional Government Article 1 paragraph 8, is giving up authority by the central government to the autonomous regions to regulate and administer government affairs in the system of the Unitary Republic of Indonesia. The

existence of fiscal decentralization is a form of granting autonomy rights in the financial sector as a source of revenue to the regions which is a process of intensifying the role and at the same time empowering the region in development.

The existence of regional autonomy can increase its own standards for each region at the national level. As well as regional autonomy has two specific implications for local governments, namely the increasing economic cost (high cost economy) and efficiency effectiveness. In the implementation of decentralization requires sufficient funds to finance the implementation of development in the regions. If a region does not have adequate sources of financing, it can cause the region to depend on funding from the central government. While the dependence on central government financing is a condition that is not in accordance with the principle of regional autonomy.

Provincial, district and city regions as autonomous regions have the authority to make public policies. One form of public policy is local regulations. Local regulations are legal products made by local governments that have binding legal force. Similar to the regulations made by the central government, it's just that regional regulations are limited within the scope of local government. This regional regulation was made by the legislative and executive government. The purpose of making local regulations is to facilitate the implementation of programs to be achieved by the government by having more priority on what areas will be focused by the region.

3. MATERIALS AND METHODS

This study used two main variables namely PAD ratio and equalization fund ratio. One dependent variable is the growth of PDRB. The type of data in this study use secondary data. The source of data obtained from Institution related to the research problem is from the Central Statistics Agency of East Nusa Tenggara and the Directorate General of Financial Balance (DJPB). The data used is gross Regional domestic product (PDRB), local revenue (PAD), equalization fund, Total income and open unemployment rate in the Regency/city of East Nusa Tenggara period from 2012-2017. The data in this study uses the data panels where the panel data is a combination of data time series and cross section data between the Regency/city in East Nusa Tenggara province. The population in this study was 22 districts in East Nusa Tenggara province with a period of 2012-2017. So in this study observe 12 districts/cities.

The method used in this thesis is to use a regression analysis of the data panel. Where this analysis is an analysis tool whose data is collected individually (the cross section) and the time of the given (time series). There are several techniques in estimating the model parameters with the data panels that are Pooled Least Square, Fixed Effect and Random Effect. As for determining the models used in the study is to use the Chow test and the Hausman test. The model estimates the influence of regional financial independence to the economic growth of the district/city in East Nusa Tenggara province, the model can showed:

$$Y_{it} = \beta_0 + \beta_1 RPAD_{it} + \beta_2 RDP_{it} + \epsilon_{it}$$

Where: Y is gross Regional domestic product (billion rupiah); RPAD is PAD ratio to total local revenue (%); RDP is the ratio of equalization funds to total regional income (%); β_0 is regression coefficient; β_1 is regression coefficient of ratio PAD to total regional income; β_2 is a regression coefficient of balance fund ratio to total revenue of the district; ϵ_{it} is error term; i is district/city to-i; and t is time period (2012,..., 2017).

4. RESULTS AND DISCUSSION

Test Chow to compare between Common Effect methods and the Fixed Effect method. The results of the test are used to determine the best method to choose. The Chow test is shown in Table 1:

Table 1. The Chow test Result

Redundant Fixed Effects Tests			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	229.7073	(20,103)	0.0000
Cross-section Chi-square	481.3176	20	0.0000

Source: Author's calculation, 2019.

In table 1. The results of a chow test result obtained are a cross-section F probability of 0.0000. The results showed a signification rate below 0.05 or 5% so that H₀ was rejected and H₁ was accepted. So a suitable model used in this research is the fixed effect model. The Hausman test aims to compare the matching random effect or fixed effect methods. The Hausman test is presented in Table 2:

Table 2. The Hausman test results

Correlated Random Effects - Hausman Test			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	27.905146	2	0.0000

Source: Author's calculation, 2019.

In table 2. The results of a Chow test are obtained is a cross-section F probability of 0.0000. Indicates that the signification rate is below 0.1 or 10% until H₀ is rejected and H₁ is received. So a suitable model used in this research is a fixed effect model. With the Chow test testing and the Hausman test hence the result the most appropriate model used is fixed effect.

Table 3. The Estimation Result of Fixed Effect Method

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	1375.356	759.8901	1.809941	0.0732
RPAD	13306.72	2117.822	6.283211	0.0000
RDP	391.8388	796.224	0.492121	0.6237

Source: Author's calculation, 2019.

The result of the model estimation indicates that the Adj-R² value of 0.984274 indicates that the PDRB growth variable is being described by the PAD ratio variable and the equalization funds ratio of 98.42% and others are influenced by other variables outside the model. The estimated F-Statistic value of the regression model of 356.6098 with the value of Prob (f-Statistic) 0.000000. With the significance of $\alpha = 5\%$ so that the regression results obtained proves the Prob F-statistic is smaller than the significant level. concluded that the PAD ratio variable and equalization fund ratio simultaneous have significant effect on the growth of PDRB in East Nusa Tenggara province.

The estimated results show T-statistics for the local revenue (RPAD) variable in this study has a probability value of 0.0000 where the probability value is smaller than the significance rate of 0.05. The RPAD variable means it significantly affects the growth of PDRB. The Variable equalization fund ratio (RDP) in this study has a probability value of 0.6237 where the probability value is greater than the significance rate of 0.05. This means that RDP variables have no significant effect on the growth of PDRB.

The classic assumption test results show that the value of correlation coefficient between independent variables is nothing more than 0.80, so the model in the study is free of multicollinearity. Moreover, the result of the above calculation shows the results of the Glasjer test with the probability of RPAD $0.2285 > 0.05$ and RDP variable $0.7586 > 0.05$, so that it can be concluded in regression model does not occur heteroskedastisity.

The resulting results showed that the model describing the RPAD and RDP variables in East Nusa Tenggara Province during the period of 2012-2017 was not normally distributed. Because X^2 value of 0.000000 is smaller than the probability value = 0.05. Based on the results obtained then the data in this research is assumed to be experiencing Central Limit Theorem if the data in the observation is large enough ($n > 30$) then the assumption of normality can be ignored (Gujarati, 2003). In this research the observation data obtained by researchers is 60 which in the sense is already qualified Central Limit Theorem.

The regression results of panel data using the fixed Effect method can see the effect of PAD ratios on economic growth. Regression results show PAD ratios of significant positive effect. So that each increase in the ratio of the PAD will increase economic growth in East Nusa Tenggara province. This situation corresponds to the purpose of the existence of fiscal decentralization policy stating the financial independence of the area demonstrated through the increase of PAD to the total revenue of the district can increase economic growth.

Accounting data obtained from DJPK shows the progression of PAD in Figure 2, in the amount from 2012 until year 2017 increases. Within 6 years the acquisition of PAD in East Nusa Tenggara province has always increased. There are several factors that cause increased PAD acceptance. The performance of regional financial management by the local government, which became one of the increasing acceptance of PAD, the performance of the regional financial governance that intended achievement level gained in the area of financial areas covering the implementation of and regional expenditure based on the financial system stipulated by the statutory policies or provisions during the budget period. Performance measurement in the form of financial ratios formed from the system of regional accountability report in the form of APBD calculation. The good indicators or whether the regional financial management performance can be seen through the tax performance index and regional retribution and regional self-reliance ratio (Mardiasmo, 2002). In Figure 2. We can see the data on the acquisition PAD of East Nusa Tenggara Province in the year 2012-2017. We can know from the acquisition of the PAD 74% sourced from the local tax of 3 641 billion. PAD increase indicates that the local government is able to manage its finances by digging the potential of the area as a source of income demonstrated by the acquisition of local tax that dominates the PAD. Where the acquisition of income is used to finance regional development, in accordance with the development Plan of regional Medium Term Development plan (RPJMD) of East Nusa Tenggara Province in 2013-2018 which is directed to reach 6 targets, namely To make NTT a corn province, NTT as a cooperative province, NTT as a livestock province, increase fishery production, improve NTT tourism and restore the fragrance of cendana. So that it can help the performance of the agriculture, fisheries and forestry sectors as shown in its

contribution to the PDRB business field based on the constant price of 2010 of 17 341 billion in 2017 and directly contributed Economic growth in East Nusa Tenggara province. In addition, with the existing PAD is accompanied by the financial management of the economical, efficient and weak interference policies conducted by the central government.

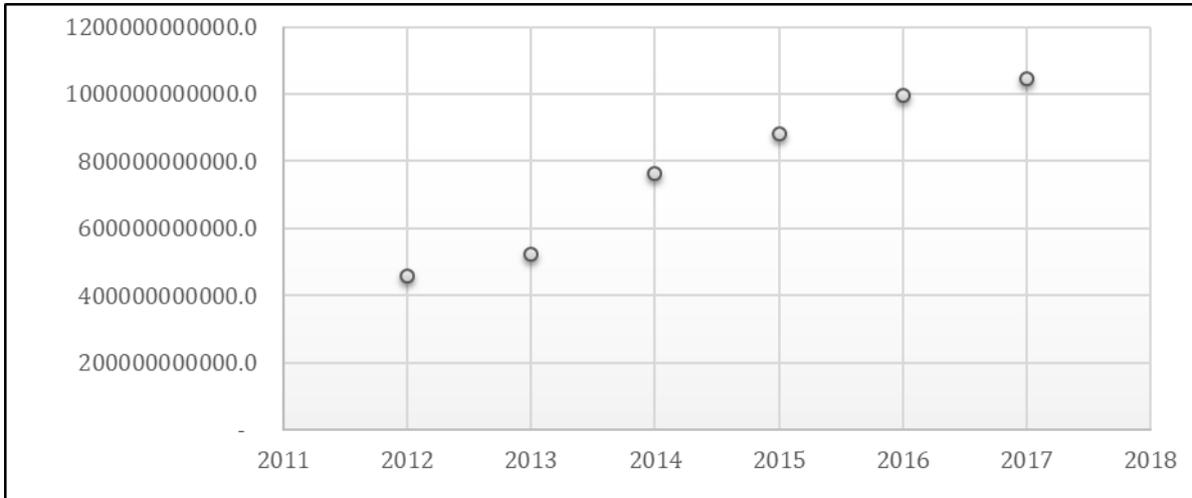


Figure 2. PAD Developments in East Nusa Tenggara province, 2012-2017

Source: DJPK, 2018

This is in line with Harrod-Domar growth theory where steady long-term economic growth will be realized if the entire production increase can be absorbed by the market to be achieved when the level of output growth is coupled with the level of Capital growth. The results of this research in accordance with the research (Syamsudin et al, 2015) the larger PAD obtained from the tax, the regional levy, the results of regional wealth management as well as the small lending from the center then the more independent the area. Financial independence can increase economic growth. As well as the research in line with research (Slavinskaitė, 2017) states that fiscal decentralization dinegara-negara with higher economic levels has great power to control its own income and spending Compared to countries that have lower economic levels.

The regression results of panel data using fixed effect model known effect of equalization fund ratio to economic growth. The regression results show the ratio of equalization fund to have an insignificant positive influence on economic growth. And there is no significant influence between the ratio of equalization fund to economic growth. There are several factors that cause the ratio of balance fund to no effect on economic growth in East Nusa Tenggara province. The first factor is in accordance with the principle of fiscal decentralization policy that the policy intended is to authorize the local government to manage its finances or to explore its source of income with the potential Owned to finance existing developments in the region. The aim of the balance Fund allocated by the central government is to reduce the fiscal inequality between regions, creating the stability of economic activity in the region and addressing the impact of public services between the districts (Sukriy and Halim, 2003). In other words, the area that is still gaining high transfer funds, especially the General Allocation Fund (DAU) indicates that the area is still not independent from the financial side where the government has not been able to explore the potential owned maximum as a source of its regional income.

As for the development of the realization of the equalization of fund acquisition we can see in Figure 3 during the period 2012-2017. Based on the data obtained shows the policy of regional autonomy of local government in the province of East Nusa Tenggara trying to explore the potential owned to finance development in the region. Data obtained by the growth of PDRB in the province of East Nusa Tenggara showed in the amount of increased each year, namely in 2013 PDRB obtained at 48 863 billion and in 2017 reached 62 725 billion.

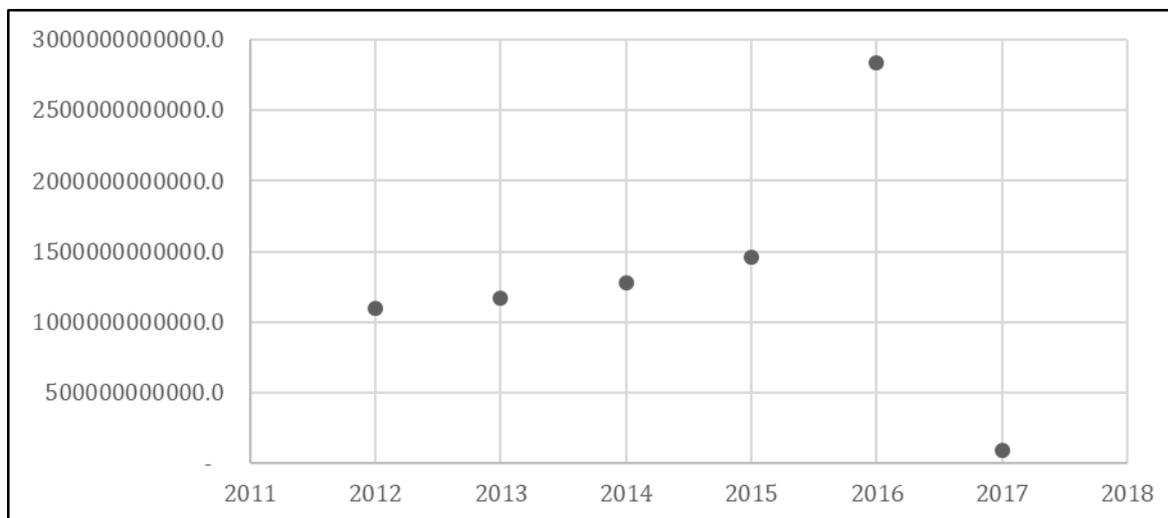


Figure 3. Realization of equalization fund acquisition in East Nusa Tenggara, 2012-2017
Source: DJPK, 2018

Based on the above data can be deduced more and more equalization funds obtained by local governments can not influence the economic growth. Due to the purpose of equalization funds only to overcome the fiscal gaps between regions, the fiscal gap between regions with the center, the stability of economic activity. Where in development to increase economic growth PAD is the main source of the funding, the shortcomings will be fulfilled by the equalization fund. This situation is in accordance with previous theory and research, in which there is a submission of responsibilities regarding reception as well as financial management. Local governments are expected to be able to dig their income based on the potential that is owned to raise its development which then can be indicated by increasing economic growth.

These results in accordance with the theory that the Tiebout model declares a fiscal decentralized system that more plays the role of local governments than the central government in the provision of public services will encourage economic growth. The implementation of fiscal decentralization in the province of East Nusa Tenggara proved to increase regional economic growth, because the local government is more sensitive to the needs and economic strength. The results of this study in line with the research of Aini et al (2014) the ratio of district financial independence marked by the low government dependence on transfer funds will encourage economic growth.

6. CONCLUSIONS

The test results of the panel data regression over the PAD ratio and the ratio of the equalization fund to economic growth show the ratio of the PAD and the ratio of positive equalization funds to the economic growth in East Nusa Tenggara province. The results showed the PAD's ratio positively influential and insignificant on economic growth. And

the ratio of balance funds has a positive and significant impact on economic growth. So for the long term when the level of dependence of local governments will increase economic growth where local governments will focus more on the management of potential owned by the region to improve the PAD and Improving the performance of local governments in increasing the economic output.

Increased economic growth needs to be supported by increasing the ratio of PAD and equalization fund ratio, especially for areas that have the largest growth of PDRB in East Nusa Tenggara province such as Kupang City, Kupang Regency and Middle Timor Timur Regency. In addition, the need to be reduced is the dependence of regional governments on the balance fund with the appropriate policy to avoid disrupting the performance of the Government and the objectives of the Long-term Equalization Fund. Can reduce the financial gap between regions and can assist or support in the development process. But still make PAD as the main source of the development.

REFERENCES

- Abdullah, S., & Halim, A. (2003). *Pengaruh Dana Alokasi Umum (DAU) dan Pendapatan Asli Daerah (PAD) terhadap Belanja Pemerintah Daerah Studi Kasus Kabupaten/ Kota di Jawa dan Bali*. Simposium Nasional Akuntansi VI Yogyakarta.
- Aini, N. L. N. P. & Dwirandra, A. A. N. B. (2014). Pengaruh Kinerja Keuangan Daerah pada Pertumbuhan Ekonomi, Pengangguran dan Kemiskinan Kabupaten dan Kota. *E-Jurnal Akuntansi Universitas Udayana*, 6(3), 481–97.
- Bashir, A. (2011). Dampak Desentralisasi Fiskal Terhadap Perekonomian Daerah Kabupaten/Kota Di Provinsi Sumatera Selatan. *Kajian Ekonomi* 10(2): 135-169.
- Enceng, L. B. I., & Purwaningdyah, M. W. (2012). Desentralisasi Fiskal Penerimaan Keuangan Daerah. *Jurnal Ilmu Administrasi Negara*, 12(1):1-73.
- DJPB Kementerian Keuangan. (2017). *LGF Realisasi Anggaran 2012-2017*. Jakarta: DJPB Kemenkeu Republik Indonesia.
- Gujarati, Damodar. (2003). *Ekonometrika Dasar*. Terjemahan: Sumarno Zain. Jakarta: Erlangga.
- Halim, A. (2001). *Manajemen Keuangan Daerah*. Yogyakarta: UPP–AMP YKPN.
- Mardiasmo. (2002). *Otonomi dan Manajemen Keuangan Daerah*. Yogyakarta: Andi.
- Sukirno, S. 2004. *Makro Ekonomi Teori Pengantar*. (Edisi Ketiga). Jakarta: PT Raja Grafindo Persada.
- Slavinskaitė, N., & Ginevičius, R. (2017). Revenue Autonomy of Local Government: Fiscal Decentralization Aspect. Vilnius, Lithuania: *Proceeding International Scientific Conference Business and Management*. (p. 1-9)
- Suci, S. C., & Asmara, A. (2014). Pengaruh Kemandirian Keuangan Daerah Terhadap Pertumbuhan Ekonomi Kabupaten/Kota Provinsi Banten. *Jurnal Ekonomi dan Kebijakan Pembangunan*, 3(1): 8-22.
- Syamsudin., Cahya, B. T., & Dwi, S. N. (2015). Pengaruh Kinerja Keuangan Daerah terhadap Pertumbuhan Ekonomi, Pengangguran dan Kemiskinan. *Jurnal Ekonomi dan Sumber Daya*, 17(1): 15-27.
- Tarigan, R. (2004). *Perencanaan Pembangunan Wilayah*. Jakarta: PT Bumi Aksara.

