Determinant Factors of Percapita Income
and Poverty Level in the Eastern Indonesia
Period Year 2004 – 2016

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Abstract: Eastern Indonesia is a marginalized area compared to western part of Indonesia. This is proven by high inequality. In terms of fastening the realization of economic development expansion and equity distribution so it can be enjoyed evenly by the group of people, so Indonesian government make a concept of development planning what-so-called The Acceleration of Master Plan And Economic Development Expansion (MP3EI). This concept divided the development based on Economic Corridor.

The development of economic corridor in Indonesia has been done based on potential and the advantages of each region that scattered throughout Indonesia with the purpose of economic development, which followed by the decreasing of economic gap. Based on this situation, this research's purpose is to analyze the determination of income per capita and poverty in economic corridor of Papua – Maluku Islands. Method for this research is using regression method panel data year 2004 – 2016 in Economic Corridor of Papua – Maluku Islands.
Based on this research's outcome: (i). allocation of education budget and allocation of infrastructure budget have a positive and significant effect toward income per capita. Meanwhile, FDI and DDI has no significant effect toward per capita income; (ii). Foreign investment, allocation of education budget, and tax has positive and significant effect toward consumption expenditure but DDI, Subsidy and Per capita income have no significant effect toward consumption expenditure; (iii). Per capita Income, FDI and education have a significant effect toward Poverty level but DDI has no significant effect on Poverty level at in Papua Province and Maluku Islands.

For reaching the purpose of MP3EI, the achievement of welfare is characterized by decreasing the level of economic gap and increasing of income per capita so that, it necessary to pay attention to supporting variables such as: infrastructure that really needed for increased the revenue and income distribution. The existence of infrastructure can give connectivity and increase income per capita in economic corridor area. Distribution of infrastructure budget allocation throughout the economic corridor is able to encourage economic growth of Indonesia and help area which is less developed to catch up with more developed area. The allocation of education budget is necessary for high public consumption expenditure indicates sufficient income as well as public consumption is determined by price. Controlled prices are due to the policy of price monitoring and improvement of commodity trading, improvement of central and regional policy coordination, and the stable core inflation.

The investment consists of FDI and DDI. Investment encourages economic activity among others are increased regional growth, increased competitive advantages and technology transfer. In attracting investment so that the value of increased investment conducted improvements in competitiveness and investor perceptions. The improvement of competitiveness has driven by strategic infrastructure development programs and improvements in the business climate as well as the continued impact of policy packages that are expected to drive business activities. The

implication of this research is that the crucial problem facing the government today is how to increase investor appeal to invest capital in various regions of Indonesia, especially Eastern Indonesia.

Introduction

In order to accelerate the realization of the expansion of economic development and equity distribution in order to be enjoyed equally among the people, the Indonesian government develops a development-planning concept called Master Plan Economic Development Acceleration and Expansion (MP3EI). The acceleration and expansion of economic development will be supported based on the potential for demography and natural resource wealth, and with the geographical advantage of each region. The development of economic corridors in Indonesia is based on the potentials and advantages of each region spread throughout Indonesia. As a country of thousands of islands and located between two continents and two oceans, the Indonesian archipelago has a unique constellation, and each archipelago has its own strategic role which in the future will be the main pillar to achieve the vision of Indonesia in 2025. Overall, the centers of economic growth and connectivity are creating the Indonesian Economic Corridor. Taking into account the various potential and strategic roles of each large island (in accordance with the location and geographical position of each island), 6 (six) economic corridors are defined: Sumatera Economic Corridor, Java Economic Corridor, Kalimantan Economic Corridor, Sulawesi Economic Corridor, Economic Corridor Bali - Nusa Tenggara, Corridor Papua - Maluku Islands.

For more than six decades, Indonesia has made progress in the field of economic development. Starting from a country whose economy is based on traditional economic activity, Indonesia is now a country with a growing proportion of manufacturing and service industries. The economic progress that has been achieved has brought about an increase in the welfare of the people, which is reflected not only in increasing per capita income but also in the improvement of other socio-economic indicators such as the Human Development Index (HDI). In the period of 20 years, since 1980 – 2010, HDI increased from 0.39 to 0.69. Right now, Indonesia has 34 Provinces with the highest HDI is DKI Jakarta 0.79 and Papua Province with the lowest HDI of 0.58 (BPS, 2017).

Positive economic development in the 5 percent range has been achieved since 2004. But in the year 2013 until early 2014 the economic growth of Indonesia experienced a slowdown despite still experiencing positive growth and still better compared with other countries experiencing a big slowdown. Nevertheless, economic growth in Indonesia is considered only as a statistical figure because there are still many members of the community who have not received welfare, the number of malnourished infants increases, the poverty rate is high, especially in the eastern part of Indonesia, especially Papua Province and Maluku Islands. Of course this invites the question, is it true that the Indonesian economy is growing well? If it grows well, why there are still some people who have not got what the government gives? What about the State Budget for the welfare of its people? Based on the Central Bureau of Statistics (BPS) data, the Gini ratio (indicator for measuring the economic gap/inequality or aggregate inequality) shows the figure of 0.413 (BPS, 2017). That is, almost reaching the required maximum threshold of 0.5 and unchanged over the three years of 2011, 2012, and 2013. These figures show that the government has not achieved optimal results in narrowing the differences between the poor and the rich.

The magnitude of inequality occurs a bit much due to the availability of uneven infrastructure for the entire region in the country. In fact, the dynamics of the economy requires a quality basic infrastructure. During this time, the policy of concentration of development is only focused on the Western Region of Indonesia, especially Java Island, so that infrastructure outside the island is very lagging behind. Domestic Investment (DDI), Foreign Investment (FDI), manpower, capital expenditure, infrastructure covering asphalt road, non-asphalt road, and electricity have a significant effect on economic growth in Java Island period 2007-2011 (Putri, 2014). Prasetyo & Firdaus (2009) mentioned that the infrastructure of electricity, roads and clean water have a positive influence on the economy in Indonesia.

A number of scientific research on infrastructure in poor countries shows that poor countries require the use of about 9 percent of GDP to operate, maintain or maintain and build infrastructure, if the poor country wants to achieve Millennium Development Goals (MDGs) level (Estache, 2006). Indonesia though not the category of poor countries, the condition of the infrastructure is also still apprehensive. The availability and quality of infrastructure both physical and nonphysical is inadequate. In the case of growing economic conditions such as Indonesia absolutely requires the development of infrastructure in various sectors. There are some things that need to be addressed related

to infrastructure development namely the need to improve institutional capacity and governance. Improvement of government capacity and investment climate is essential to restore public and investor confidence in increasing infrastructure investment to support the quality of Indonesia's economic growth. Johan et al. (2016) states that investment has a significant and negative effect on unemployment in Indonesia.

In addition to the issue of infrastructure spending in support of infrastructure investments, it also needs to be sharpened the issue of how much the ideal strategy must be met so that the poor have access to infrastructure and meet the Millennium Development Goals (MDGs) targets. How big is poverty alleviation for each additional investment, especially poverty alleviation for rural and urban people.

The main problem in the inter-regional economy is the inequality of income between provinces in Indonesia, which has an impact on the difference in poverty levels. The income gap that occurs as a result of differences in resources owned between provinces, as well as the managerial capability of the regional heads in utilizing and developing the potential of the region so as to attract a very useful investment to accelerate the economic growth of the region and ultimately be able to reduce the poverty level. To improve the inter-regional economic performance, three main strategies are implemented in three strategic initiatives namely to encourage the realization of investment through the acceleration of the completion of barriers faced by the perpetrators; the establishment of national regulatory and national key infrastructure troubleshooting schedules and encouraging the development of Human Resources and Science and Technology (IPTEK) as needed to improve competitiveness. Based on these three strategic initiatives, there are three main factors determining the acceleration of development, namely investment level, infrastructure and education budget allocation. Zuhdiyaty (2017) stated that the Human Development Index (HDI) has a significant positive value to poverty. While, Bajracharya (2014) mentioned that an increase in HDI of 1 will reduce poverty by 8.437 people. Looking at the above conditions can be deduced that the HDI can reduce the level of poverty.

In many economic literatures it has been widely expressed that income levels, education budget allocations, investment levels and infrastructure spending are fundamental factors directly affecting poverty levels. The main factor that directly affects the poverty level is basically the consumption expenditure of society, while the expenditure of the community's consumption is heavily dependent on income so that using the analysis of this research path will examine the effect of income on poverty through its influence on consumption expenditure. This research covers in the East Indonesia Economic Corridor area with the consideration that the economic development of the eastern part of Indonesia has not progressed significantly to catch up.

Theoretical Background
Economic Development Theory

The economic progress of a region shows the success of a development even though it is not the only indicator of development success (Todaro: 2015). There are three measurements to assess economic growth: output growth, output growth per labor, and output growth per capita. The output growth is used to assess the growth of production capacity that is influenced by the increase of manpower and capital in the region. Output growth per labor is often used as an indicator of a change in the competitiveness of the region (through productivity growth). While output growth per capita is used as an indicator of changes in economic prosperity (Bhinadi: 2003).

There are several theories about growth as described below: (i). Rostow's theory, which explains that there are stages that a country passes through in economic growth. One way to accelerate economic growth is by strengthening national savings; (ii). Structural transformation theory, which focuses on the mechanisms by which poor and developing countries can promote economic growth by transforming their economic structures from the traditional agricultural sector to the more modern manufacturing sector and the services sector; (iii). The Solow theory, which explains how savings and investment rates, population growth and technological advances affect the level of economic output and growth over time; and (iv). Endogenous growth theory, which attempts to explain that sources of growth are increased capital accumulation in a broad sense. Capital in this case not only in physical properties but also non-physical in the form of science and technology. The development of this technology will develop innovation so as to increase productivity and lead to increased economic growth (see: Mankiw: 2011).

Poverty Theory

World Bank (2010) defines poverty as a shortage in well-being which consists of many dimensions including low levels of health and education, poor access to clean water and sanitation, inadequate physical security, lack of sound and adequate capacity and opportunities for a better life. Meanwhile, poverty also defines as the inability of the

economic side to meet the basic needs of food and not food as measured by the expenditure. Poverty is divided into two, namely: (i) Absolute Poverty, that is a poverty that determined based on the level of public income to meet basic minimum needs. If he is unable to meet the minimum basic needs with the income he receives then he is said to be poor; and (ii). Relative Poverty, poverty which is emerge, due to the inequality of income distribution. Some scholars argue that even if one's income has already reached the minimum level of minimum requirement, it turns out that the person's income is still much lower than the income of the surrounding community, and then the person is still in the poor category (see: BPS, 2017 and Arsyad, 2010)

Consumption Theory

According to Samuelson & Nordhaus (2004) "Consumption is the expenditure for the purchase of final goods and services in order to obtain satisfaction or fulfill their needs". Consumption in everyday terms is often defined as the fulfillment of food and beverages. Consumption has a broader understanding of the goods and end services needed to meet human needs. Goods and end services in question are goods and services that are ready to be consumed by consumers. Consumer goods consist of consumable consumables and consumer goods that can be used more than once. BPS (2017) states that household expenditures are distinguished by consumption expenditures and non-food consumption expenditures. While, Keynes consumption theory has stated firmly that the income factor has a direct influence on consumption where the higher the income the higher the consumption and vice versa. Consumption therefore has an influence on poverty, which means that income factors can be said to also have an indirect effect on poverty through consumption factors.

Government Allocation Budget Theory

Budget according to Haryanto (2008) there are two understandings, in the broad sense that includes the budget period is planned, implemented, and accounted for. In a narrow sense, the budget covers revenue and expenditure plans within one year only. Based on this understanding, budgeting is an activity to allocate limited financial resources to meet unlimited expenditure on organizational expenditure. Budget allocations have some basic principles that must be fulfilled. According to Donaldson (2008) the basic principles of the budget consist of:

a. *Legislative by Authority*. Public budgets must get authorization from the legislature first before the executive can spend the budget.
b. *Comprehensive*. The budget should show all government revenues and expenditures. Therefore, the existence of non-budgetary basically violates the principle of a comprehensive budget.
c. *Budgetary Integrity*. All government revenues and expenditures must be collected in a general fund.
d. *Nondiscretionary Appropriation*. The amount approved by the legislative council should be utilized economically, efficiently and effectively.
e. *Periodic*. Budget is a periodic process, can be annual or multi-yearly.
f. *Accuracy*. Budget estimates should not include hidden reserves that can serve as pockets of waste and budget inefficiency and can lead to the emergence of underestimate income and overestimate expenditures.
g. *Clear*. Budget should be simple, understandable to the public, and not confusing.
h. *Publicly Known*. The budget should be informed to the public at large, so that the public can know the allocation of government budget usage.

Research Methodology
Research Design, Population, and Sample

The design of this research is to analyze the determination of growth and poverty levels in the Corridor Areas of Papua and Maluku. Corridor Papua - Maluku Islands (consist of 5 Economic Centers: Ambon, Sorong, Manokwari, Jayapura and Marauke). The data used in this research is secondary data. The secondary data used is the incorporation of the time series from 2004 to 2016 and the cross section. The data used are growth rate / per capita income, consumption expenditure, poverty level, investment expenditure, infrastructure, education budget allocation, tax, subsidy and labor force. The data is processed using path analysis method and E-Views 9.0 analysis tool.

Variable Definition and Measurement Scale

The variables in this research may consist of several indicators, therefore must have conceptual definition, operational definition, and measurement scale. The following is a table on the conceptual and operational definitions of research variables.

Table 1: Conceptual Definition and Variable Operational

No.	Variable	Conceptual Variable Definition	Operation Variable Definition	Scale
1.	Per capita Income	Per capita Income is the average income of the population in a country. Per capita income is derived from the division of national income of a country with the population of the country. Revenue per capita also reflects GDP per capita.	Per capita Income is the sum of per capita income value in Papua and Maluku Economic Corridor 2004-2016.	Ratio
2.	Foreign Investment	Foreign investment is long-term participation by other countries in various aspects. Among them are company management, technology transfer, and expert consultation.	Foreign investment is the amount of foreign investment in Papua and Maluku Economic Corridor 2004-2016.	Ratio
3.	Local Investment	Domestic investment is long-term participation where the participation comes from within the country.	Domestic investment is the amount of value of domestic investment in Economic Corridor Papua and Maluku year 2004-2016.	Ratio
4.	Infrastructure Budget Allocation	Infrastructure is a physical facility required and developed by public agencies aimed at meeting social and economic objectives and governmental functions in terms of transportation, electric power, water supply, waste disposal, and other similar services.	Infrastructure is the number of government allocations for infrastructure in the Economic Corridor of Papua and Maluku in 2004-2016.	Ratio
5.	Education Budget Allocation	The allocation of education budget is the allocation of budget to the education function in Indonesia's expenditure.	The budget allocation for education is the amount of government allocation for education in Papua and Maluku Economic Corridor 2004-2016.	Ratio
6.	Consumption	Consumption expenditure is the amount of public consumption expenditure in Indonesia at constant prices.	Consumption is the amount of public consumption expenditure in Papua and Maluku Economic Corridor 2004-2016.	Ratio
7.	Tax Revenue	The tax in this research is the amount of taxes received by the Indonesian government.	Tax is the amount of income received from the tax sector in the Economic Corridor of Papua and Maluku in 2004-2016.	Ratio

No.	Variable	Conceptual Variable Definition	Operation Variable Definition	Scale
8.	Number of Subsidies	Subsidies are government expenditures in the form of transfer of payment, which means that expenditure is not get rewarded.	Subsidy is the amount of government allocation for subsidy in Papua and Maluku Economic Corridor 2004-2016.	Ratio
9.	Poverty Level	The poverty rate is the percentage of the population below the poverty line, where poverty is defined as a lack of income to meet basic or basic living needs. The data used is gini ratio.	Poverty is the percentage of poor people in Economic Corridor Papua and Maluku in 2004-2016.	Ratio

Source: data processed

Analysis Method

Panel data analysis will use for this research. Panel data analysis according to Gujarati and Porter (2010) is a multiple linear analysis that uses a number of objects and a number of years (pool). Panel data analysis is consisting of three types of estimation techniques, namely: Common Effect model, Fixed Effect model and Random Effect model. To make a selection of the panel models that have been produced, there are several tests that need to be done: (i). Chow Test. Chow test is done to do the model selection whether Pooled Least Squared and Fixed Effect model will be selected; (ii). LM Test. This test is used to choose between Pooled Least Squared or Random Effect. This LM test is based on Chi-square distribution with degree of freedom equal to the number of independent variables; (iii). Hausman Test. Hausman test is used to determine the best model between Fixed Effect and Random Effect. Hausman test uses Chi-square value so that the decision of panel data method selection can be determined statistically.

1. **First Substructure Equation: Equation of Per Capita Income**
    In the first substructure equation there are 3 exogenous variables namely Investment value FDI (X_{1it}), Investment value DDI (X_{2it}), Infrastructure budget allocation (X_{3it}) and education budget allocation (X_{4it}), and one endogenous variable is per capita income (Y_{1it}).
    $$Y_{1it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + e_{1it}$$
2. **Second Substructure Equation: Equation of Consumption**
    In the substructure equation the 5 predetermined exogenous variables ie Investment value FDI (X_{1it}), Investment value DDI (X_{2it}), education budget allocation (X_{4it}), tax revenue (X_{5it}), subsidy amount (X_{6it}) and one predetermined endogen variable (Y_{1it}), the endogenous variable is the consumption level (Y_{2it}).
    $$Y_{2it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_6 X_{6it} + \beta_7 Y_{1it} + e_{2it}$$
3. **The Third Substructure Equation: Equation of Poverty**
    This equation represents the most recent substructure equation in the pathway model which describes the poverty rate in the form as follows:
    $$Y_{3it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_7 Y_{1it} + e_{3it}$$
    In the above equation it is clear that there are 3 predetermined variables consisting of 3 predetermined exogenous variables: Investment (X_{1it}), education budget allocation (X_{4it}), and tax (X_{5it}) and 1 predetermined endogenous variable, per capita income (Y_{1it}), the endogenous is the level of poverty (Y_{3it}).
    Note:
    Y_1 = Per capita Income
    Y_2 = Consumption Expenditure
    Y_3 = Poverty level
    X_1 = Investment Level (FDI)
    X_2 = Investment Level (DDI)
    X_3 = Infrastructure
    X_4 = Education budget allocation
    X_5 = Tax

X_6 = Subsidy

Analysis and Discussion

Characteristic Variables

According the data that given by BPS, the per capita income of the Papua-Maluku Islands Economic Corridor are as follows: Sorong is the region with the highest per capita income (around Rp277.91 millions), second is Manokwari (Rp170.71 millions), third is Jayapura (Rp86.27 millions), fourth is Ambon (Rp38.76 Millions) and the last and the lowest is Merauke (Rp26.52 millions).

In other side the total consumption of Jayapura is Rp7.815.13 billion, which is the highest overall consumption value in the Papua-Maluku Islands economic corridor. Next is Merauke with total consumption value of Rp4.652.3 billion, Ambon is Rp4.092.6 billion, Manokwari is Rp2.600.00 billion, and Sorong is the region with the lowest overall consumption of Rp1.360.93 billion.

For the poverty rate, Manokwari and Sorong is the region with the highest amount of poverty. In the Manokwari, the poverty rate is at 35.79%, while Sorong is 34.99%. For Jayapura, the poverty rate is at 23.24% and the Merauke poverty level is 16.06%. The region with a low poverty rate is Ambon. It is seen that there is big difference between Ambon and other areas, where the poverty rate in Ambon only 5.86%.

For Foreign Investment (FDI) in Papua-Maluku Islands Economic Corridor, it is seen that Jayapura dominates investment rate of FDI with investment value of US$568,62 million. Then the area of Sorong and Manokwari get the same amount of FDI investment, with an investment value of US$82.07 Million. Ambon region gets a FDI of US$22.62 million and Merauke region gets a FDI of US$0.19 million and known as the region with the lowest FDI. For the Domestic Investment (DDI) has been seen a big difference between Jayapura with other regions. DDI in Jayapura area amounted to Rp415.92 billion. While the region with the lowest DDI is Ambon with investment value of DDI of Rp1, 16 billion. In the Sorong and Manokwari areas, the DDI value of both regions is as large, with an value of DDI of Rp 47.87 billion and Merauke gets DDI of Rp42, 18 billion.

For government spending on the infrastructure sector of Papua-Maluku Islands Economic Corridor, Jayapura occupies the highest position with an infrastructure value of Rp415, 92 billion. Then it is Merauke with infrastructure value of Rp233.5 billion, and Sorong with infrastructure value of Rp 135.74 billion. In the Manokwari area, the infrastructure value is Rp115.46 billion, and Ambon is the region with the lowest infrastructure value with only Rp76.76 billion. For government spending on the education sector of the Papua-Maluku Islands Economic Corridor tends to be heterogeneous. Ambon region became the region with the highest education with a value of Rp318.26 billion. Next is Jayapura and Merauke with education budget value of Rp 243.16 billion and Rp229.43 billion respectively. The Manokwari region has an education expenditure of Rp180.41 billion, and Sorong is the region with the lowest education government expenditure at Rp132.18 billion.

For tax revenue of the Papua-Maluku Islands Economic Corridor, Jayapura has tax revenue of Rp41.56 billion. Ambon region has tax revenues of Rp30.36 billion, Manokwari of Rp 12.24 billion, Merauke area of Rp10.04 billion, and Sorong became the lowest with a value of Rp3.09 billion. For the subsidies and social assistance funds of Papua-Maluku Islands Economic Corridor. The highest area that gets subsidy is Merauke with a value of Rp132.74 billion. Sorong of Rp22.33 billion, while Manokwari amounted to Rp22.03 billion. The regions of Jayapura and Ambon received the lowest subsidy funds, which were Rp11.59 billion for Jayapura, and Rp6.11 billion for Ambon.

Result Analysis and Discussion

This research has three models in it. Each model is examined to see the effect of variables to each economic corridor.

a. Model I

Model I sees the influence of FDI, DDI, infrastructure budget and Education budget. In effort to produce a good model, hence the first step is run Chow Test and Hausman Test, to compare between using Common Effect Model or Fixed Effect Model or Random Effect. The Chow and Hausman Test results are shown in Table 2 below.

Table 2. Results of Model Selection Estimation with Chow and Hausman Test

Method	Prob. Chi-square	Result	Description
Chow Test	0,0000	H_0 reject	*Fixed effect*
Hausman Test	0.9869	H_0 reject	*Random effect*

Source: data processed

After testing using chow test with null hypothesis (H_0) is common effect model obtained by probability value from Chi-square equal to 0.0000 $<\alpha$ 0.05. Thus H_0 is rejected, so a better model used is estimation with fixed effect model. By testing using Hausman Test where H_0 is a random effect model obtained the probability value of Chi-square of 0.000 $<\alpha$ 0.05. Thus H_0 is rejected, so a better model used is estimation with random effect model.

Hypothesis Testing

Hypothesis testing of Model I is listed in Table 3 below.

Table 3: Result of Estimation of Model I Economic Corridor Papua-Maluku Islands with Random Effect Model

Dependent Variable: Per capita Income					
Independent Variables	**Hypothesis**	**Coefficient**	**Std. Error**	**t-stat**	**Prob.**
Constants	+	34.29386	47.83360	0.716941	0.4762
FDI	+	47.43203	66.43097	0.714005	0.4780
DDI	-	-0.176252	88.14728	-0.002000	0.9984
Infrastructure	+	0.302072	0.126927	2.379897	0.0205
Education	+	0.143823	0.076868	1.871054	0.0662
R-square			0.179170		
Adjusted R-square			0.124448		
F-stat			3.274179		
Prob. F-stat			0.017064		

Source: data processed

1. Coefficient of Determination Analysis
   Based on statistical results, the Adjusted R-Square value for Papua-Maluku Islands Economic Corridor in Model I is 0.124448 or 12.48%. This explains the independent variables (FDI, DDI, Infrastructure and Education) can explain the dependent variable (per capita income) of 12.48%, while the remaining 87.52% is explained by other factors not included in the model.
2. F Test

Based on the test results, the significant value for the F test of 0.017064 <0.05, then the overall independent variables (FDI, DDI, Infrastructure and Education) affect the dependent variable (per capita income) simultaneously and fit model to test hypothesis.

3. T Test

Base on t-test examination, there is a negative but insignificant of DDI on per capita income. Infrastructure has a significant positive effect on per capita income and Education has a significant positive effect on per capita income.

b. Model II

Model II sees the influence of FDI, DDI Investment, Education budget, taxes, subsidy and per capita income on Consumption Expenditure on Papua - Maluku Islands Economic Corridor. The Chow and hausman test results are shown in Table 4. below.

Table 4. Results of Model Selection Estimation with Chow Test

Method	Prob. Chi-square	Decision	Description
Chow Test	0.0000	H0 reject	Fixed effect
Hausman Test	1.0000	H0 reject	Random effect

Source: data processed

At this model II, also better to use random effect model.

Hypothesis Testing

Hypothesis testing on Model II is presented in Table 5. below.

Table 5: Result of Estimation of Model II Economic Corridor of Papua-Maluku Islands with Random Effect Model

Dependent Variable: Consumption Expenditure					
Independent Variables	Hypothesis	Coefficient	Std. Error	t-stat	Prob.
Constants	+	1.285417	0.172526	7.450568	0.0000
Per capita Income	-	0.001044	0.000758	-1.376950	0.1742
FDI	+	1.248572	0.289741	4.309271	0.0001
DDI	-	0.605463	0.475896	-1.272260	0.2087
Education	+	0.009603	0.001058	9.075334	0.0000
Tax	+	0.036634	0.005258	6.967065	0.0000
Subsidy	-	0.028930	0.083292	-0.347336	0.7297
R-square			0.971583		
Adjusted R-square			0.966321		
F-stat			184.6300		
Prob. F-stat			0.000000		

Source: data processed

1. Coefficient Determination Analysis
    Based on statistical results, the Adjusted R-Square in Model II is 0.966321 or 96.63%. This explains the independent variables can explain the dependent variable (Consumption Expenditure) of 96.63%, while the remaining 3.37% is explained by other factors not included in model.
2. F Test
    Based on the test results, the significant value for the F test is 0.0000 <0.05, then the overall independent variables simultaneously affect the dependent variable (Consumption) and model fit to test the hypothesis.
3. T Test
    FDI, Education and Tax has a significant and positive effect on Consumption Expenditure at Economic Corridor Papua-Maluku Islands.Meanwhile, Per capita income, DDI and subsidies have a negative but insignificant effect on consumption expenditure.

c. Model III

Model III looks at the influence of Per capita Income, FDI Investment, DDI, Education budget, and tax on Poverty Rate on Papua - Maluku Islands Economic Corridor. The Chow and Hausman test results are listed in Table 6 below.

Tabel 6: Results of Model Selection Estimation with Chow Test

Method	Prob. Chi-square	Result	Description
Chow Test	0.0000	H0 reject	Fixed effect
Hausman Test	1.0000	H0 reject	Random effect

Source: data processed

After testing using Chow and Hausman test, so a better model used is estimation with random effect model.

Hypothesis Testing

Hypothesis testing on Model III is presented in Table 7 below.

Table 7: Result of Estimation of Model III Economic Corridor Papua-Maluku Islands with Random Effect Model

Dependent Variable: Poverty					
Independent Variables	Hypothesis	Coefficient	Std. Error	t-stat	Prob.
Constants	+	25.27735	2.262464	11.17249	0.0000
Per Capita Income	+	3.175979	1.215209	2.613524	0.0115
FDI	-	-7.272160	4.042412	-1.798966	0.0775
DDI	+	6.043698	6.007366	1.006048	0.3188
Education	-	-0.058647	0.019726	-2.973028	0.0044
Tax	-	-0.040460	0.029750	-1.359980	0.1794
R-square			0.787088		
Adjusted R-square			0.752248		
F-stat			22.59139		
Prob. F-stat			0.000000		

Source: data processed

1. Determination Coefficient Analysis
   Based on statistical results, the Adjusted R-Square value in Model III is 0.752248 or 75.22%. This explains the independent variables can explain the dependent variable (Poverty rate) of 75.22%, while the remaining 24.78% is explained by other factors not included in the model.

2. F Test
   Based on the test results, the significant value for the F test is 0.0000 <0.05, the overall independent variables (Consumption, FDI, DDI, Education, Labor Force) together affect the dependent variable (poverty rate) and fit model to test the hypothesis.

3. T Test
   Per capita Income has a positive and significant effect on the poverty level. FDI and Education has a significant but negative effect on the poverty level. Meanwhile, DDI has a positive but insignificant effect on the level of poverty and Tax has a negative effect but insignificant on the level of poverty.

Conclusion, Implication and Suggestion
Conclusions

Based on the above analysis and discussion on Economic Corridor Papua-Maluku Islands, it can be concluded as follows:
(a). For Equation Model I: (i). Infrastructure and Education has a positive and significant effect on per capita income; and (ii). FDI and DDI has no significant effect on per capita income;
(b). For Equation Model II: (i). FDI, Education, Tax has a positive and significant effect on consumption expenditure; and (ii). DDI, Subsidy and Revenue per Capita has no significant effect on consumption expenditure;
(c). For Equation Model III: FDI, Education and Per capita Income has a significant effect on Poverty Rate; and (ii). DDI has no significant effect on Poverty Rate;

Policy Implications

In achieving the success of the MP3EI policy, one of them is the welfare of society. The achievement of welfare is characterized by a decrease in gini ratio and increased per capita income. In achieving this, need to consider the supporting variables as follows: (i). Infrastructure is necessary for income generation and income distribution. The existence of infrastructure is able to provide connectivity and increase per capita income in the Economic Corridor area. The allocation of infrastructure budget throughout the Economic Corridor is able to encourage economic growth in Indonesia; (ii). Education budget allocation is needed to improve the quality of human resources. Increasing the quality of human resources, able to compete and boost Human Development Index (HDI) of Indonesia when compared with ASEAN countries; (iii). High public consumption expenditure signifies sufficient income as well as public consumption is determined by price. Controlled prices are due to the policy of price monitoring and improvement of commodity trading, improvement of central and regional policy coordination, and the stable core inflation; and (iv). Investment consists of FDI and DDI. Investment encourages economic activity, among others are increased regional growth, increased competitive advantages and technology transfer. In attracting investment so that the value of increased investment conducted improvements in competitiveness and investor perceptions.

Suggestions

Based on conclusions and policy implications, the suggestion from the research are: (i). Increase the value of investment by improving competitiveness and investor perception. Improved competitiveness is driven by strategic infrastructure development programs and improvements in the business climate as well as the continued impact of policy packages that are expected to drive business activities; (ii). Equity allocation of government budget in infrastructure and education. Equity allocation of both budgets is able to encourage economic activity in every corridor and at the same time will improve the quality of human resources; (iii). Increased tax revenue by applying a progressive tax; and (iv). Government policy not only prioritizes pro growth but also must pay attention to pro poor and pro jobs.

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