Factors Affecting Regional Domestic Product and Its Impact on Employment Opportunities and Poverty

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Abstract. This study is driven by a desire to learn more, by the various problems that occurred in the Aceh province in 2018 there was a rise in the number of jobless people in the same period reaching 154 thousand people or 6.55 percent, of the total workforce of 2.354 million people, compared to 2.289 million labor force in 2017 or 6.57 percent of the open unemployment rate with a total of 150 thousand people, but on a percentage basis, there was a slight decrease of 0.02 percent. The percentage position of the open unemployment rate in Aceh province is still above the national open unemployment rate. Processes, regulations/laws, and levy, Policy and parliamentary coherence, aspects of legal certainty, political stability and security, activity, net exports are still relatively declining, the Quality Of Life has risen is quite low, the number of labor force absorbed is decreasing, absorption has limited the availability of job opportunities for job seekers which continues to increase every year, the high mass unemployment rate due to the employment currency's failure to accept sufficient workers, strength, the gap is widening as between amount of job applicants and the amount of available positions and the available vacancies. This study relied on second data is in the form of time series data collected over a five-year period from 2013 to 2017. Multivariate regression analysis was conducted as the analysis method. The findings of this study show that consumer spending, remittances, investment, and trade balance all have a substantial influence on the Real Area Total Production in Aceh province, either concurrently or individually. In the province of Aceh, the role increasing gross region national GDP can have a favorable effect on total labor spending.

Keywords: Regional Domestic Product; Job Opportunity; Poverty

1   Introduction

Aceh Province is located in the westernmost part of the archipelago, occupying a strategic position as a gateway for trade and cultural traffic that connects east and west since centuries ago. Aceh is also a haven for Chinese, European, Indian, and Arab traders, the development of Acehnese civilization continues to change from time to time in the dynamics of a religious society and struggles with the spirit inherited by its predecessors to achieve the ideals of realizing a free society from the shackles of colonialism that cause poverty, ignorance, and backwardness so that they can lead to an advanced, independent and prosperous society.

Economic conditions both macro and micro in Aceh province are strongly influenced by the level of job opportunities and community poverty, employment, and poverty alleviation are very important aspects of economic development. The condition of employment opportunities has various kinds of problems, both nationally and regionally, including a high labor force, limited availability of employment opportunities, low levels of education and workforce skills, matters with labor wages, problems due to termination of employment, contract workers, and

others. Of course, it can be used as the focus of sustainable development planning. It will have a direct impact on people's incomes and the fulfillment of their needs, as a result, the low employment opportunities will increase the poverty rate.

Todaro (2000, p. 14) explains that development strategies usually focus on efforts to create industrialization on a large scale so that sometimes it sacrifices the development interests of the agricultural sector and rural areas which are actually no less important. and useful, must also be supported by non-economic social indicators such as literacy rates, education levels, health quality, housing needs, and others [1]. Of the many efforts to create weighty social indicators to accompany the GNP per capita indicator, the most prominent is the United Nations' efforts which later succeeded in creating a indicator of human progress.

The indicator of human progress is the least zealous and latest attempt to analyze the comparable socio-economic development status, both in developed and developing countries. Economic development is important to do to maintain the welfare of its people, but it is not the end of human development in a region, and development should be carried out or used by involving human capacities and capabilities in the region.

Based on data from the Human Development Index (IPM) in Aceh Province from year to year, it continues to improve, it can be confirmed through data from the Central Bureau of Statistics (BPS) of Aceh Province, the development of the Human Development Index (IPM) in 2017 increased to 70.60 compared to 70.00 in the previous year. However, this increase has not been able to exceed the national Human Development Index (HDI) of 70.81 in 2017 [2]. From the Central Statistics Institution's data, released the open unemployment rate (TPT) in Indonesia in February 2018 reached 6.87 million people or 5.13 percent, down from the same period the previous year, 7.01 million people or 5.33 percent. On the contrary, on a percentage basis, in Aceh province in 2018, there was an increase in the open unemployment rate (TPT) in the same period reaching 154 thousand people or 6.55 percent, from the total workforce of 2.354 million people, compared to 2.289 million in the 2017 workforce. or 6.57 percent of the open unemployment rate (TPT) with a total of 150 thousand people, but on a percentage basis, there was a slight decrease of 0.02 percent. The percentage position of the open unemployment rate (TPT) in Aceh province is still above the national open unemployment rate (TPT) [2].

Meanwhile, the poverty rate of Aceh Province for the March 2018 period was 893 thousand people or 15.97 percent, an increase of 0.05 percent compared to the previous or an increase of 10 thousand people compared to 2017 which was 829 thousand people or 15.92 percent. The poverty rate in Aceh province is ranked 5th (five) nationally and ranked first at the provincial level in Sumatra and far exceeds the percentage of the 2018 national poverty rate of 9.82 percent. From the findings of the Central Statistics Agency for Aceh Province, the biggest factors causing poverty both in urban and rural areas are rice and fish, and cigarettes are the main contributor to poverty in Aceh.

Government expenditure and trade are the present forms of total expenditure in the economy, according to economic factors. Meanwhile, private consumption, private and government investment, government consumption spending, exports, and imported goods are separated into five components, as according Sukirno. [3].

Economic Growth and Development

Increases in national income per capita and provincial capita income are used to quantify productivity expansion at the national and provincial level, respectively. Population growth, investment, changes in the marginal ratio between rate of capital, global warming, and other variables all influence per person wage growth Furthermore, the capital multiplication

determines job development and accelerator (acceleration) factor, as stated by Samuelson in Sumitro Djojohadikusumo (1991, p. 87) states that:

"People's demand is influenced by investment actions, and through the multiplier factor, it brings additional income many times over. Effective demand can also be stimulated starting from consumer spending which then goes through the indirect accelerator principle of time. The pace of development is evaluated by an rise in growth in per capita gdp at the level of the national economy and by an region expansion income per capita at the level of generating additional investment.

According to Jhingan (2000, p. 5), indicators of economic development are defined in 3 (three) ways [4]:

a. Economic development must be measured in terms of an increase in real national income over a long period. But this is not a satisfactory definition.
b. The second definition relates to the increase in real income per capita in the long run. Economists agree on defining economic development in terms of an increase in real income or output per capita.
c. There is another tendency to define economic development from the point of view of economic well-being. For example, economic development is seen as a process in which real national income per capita improvement is accompanied by a decrease in income inequality and the fulfillment of the desires of society as a whole.

Gross Regional Domestic Product

In general, to know the rate of economic development of a country and the development of the level of welfare of its people, it is necessary to know the level of increase in national income and the amount of income per capita. If the increase in national income is greater than the rate of population growth, the level of income per capita of the population will increase, and or vice versa. National income and per capita income itself will increase if per capita productivity increases (Suryana, 2000 p. 8). Economic output is the worth of products and services produced in a country in a given year, which is referred to as Domestic Product or GDP, and which may be measured using current liability rates. [3]

According to Todaro (2000, p. 189), one of the indicators that can be used to explain the performance of a region's economic existence is the Gross Regional Domestic Product (GRDP) which is the level of sales contributed created by various economic sectors including indirect taxes, in the formation of GRDP each province can also describe the total added value created by the regional economic sectors so that this situation can reflect the sector's support for the poor in obtaining income to meet their daily needs [1]. Gross Regional Domestic Product (GDP) describes the ability of a region to create an output (added value) in a certain area [2].

Furthermore, Mangara Tambunan (2010, p. 86) says that the regional or regional economic growth model that is more appropriate to be applied is the choice of changing the economic structure with economic growth based on high labor absorption with the achievement of poverty reduction and job creation [5]. The main step that must be taken is to build centers of potential economic growth to expand regional economic activity through an approach to increasing private sector investment and fiscal capacity.

The challenges for the regional (regional) economy as stated by Rahardjo Adisasmita (2005, p. 78) are following economic phenomena, explicitly covering five issues [6]:

a. Determination of the economic landscape, namely regarding the distribution of economic activities based on spatial planning.
b. The concept of the region is introduced, namely the region as a spatial subsystem of the national economy and the measurement of economic activity such as regional boundaries.

c. Interaction between regions, namely the flow of production factors and commodity exchange flows.

Optimum or inter-regional equilibrium, namely activities related to the goals and objectives to be achieved, such as optimal resource allocation. In this connection, several things can be stated, including the optimal flow of transportation and the exchange of commodities between regions. Regional policy, which is an activity that takes into account economic behavior in a spatial environment, seeks to control the structure of economic processes in the national economic subsystem.

Gross Regional Domestic Product is divided into 2 (two) namely (Prathama Rahardja and Mandala Manurung, 2008, p. 203):

a. The basis of current prices, based on current prices are prices taken based on market prices prevailing at that time without taking into account the effects of inflation.
b. Based on constant prices, constant prices are prices that are determined based on the base year in which the economy is in good or stable condition.

Household consumption

Household consumption is the main component of gross regional domestic product (GRDP), because the taller the income of a household, the greater the consumption rate. The relationship between consumption and income is called consumption desire or Propensity to Consume. Household consumption in the economy occurs because of the income obtained by households that comes from the use of the factors of production they have which are divided into 4 groups, namely land, labor, capital, and entrepreneurial skills. If these production factors are used by the corporate sector and the government, it will create a stream of income for the household sector in the form of salaries or Payroll, property, debt, and earnings are all examples of expenses.

According to Suherman Rosyidi (2017 p. 165), in economics, consumption is defined as the use of goods and services to satisfy human needs [7]. Consumption must be considered as the essential purpose and aim of production, in other words, [production is a means of consumption. A person (household) receives a reward for his work, it will immediately plan to spend the money, after deducting all other obligations. And every income that is first issued is for consumption purposes, while the rest will usually be in savings.

Government Consumptions

In general, the increase in government spending was dominated by the function of public services. Based on the classification of state spending by function, state spending is divided into spending for public service functions and economic functions. The budget for the function of public services includes, among others: public service programs carried out by state ministries, provision of various types of subsidies, payment of debt interest, population administration structuring programs, community empowerment programs, regional development, as well as research and development programs for science and technology. Meanwhile, spending on economic functions is allocated to aid efforts to increase economic stability in order to drive high-quality industrial prosperity, which is supported by the influence of GRDP on the development of transportation, agriculture, infrastructure, and energy.

The main theory that links government spending to an increase in several macroeconomic indicators such as economic growth and poverty levels is the Rostow theory in Prasetya, et.al (2011 p. 98), In the early phases of economic growth, public investment accounts for a significant portion of investment value. occurs since the government must provide education, health care, roads, and other services during this time. The implication of the existence of

government spending through investment in the required facilities and infrastructure is expected to encourage increased output and also reduce the existing poverty rate.

Cakti Indra Gunawan (2016, p. 3) divides government spending into two parts [8]:

a. Routine expenditures, namely expenditures used for maintenance or day-to-day administration of government; such as personnel expenditure, goods expenditure, subsidies, and debt installments.
b. Development expenditures, namely government expenditures for financing such as departmental and institutional operations, regional transfer financing, and infrastructure.

Foreign Private Investment

Investment is also known as investment, Participation as a specific investment activity, defined as actions by domestic companies to trade in the Republic of Indonesia's land, is clarified by Law No. 25 of 2007. [9] Overseas money is the action of wealthy foreigners making deals on the territory of the Republic of Indonesia, including those who utilize utterly foreign investment and those who form strategic partnerships with domestic ones. Meanwhile, what is called A neighboring country's capital is called foreign capital, foreign individual, foreign business entity, and an overseas as both a portion or all of the equity of an Indonesian legal organization.

Several factors that also influence investment in a country are as follows [10]:

a. There is no clear legal and regulatory certainty in regulating the implementation and concept of investment as well as guarantees in investing
b. The process of restructuring the company's debt has not been completed yet
c. The government must bear the debts of private companies by issuing new loan funds to cover the debts of private companies originating from the government treasury so that the stimulus from the economic recovery tends to slow down.
d. The process of political maturity has not shown very fast progress even though it is continuously moving, but still depicts a character that is far from a mature form of thinking for the sake of the nation and state.

Domestic Private Investment

Abdul Halim quoted by Irham Fahmi (2010, p. 69) defines investment in essence as the placement of several funds at this time with the expectation of sales and profit [10]. Thus, the a type of investment management is to provide benefits by placing these funds in an allocation that is expected to provide additional profit output. Meanwhile, it was stated that the share of output used by private companies to produce output in the future can be referred to as investment [9].

The investment objective according to Irham Fahmi (2010, p. 72) is to achieve the expected effectiveness and efficiency of the investment, namely [10]:

a. Creating continuity in investment
b. The creation of maximum profit as expected (actual profit)
c. Creating prosperity for shareholders
d. Contribute to the development of the nation

Export Netto

Sadono Sukirno (2011, p. 201) says, if export and import activities are taken into account in determining the balance of national income, the analysis of the economic activity in a country has fully described the actual situation, in reality, then the economic activity can be divided into

four sectors, namely plus with the foreign sector where export and import activities are carried out [3].

In a four-sector economy or an open economy, these economic sectors include aggregate expenditure, namely household spending on domestically made goods, government spending, company investment, spending on imported goods from abroad, and spending by foreigners on domestically made goods (exports). In an economy that engages in foreign trade, export-import activities are a crucial part and have different interests from one country to another, giving rise to flow circulation.

2   Research Methods

The research was carried out for 12 (twelve) months starting from January to December 2021, beginning with deciding on a study title, writing proposals, obtaining research area permissions, selecting the divisions to be investigated, collecting data and facts in the field, and finally processing and evaluating the data. The location of this research is in Aceh Province. The data needed in the study is the secondary data whose collection is time series with a period of 20 (twenty) years, from 1998 to 2018.

The sample of the population used in this study is a sample of household consumption data, government consumption data, foreign private investment data, domestic private investment data, and net export data. GRDP data, labor force data, labor absorption data, and poverty data within a span of 20 (twenty) years in Aceh Province. This study uses an Explanatory Research Design, which aims to examine the relationship between variables and test hypotheses [11]. Explanative research is researching that tests hypothesis on the relationship between variables formulated with econometric models, intended to find the cause of one or more problems by completing the form of causal relationship and the degree of influence between variables.

The analytical technique used to test the hypothesis regarding the Factors Affecting Gross Regional Domestic Product (GRDP) and its impact on Employment Opportunities and Poverty is Multivariate Linear Regression Analysis. Linear regression analysis is used to determine the relationship between a dependent variable and an independent variable, if there is only one dependent variable and one independent variable it is called simple linear regression analysis, but if there are several independent variables it is called multiple linear regression analysis [12]

3   Results and Discussion

Result

Table 1. Model I. Multiple Regression Test Results

Variables	Beta Coefficients Standard	R	p-value	Standard error	R^2
Household consumption	0,206		0,000	0.71	
Government consumption	0,358	0,762	0,000	0.719	
Foreign investment	0,405		0,001	0.7935	0,684
Private investment	0,257		0,000	0.72	
Net exports	0,287		0,003	0,082	

Source: Processed data 2022

$Y = 0,302 + 0,206.X1 + 0,405.X2 + 0,257.X3 + 0,287.X4 + \varepsilon1$

Based on the regression equation above, it appears that all variables have a positive relationship to Gross Domestic Product (GRDP). R = 0.762 is the degree of the close relationship between Household Consumption, Government Consumption, Investment, and Net Exports. Statistically, it is a powerful relationship. R2 of 68.40% means that the contribution of the variables of Household Consumption, Government Consumption, Investment, and Net Exports is 68.40%, while the remaining 32.60% is determined by other variables which are not included in this study.

Table 2. Multiple Regression Test Results Model 2

Variables	Standard Coefficients Beta	R	p-value	Standard error	R^2
PDRB	0,435	0,904	0,001	0,735	0,79

Source: Processed data 2022

Effect of Gross Regional Domestic Product (GDP) on employment opportunities
$Z1 = 0.304 + 0.435.Y + \varepsilon2$
Based on the regression equation above, Gross Regional Domestic Product (GRDP) has a positive influence on employment opportunities.

R = 0.904 means the degree of closeness of the relationship between Gross Domestic Product and employment opportunities. R2 = 79% means that the contribution of GRDP with employment opportunities is 79% while the remaining 21% is determined by other variables that are not included in this research model.

Table 3. Model 3. Multiple Regression Test Results

Variables	Beta Standard Coefficients	R	p-value	Standard error	R^2
PDRB	0,356	0,763	0,001	0,203	0,68

Source: Processed data 2022

Effect of Gross Regional Domestic Product (GDP) on poverty
$Z2 = 0.203 + 0.356.Y + \varepsilon2$
Based on the regression equation above, Gross Regional Domestic Product (GRDP) has a positive influence on poverty.

R = 0.763 means the degree of closeness of the relationship between Gross Domestic Product and poverty. R2 = 68% means that the contribution of GRDP to poverty is 68% while the remaining 32% is determined by other variables that are not included in this research model.

Table 4. Model 4 . Multiple Regression Test Results

Variables	Beta Standard Coefficients	R	p-value	Standard error	R^2
PDRB	0,356	0,764	0,001	0,203	0,701

Source: Processed data 2022

The effect of employment opportunities on poverty
$Z2 = 0.269 + 0.356.Z + \varepsilon2$

Based on the regression equation above, employment opportunities have a positive influence on poverty. R = 0.764 means the degree of closeness of the relationship between job opportunities and poverty. R2 = 70.1% means that the contribution of employment opportunities to poverty is 70.1% while the remaining 29.9% is determined by other variables that are not included in this research model.

Discussion

The findings of the combined regression effect of household consumption, government consumption, investment, and net exports on Gross Regional Domestic Product (GRDP) indicate R = 0.762 and R2 of 0.684. It means that the effect of household consumption, government consumption, investment, and net exports on GRDP is 68.4 percent, while the remaining 31.6 percent is influenced by other factors not considered (researched) in this template, such as borrowing costs, currency risk, protection, and others.

Of the five aggregate spending variables, net exports have the lowest influence on Gross Domestic Product (GRDP) in Aceh province. This is because there are still many obstacles in the process of exporting products in the province of Aceh. The length of the licensing process, lack of infrastructure, lack of knowledge and export policies, and lack of relationships are factors that hinder exports.

The results of the regression of the effect of Gross Regional Domestic Product on employment opportunities (Z1) show R = 0.904, which means the degree of closeness of the relationship between Gross Domestic Product and employment opportunities. R2 = 79% means that the contribution of GRDP with employment opportunities is 79% while the remaining 21% is determined by other variables that are not included in this research model, such as income level, community welfare, education level, and others.

The influence of the gross domestic product index on poverty shows that the contribution of the influence of gross domestic product on poverty in Aceh province shows R = 0.763 which means the degree of closeness of the relationship between Gross Domestic Product and poverty. R2 = 68% means that the contribution of GRDP to poverty is 68% while the remaining 32% is determined by other variables that are not included in this research model, such as investment, number of available industries, employment, and workforce skills.

The outcome of the employment opportunity index on poverty shows that the contribution of the effect of employment opportunities on poverty in Aceh province shows R = 0.764 which means the degree of closeness of the relationship between employment opportunities and poverty. R2 = 70.1% means that the contribution of employment opportunities to poverty is 70.1% while the remaining 29.9% is determined by other variables that are not included in this research model, such as investment, infrastructure, agricultural land, and the number of jobs, etc.

4 Conclusion

There is a significant effect of household consumption, government consumption, foreign private investment, domestic private investment, and net exports, either simultaneously or partially on the Gross Regional Domestic Product in Aceh province. There is a positive and significant influence of Gross Regional Domestic Product on employment opportunities and poverty alleviation in Tanger Regency, Acehang province. Gross Regional Domestic Product as an indicator of increasing employment opportunities and relation to poverty alleviation in Aceh province.

Suggestion

To reduce the poverty rate, it is suggested to the Aceh provincial government to make integrated and more realistic efforts, namely: building infrastructure in rural areas opening access in rural areas to make it easier to carry out economic activities, increasing agricultural yields, and providing capital in the development of production. In addition, establish relationships with many investors so that they are willing to open companies in the province of Aceh that can increase employment opportunities for the people of Aceh.

References

[1]   P. M. Todaro, *Pembangunan ekonomi di dunia ketiga*. Jakarta: Penerbit Erlangga, 2000.

[2]   "Biro Pusat Statistik (BPS) Propinsi Aceh." .

[3]   Sadono Sukirno, *Ekonomi Pembangunan : Proses, Masalah, dan Dasar Kebijakan. Edisi Kedua*. Jakarta: . Kencana Predana Media Group, 2006.

[4]   Jhingan M.L., *Ekonomi Pembangunan dan Perencanaan (Judul asli : The Economics of Development and Planning). Alih Bahasa D.Guritno. Edisi Pertama. Cetakan ke tujuh belas.* Depok: PT RajaGrafindo Persada, 2016.

[5]   Mangara Tambunan, *Menggagas Perubahan Pendekatan Pembangunan, Menggerakkan Kekuatan Lokal dalam Globalisasi Ekonomi*. Yogyakarta: Graha Ilmu, 2010.

[6]   Rahardjo Adisasmita, "Indikator Pengembangan Tata Ruang Wilayah. PPKED Fak. Ekonomi UNHAS, Makasar.," 2010.

[7]   Suherman Rosyidi, . "Pengantar Teori Ekonomi : Pendekatan kepada Teori Ekonomi Mikro dan Makro. Edisi Revisi, Cetakan 12. PT Rajagrafindo Persada. Kota Depok.," 2017.

[8]   Cakti Indra Gunawan, *Ekonomi Makro. Cetakan Kedua. CV IRDH (Research and Publishing), Purwokwrto.* 2016.

[9]   "Undang-undang nomor 25 tahun 2007." .

[10] Irham Fahmi, "Pengantar Politik Ekonomi. Cetakan kesatu. CV Alfabeta. Bandung.," 2010.

[11] U. Sekaran, "Research Methods for Business (Diterjemahkan Oleh Kwan Men Yon) Metodologi Penelitian untuk Bisnis. Salemba Empat, Jakarta.," 2006.

[12] Wing Wahyu Winarno, "Analisis Ekonometrika dan Statistik dengan Eviews. Cetakan pertama. UPP STIM YKPN. Yogyakarta.," 2000.