

## INCOME AND EDUCATION INEQUALITY IN BANTEN

Hudaya Latuconsina<sup>1</sup>, Khusaini<sup>2</sup>, Ambuy Sabur<sup>3</sup>

Faculty of Teacher and Training, Islamic Syekh-Yusuf University  
Jln. Maulana Yusuf Babakan Kec. Tangerang Kota Tangerang Banten  
E-mail : [hudayaltc@gmail.com](mailto:hudayaltc@gmail.com)

diterima: 30/3/2020; direvisi: 28/8/2020; diterbitkan: 26/9/2020

**Abstract:** : Nearly two decades, the issue of education inequality in Banten Province has not been resolved optimally. This study examines the influence of education budget, poverty, income inequality, and economic growth factors on education inequality. The measurement of education inequality was used in the formulation of school standard deviations. The analysis model used is multiple regression. The data used is secondary data from the period 2001 - 2019 which was sourced from BPS Banten. The results showed that the education budget and inequality were contributed in reducing education inequality, while poverty and economic growth were not proven to be able in reducing education inequality. The government should reduce income inequality and poverty by providing access to income enhancement, and building school infrastructure to remote villages.

**Keywords:** *Education Budget, Poverty, Income Inequality, Education Inequality*

### INTRODUCTION

Nearly two decades after becoming an autonomous region, the issue of education inequality in Banten Province is still being a concern for researchers and policymakers. The problem of education inequality is not only occurred inter districts or cities, but also there is the education inequality between rural and urban areas, North Banten and South Banten, also men and women. Studies of education inequality include education inequality according to location characteristics, between genders, between regions, even between countries.

To find out the education inequality, there are several indicators, comparing the population education level based on gender, income groups, standard deviation of school, literacy rates, average years of schooling, Gini index, Entrophy index, and Theil index (Ram, 1990; Thomas, Wang, & Fan, 2001).

Income in each capital is one of the important concepts in a country's economy. According to Todaro & Smith (2015), gross national product per capita

is the frequently used concept as a benchmark for the level of population economic welfare in a country. The concept of per capita income is used by Kuznets in analyzing income inequality. Professor Kuznets, who has been instrumental in pioneering the analysis of historical growth patterns in developed countries, argued that in the first stages of growth, the distribution of income or welfare tends to be worsening, but in later stages, it will increase.

Abdelbaki (2012) analyzed income inequality and education inequality in Bahrain from 1980-2006. The study produced a positive relationship between the level of income inequality and education inequality. Whereas Bustomi (2012) strengthened the results of previous studies by concluding the study results, which is if income inequality as measured by Gini ratio is increasing with the assumption of *ceteris paribus*.

Another study found that in developing countries, there has no been downward trend in income inequality, with education inequality declining slightly (Lam, 2020). Even, there are more assertive the studies suggesting

educational inequality leads to income inequality or vice versa (Obasuyi & Rasiah, 2019)

The existence of the government is an important factor in the distribution of education. The study of (del Granado, Fengler, Ragattz, & Yavuz, 2007; Wardhana, Kharisma, & J., 2019) stated that public expenditure plays a role in determining the level of education participation. The coefficients for the expenditure of education are positive and significant in all model specification. The higher of the education budget allocation, so the higher of the education participation rates.

Baldacci, Clements, Gupta, & Cui (2004) found that a positive correlation between public expenditure enhancement in education and health in 86 developing countries with an enhancement in education and health outcomes. The same finding was conducted by (Doriza, Purwanto, & Maulida, 2013; Suryadarma, 2012). A similar result, (Rajkumar & Swaroop, 2008), found that there is no significant relationship between public expenditure on education and dropping out of school.

The challenges in the economy, one of which is stagnation in poverty reduction (World Bank, 2020). Poverty is seen as an inability from the economic side to fulfill the basic needs of food and measured in terms of expenditure of food. Thus, the Poor Population is the population that has an average expenditure monthly under the poverty line (BPS, 2018). Todaro & Smith (2015) divided poverty based on its causes, natural and structural poverty. (Mankiw, 2015) stated that most people would like to increase the amount and quality of the goods and services which they consume. Some previous empirical studies related to the effect of education on poverty showed that education has a

negative effect on poverty (Nurdyana, Budiono, & Fahmi, 2012).

Another approach, Ram (1990) proposed several variables such as education level and inequality, as well as an economic structure that explained the relationship between income distribution and economic growth. In 2001 the value of gini ratio was 0.26 and in 2019 it was 0.37. This represents an increase in income inequality of 0.11. While economic growth in Banten in 2001 amounted to 3.95% and in 2019 by 5.54% or up 1.58% (BPS, 2001, 2020).

Banten Province is one of the new expansion areas after the reformation in Java and directly adjacent geographically by the Capital Region, has the highest number of population among the new autonomous regions at the provincial level (BPS, 2020), ranked 4th among the new autonomous regions.

Banten is interesting to be the location or object of research on the condition of education inequality in Banten Province. There are still research gaps on the effect of the education budget, income inequality, and poverty on economic growth. Therefore, authors examine the influence of the education budget, poverty, income inequality, and economic growth on education inequality in Banten Province.

## **LITERATURE REVIEW**

The theory of human capital is a flow of economic thought that considers the human resources are considered as capital goods which can determine the efforts to achieve benefits and productivity as other forms of capital, such as technology, machinery, land, and money. Schultz (1961) considered the foundation of the theory of human capital because in the United States Association Economics contains the main message, namely the process of acquiring knowledge and skills through education is not merely a consumptive activity, but a

form of human investment. But in the 1970s, the human capital theory had experienced a dim period, because there are doubts about the role of education on economic growth in several countries (including countries that received World Bank assistance).

Furthermore (Psacharopoulos & Patrinos, 2002), and other neoclassical researchers have been proven that education has a contribution economic growth and development, without ignoring the contribution of physical capital. Government Regulation Number 47 of 2008 about Compulsory education is the implementation of Provision 34 paragraph (4) of Law Number 20 of 2003 about the National Education System and Provision 5 paragraf (2) of 1945 Constitution of the Republic of Indonesia. Compulsory education programs are held to provide services broadest possible basic education to Indonesian citizens regardless of religious, ethnic, social, cultural and economic backgrounds. Every Indonesian citizen of compulsory education has the right to get quality education services and his parents are obliged to provide opportunities for their children to get basic education (Pemerintah Republik Indonesia, 2008).

Inequality or equal distribution of education has broad meaning not only in terms of obtaining education opportunities but also after becoming students must be treated equally to get the education and develop their potential to be tangible optimally. To measure the education inequality by using school standard deviations (Inter-American Development Bank, 1999; Ram, 1990). While other measures of education inequality were formulated by (Thomas et al., 2001).

In modern macroeconomics, government policies in the fiscal sector need to be explored so the effects of those policies could be felt. According

to Roubini & Sachs (1989) there are at least 3 (three) reasons for government policies to be carried out. First, the increasing the government role in the modern industrial economy. Second, in modern economic theory emphasizing the individual expectations of future policies as an important part of their process in decision making. Third, many economists have criticized macroeconomic policies which affected in poor macroeconomic performance of most of the world's economies since the early 1970s.

Goods and services that should be provided by the government are the subjects of much political and economic debate, but economists generally agree that government has a special role in providing public goods, such as national defense, which are difficult or impossible to provide by the private sector (Williamson, 2018). In addition, the government has a greater role in providing public services, one of them is the education budget.

Related to the funding policy in education, the government has determined that the allocation of funds for education is 20% of the APBD. This is stated in Law Number 20 In 2003 about the National Education System Provision 49 Paragraph 1, namely "Educational funds other than teacher salaries and the State Budget (APBN) in the education sector and a minimum of 20% of the APBD" (Pemerintah-DPR, 2003). The simplest form of the budget is a document that describes the financial condition of revenues and expenditures presented in monetary terms and will be achieved in a certain period by including past data as a form of control and performance appraisal (Andrianto, Syamsurizaldi, Zetra, & Koeswara, 2019).

Budget policy implementation is carried out with a top-down approach (based on operational and technical guidelines). Without prioritizing the principles of budget management, they

are government-oriented, minimal participation, and public support. The implementers are dominated by the government, interest groups, and community organizations without involving the society. The study of education budgets with education outcomes (Rajkumar & Swaroop, 2008) and disparity in access to education (Doriza et al., 2013).

Income inequality is a very important issue for economists, politicians, and social science researchers. It is proxied with the Gini ratio and World Bank criteria. The Gini coefficient is used to measure the inequality of income by income class. If a country has a perfectly equitable distribution of income, then 10% of the first population also received 10% of all national income, 20% of the population 20% of national income, 50% of the population 50% of national income, 75% from population 75% of national income and so on. (UNDP, 2019).

The distribution of expenditure per capita per month of the bottom 40% of the group and the high-spending 20% group in March 2020 increased by 0.18% points and 0.22% points respectively, while per capita spending per month of the middle 40 percent population decreased by 0.40 percentage points. The conditions of income inequality in Banten in 2016 was 0.39 and in 2020 by 0.36 or decreased by 0.03 (BPS, 2020). This decrease can be interpreted as an increase in the equalization of the income of the population or welfare increase of 3%.

Someone can be said to be poor or live below the poverty line if income or access to goods and services is relatively low. A person is declared poor if his income level or standard of living is absolutely below the subsistence level. In general, poverty is the inability person to fulfill the standard needs of every aspect of life. According to Sen

(1999) poverty is more related to the inability to reach the standard of living.

To measure poverty there are several measurement methods, for example, the World Bank uses an income measure is less than \$ 1.9 per day based on purchasing power parity (World Bank, 2018). Even though, countries with a poverty line level of US \$ 1.9 per day are very poor countries (Ferreira et al., 2016). While the poverty line in Banten in 2018 is if monthly per capita expenditure is less than IDR 668,740. If using a food poverty line, so the population expenditure to fulfill the food is at least 2,100 calories per capita per day (BPS, 2018).

## **METHOD**

The method used in this study is a descriptive quantitative research method with a correlational research design. This study can be categorized as an empirical study. As an empirical study, testing the hypotheses in this study is used empirical data and then carried out the analysis. The data in this study is the type and source of data required in the study are education budget data, school deviation standards, educational inequality, poverty, and economic growth. The education budget is the logarithm value of the budget amount for the program according to education affairs beyond transfer. Inequality in schooling is represented the standard deviation of the educational distribution for each observation. It is better because it has the same dimension and unit as the mean (Ram, 1990). The variable value is zero when mean is zero. While the economic growth variable was measured by economic growth according to constant 2000 prices, the poverty variable was measured by the proportion of the number of poor people in the form of a percent, and the income inequality variable is measured by the Gini ratio.

The data used are secondary data sourced from the BPS publications, BPS Banten Province, BPS Regency or City in

Banten, the Education Authorities and other agencies during the period 2001 - 2019. The model of education inequality in Banten adapted the model (Digdowiseiso, 2012; Ram, 1990; Thomas et al., 2001).

**RESULT AND DISCUSSION**

The school standard deviation (SSD) is an indicator of education inequality inter-resident and region. The higher of SSD value showed education inequality inter residents was higher, or otherwise. Table 1 shows that the mean and standard deviation of the school standard deviation variables are 0.096 and 0.019. This means that most of the population in Banten has a low level of education compared to the population with high education. This also showed that the variation in education level among individual society is still high.

The education budget variable showed that the mean and standard deviation values of the education budget variable are 5.220 and 0.621. This means that the mean of the education budget allocated is still small because mean is IDR 165.96 billion, highest is IDR 1.629,29 billion, and minimum IDR 4.405,54 billion. It is less than 20% of the total realization of regional expenditure as stated in Banten Province.

Table 1: Descriptive Statistics of Study variable

Aspect	SSD	Log EB	POV	EG	GR
Mean	0.096	5.220	7.66	5.62	0.352
Max.	0.126	6.212	17.24	7.13	0.420
Min.	0.075	3.644	4.94	3.95	0.260
Std. Dev	0.019	0.622	2.85	0.79	0.050
Obs	19	19	19	19	19

Source: Data processed (2020), Eviews 9

The calculation results in table 1 illustrate that the mean and standard deviation of the poverty variable are 7.66 and 2.85. The variation in the number of poor people in Banten is still relatively

high. The mean and standard deviation of economic growth variables are 5.62 and 0.79. So it can be stated that the variation in economic growth is relatively small so the economic growth is relatively slow. While the mean and standard deviation of income inequality variables are 0.35 and 0.05. This means that the average of income inequality during the study period was 33%, which was classified as low because < 35%, the lowest income inequality was 26%, and the highest was 42%. The figure of 42% shows that the level of income inequality is relatively high because > 35%. The variation in income inequality is relatively small.

The authors tests a classic assumption. The test results show that the model has avoided the problem of the residual normality, multicollinearity, heteroscedasticity, and autocorrelation. It means that the regression model is feasible to proceed the analysis.

The estimation results show that the value of the education budget coefficient (LOG\_AP) is minus 0.026 and significant 1% which means that every 1% increase in the education budget can reduce education inequality by 2,6%, assuming ceteris paribus or otherwise.

Table 2. Estimation Results of SSD Model (Dependent Variable) with the OLS Model

Variable	Model 1	Model 2
LOG_AP	-0.016*** (0.005)	-0.026*** (0.008)
POV		-0.003 (0.002)
GR	-0.172** (0.071)	-0.214*** (0.069)
PE	-	-0.001 (0.004)
Constanta	0.238***	0.340***
Observation	19	19
R <sup>2</sup>	0.7731	0.8010
F-stat	17.043	14.096
Prob (F-stat)	0.0000	0.0000

Source: Data processed (2020), Eviews 9 Note: \*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01

In the model 2 (see table 2) that the coefficient value of the poverty variable

(POV) is minus 0.003 and is not significant statistically. This result can be interpreted that every 1% increase in poverty, it would reduce education inequality by 0.3% with the assumption of *Ceteris Paribus*, or otherwise, but not significant. This means that poverty is not an effort barrier to reduce education inequality in Banten Province. While the economic growth coefficient (PE) value is minus 0,001 and is not statistically significant. While the income inequality coefficient (GR) between income groups is minus 0.214 and significant by 1%, which means every 1% increase in income inequality, it will reduce education inequality by 21.4% with the assumption of *ceteris paribus*, or otherwise.

The estimation results in model 1 (without economic growth variables) and model 2 show identical results, both of the magnitude of the coefficient value and the significance value, so the authors decided to analyze and discuss the research results of model 2. Simultaneous test results of multiple regression models (models 2) in table 2 shows that the F-test value of 14,096 and probability 0,000, which at least there are two variables namely the education budget and income inequality affect education inequality in Banten Province. This equation gives  $R^2$  of 0.801 which means that variability in education inequality can be explained by variability in education budget, poverty, economic growth, and income inequality of 80.1%, while 19.9% is explained by other variables.

The results of this study revealed that there is a negative correlation between government expenditure in education with education inequality in Banten. It has proven significant statistically. The current study confirms with previous studies conducted by (Doriza et al., 2013; Wardhana et al., 2019) found that special allocation funds for education and local own-source revenue could reduce basic education

distribution. At the same time, Suryadarma (2012) found that public expenditure on education had a positive and significant effect on education participation, but public expenditure didn't significantly correlate with school performance.

This result does not confirm with the study which that government investment variables in education have a contribution in influencing education inequality in a region. This study is also not in line with the result by Bustomi (2012) that found a negative relationship between the two variables. In other words, the increase in government expenditure in education would be followed by a reduction in education inequality.

The budget allocation in the field of education in Banten Province is still relatively low and has not fulfilled 20% of the total available budget, since 2019 the allocation of education budget has reached 17.34% without transfer and 17.74% with transfer (Kemendikbud, 2019). However, when compared to 2017 is IDR 681.2 billion or 8.74% (Kemendikbud, 2017), the budget allocation for education affairs has increased significantly, which is 7.6%. Therefore, the education budget allocation needs to be increased in order to have a significant influence.

The result of the study found no significant evidence that poverty could inhibit education equality in Banten Province. Although, this finding is statistically insignificant, it can be preliminary information that the problem of poverty in Banten must be reduced, so it does not become an obstacle in development. The results of this study don't confirm with the study conducted by Syofya (2018) which stated that poverty contributed to human development. Other studies that did not confirm this study are studies conducted (Chowdhury & Hossain, 2018) have found that children from poor families are relatively fewer which enrolled in schools than rich families. Poor parents prefer their children to work of help parents

to fulfill their life needs than enroll their children in a school. This factor is strongly correlated with economic factors, namely the problem of poverty or the economic ability of parents with a percentage level of 45.06% (BPS, 2014).

Education inequality that occurred showed the inequality of access and education equality. This study found that the inequality in income had a negative and significant effect on education inequality. Contrary finding was conducted by Digdowiseiso (2012) examined the relationship of education inequality and income inequality in 23 provinces in Indonesia, education inequality has a positive relationship with income inequality. Other researcher also found a positive relationship between income inequality and the education inequality (Abdelbaki, 2012), but not significant (Bustomi, 2012).

The current study doesn't confirm with previous study which produced by (Lam, 2020; Obasuyi & Rasiyah, 2019) found that income inequality contributes less to reducing educational inequality. The decline in educational inequality did not use instruments of income, but used other non-income policy instruments.

The state of income inequality between income groups in Banten as measured by the Gini ratio for 10 years showed an increase, ie from 0.35 in 2008 to 0.37 in 2018, or an increase of 5.71% (BPS, 2020). This increase was caused by regional inequality because it has not uneven production of goods and services in Banten Province. Therefore, the regional government of Banten Province should pay attention to the resources that are each located in the regency or city of Banten and improve human resources (Irkham, 2019). Development is still concentrated in urban areas than rural areas, so development outcomes cannot be enjoyed equally.

The implication of study findings related to the education budget is the Provincial Government of Banten continues to increase the allocation of the education budget in accordance with the mandate of the law, which is 20%. The level of supervision of the education budget is expected to be carried out properly by involving all education stakeholders to be able to touch the substance of better education needs.

Although the research hypothesis determined that poverty has a significant effect on economic growth, but this results are otherwise. Therefore, this study has implications that poverty reduction must continue to be pursued by the government, particularly the Provincial Government of Banten. Decreasing poverty certainly involves many parties, because the factor of poverty is multidimensional. In addition, poor populations who are touched by education are still very few.

Income inequality is proven to have significant effect on education inequality in Banten. This result has implications that income inequality can increasingly hamper education equity. The efforts to reduce income inequality are carried out by downstream industrial mother and component industries in industrial zones, developing agro-industry based on agricultural and marine potential, and developing creative industries (Muttaqin, 2018).

## **CONCLUSIONS AND SUGGESTION**

The results of the study can be concluded that the education budget and income inequality has a significant effect on education inequality in Banten Province, but poverty and economic growth did not significantly reduce education inequality. Related to the results of the study, the education budget contributed negatively and significantly to education inequality in Banten Province. The lack of contribution to the education budget is caused by two things, first, the lack of allocation of the

education budget provided and second, the distribution of the education budget that is not well targeted, as a result, the need for education implementation is not fulfilled.

Poverty proved not to be an obstacle in the government's efforts to reduce education inequality in Banten. Meanwhile, economic growth is not able to reduce education inequality in Banten Province. The income inequality is the biggest contribution in influencing education inequality. As more people did not enjoy the outcome of development, then there are only a few people who graduated the education at a higher level.

Education budget policies are more focused on providing school infrastructure in villages and subsidizing education costs or increasing education scholarships for poor families which are expected to free up the education costs that have been borne by students. The more equitable income of society could reduce education inequality. Poverty reduction policies must be carried out by providing access to job creation for the poor, access to capital, skills training for the poor society.

For future research, the study suggests the use of Gini education index to measure education inequality, the use of education budget variables and economic growth (re-use), road accessibilities, and the existence of school infrastructure as important variables to reduce education inequality. The analysis can utilize the static or dynamic panel data to capture the situation of each districts in Banten province and also use more than 30 data.

## REFERENCES

- Abdelbaki, H. H. (2012). An Analysis of Income Inequality and Education Inequality in Bahrain. *Modern Economy*, 03(05), 675–685. <https://doi.org/10.4236/me.2012.35087>
- Andrianto, Syamsurizaldi, Zetra, A., & Koeswara, H. (2019). Analisis Efektivitas Anggaran Belanja Langsung Program Peningkatan Mutu Pendidik Pendidikan Dasar Dinas Pendidikan Kabupaten Kerinci. *Media Bina Ilmiah*, 14(4), 2487–2497. <https://doi.org/10.1017/CBO9781107415324.004>
- Baldacci, E., Clements, B., Gupta, S., & Cui, Q. (2004). Social Spending, Human Capital, and Growth in Developing Countries: Implications for Achieving the Mdns. *IMF Working Papers*, 04(217), 1–39. <https://doi.org/10.5089/9781451875140.001>
- BPS. (2001). *Banten Dalam Angka 2001*. (B. I. P. dan D. Statistik, Ed.). Banten: BPS – Statistics of Banten Province. Retrieved from [http://banten.bps.go.id/?hal=publikasi\\_detil&id=21](http://banten.bps.go.id/?hal=publikasi_detil&id=21)
- BPS. (2014). *Situasi Pendidikan Provinsi Banten 2014*. Banten: BPS Banten.
- BPS. (2018). *Laporan Eksekutif Perekembangan Tingkat Kemiskinan Provinsi Banten*. Banten. Retrieved from <https://banten.bps.go.id/publication>
- BPS. (2020). *Provinsi Banten Dalam Angka 2020*. (Bidang Integrasi Pengolahan dan Diseminasi Statistik, Ed.). Banten: BPS Provinsi Banten.
- Bustomi, M. J. (2012). Ketimpangan Pendidikan Antar Kabupaten/Kota dan Implikasinya di Provinsi Jawa Tengah. *Economics Development Analysis Journal*, 1(2), 1–10. Retrieved from <http://journal.unnes.ac.id/sju/index.php/edaj>
- Chowdhury, N. M., & Hossain, M. (2018). *Poverty, Income Inequality and Growth in Bangladesh: Revisited Karl-Marx*. <https://doi.org/1812.09385v1>
- del Granado, F. J. A., Fengler, W., Ragattz, A., & Yavuz, E. (2007). *Investing in Indonesia 's Education : Allocation ,*

- Equity , and Efficiency of Public Expenditures* (Policy Research Working Paper No. 4329). Washington, D.C.
- Digdowniseiso, K. (2012). Education Inequality, Economic Growth, and Income Inequality: Evidence from Indonesia, 1996-2005. *SSRN Electronic Journal*, (17792), 1996–2005.  
<https://doi.org/10.2139/ssrn.1602642>
- Doriza, S., Purwanto, D. A., & Maulida, E. (2013). Fiscal Decentralization and Disparity of Access to Primary Education in Indonesia Desentralisasi Fiskal dan Disparitas Akses Pendidikan Dasar di Indonesia Pendahuluan, *14*, 223–233.
- Ferreira, F. H. G., Chen, S., Dabalen, A., Dikhanov, Y., Hamadeh, N., Jolliffe, D., ... Yoshida, N. (2016). A global count of the extreme poor in 2012: data issues, methodology and initial results. *Journal of Economic Inequality*, *14*(2), 141–172.  
<https://doi.org/10.1007/s10888-016-9326-6>
- Inter-American Development Bank. (1999). *Facing Up To Inequality in Latin America Economic and Social Progress*. Washington, D.C.: Johns Hopkins University Press. Retrieved from  
<https://publications.iadb.org/publications/english/document/Facing-Up-to-Inequality-in-Latin-America.pdf>
- Irkham, M. (2019). Analisis ketimpangan wilayah. *Akuntabel*, *16*(1), 98–110.
- Kemendikbud. (2017). Neraca Pendidikan Daerah Provinsi Banten 2017. Jakarta, Indonesia: Kemdikbud.
- Kemendikbud. (2019). Neraca Pendidikan Daerah 2019: Provinsi Banten. Jakarta: Kemdikbud. Retrieved from  
<https://npd.kemdikbud.go.id/>
- Lam, D. (2020). Why Has Income Inequality Increased while Education Inequality Has Decreased in Many Developing Countries? In S. Asefa & W.-C. Huang (Eds.), *The Political Economy of Inequality: U.S. and Global Dimensions* (eds, pp. 79–116). Michigan: W.E. Upjohn Institute for Employment Research.  
<https://doi.org/10.17848/9780880996730>
- Mankiw, N. G. (2015). *Principles of Economics*. (M. Worls, Ed.) (Seventh). Stamford: Cengage Learning.
- Nurdyana, H. S., Budiono, & Fahmi, M. (2012). Pendidikan Dan Kemiskinan Studi Kasus Provinsi Maluku Utara. Bandung: Universitas Padjadjaran. Retrieved from  
[http://pustaka.unpad.ac.id/wp-content/uploads/2012/12/pustaka\\_unpad\\_pendidikan-dan-kemiskinan.pdf](http://pustaka.unpad.ac.id/wp-content/uploads/2012/12/pustaka_unpad_pendidikan-dan-kemiskinan.pdf)
- Obasuyi, F. O. T., & Rasiah, R. (2019). Addressing education inequality in sub-Saharan Africa†. *African Journal of Science, Technology, Innovation and Development*, *11*(5), 629–641.  
<https://doi.org/10.1080/20421338.2019.1567655>
- Pemerintah-DPR. (2003). Undang-Undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional. Jakarta, Indonesia: Lembaran Negara RI Nomor 4301.  
<https://doi.org/10.16309/j.cnki.issn.1007-1776.2003.03.004>
- Pemerintah Republik Indonesia. (2008). Peraturan Pemerintah Nomor 47 Tahun 2008 tentang Wajib Belajar. Lembaran Negara Indonesia 4863.
- Psacharopoulos, G., & Patrinos, H. A. (2002). *Returns to Investment in Education* (POLICY RESEARCH WORKING PAPER No. 2881). *Policy Research Working Paper*. Washington, D.C.
- Rajkumar, A. S., & Swaroop, V. (2008). Public spending and outcomes: Does governance matter? *Journal of Development Economics*, *86*(1), 96–111.  
<https://doi.org/10.1016/j.jdeveco.2007.08.003>

- Ram, R. (1990). Educational Expansion and Schooling Inequality: International Evidence and Some Implications. *Review of Economics & Statistics*, 72(2), 266–274.
- Roubini, N., & Sachs, J. D. (1989). Political and economic determinants of budget deficits in the industrial democracies. *European Economic Review*, 33(5), 903–933. [https://doi.org/10.1016/0014-2921\(89\)90002-0](https://doi.org/10.1016/0014-2921(89)90002-0)
- Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51(1), 1–17.
- Sen, A. (1999). *Development as freedom*. Oxford: Oxford University Press.
- Suryadarma, D. (2012). How corruption diminishes the effectiveness of public spending on education in Indonesia. *Bulletin of Indonesian Economic Studies*, 48(1), 85–100. <https://doi.org/10.1080/00074918.2012.654485>
- Syofya, H. (2018). Pengaruh tingkat kemiskinan dan pertumbuhan ekonomi terhadap indeks pembangunan manusia Indonesia. *Jurnal Ilmiah Ekonomi Dan Bisnis*, 15(2), 177–185. <https://doi.org/https://doi.org/10.31849/jieb.v15i2.1153>
- Thomas, V., Wang, Y., & Fan, X. (2001). *Measuring Education Inequality: Gini Coefficients of Education. Policy Research Working Paper, No. 2525*. Washington, D.C.
- Todaro, M. P., & Smith, S. C. (2015). *Economic Development*. (D. Battista & D. Alexander, Eds.) (Twelfth Ed). New Jersey: Pearson.
- UNDP. (2019). *Human Development Report 2019: beyond income, beyond averages, beyond today*. United Nations Development Program. New York. Retrieved from <http://hdr.undp.org>
- Wardhana, A., Kharisma, B., & J., N. S. (2019). Ketimpangan Pendidikan dan Pendapatan di Indonesia. *Bina Ekonomi*, 23(1), 29–38. <https://doi.org/https://doi.org/10.26593/be.v23i1.3886.29-38>
- Williamson, S. D. (2018). *Macroeconomics*. (N. Bhalla, M. Zeng, & A. Srivastava, Eds.) (Sixth). Harlow: Pearson Education Limited. Retrieved from [www.pearsonglobaleditions.com](http://www.pearsonglobaleditions.com)
- World Bank. (2018). *Pendidikan untuk pertumbuhan*. Washinton, DC. Retrieved from <http://documents.worldbank.org/curated/en/379011531893611851/pdf/1268911BAHASA-PUBLIC-IEQ-June-2018-IDN-For-web.pdf>
- World Bank. (2020). *Taking the Pulse of Poverty and Inequality in Thailand*. Washington, DC. Retrieved from <http://documents.worldbank.org/curated/en/614661586924075867/Taking-the-Pulse-of-Poverty-and-Inequality-in-Thailand>