

Determinants of Labor Productivity and Economic Growth in Indonesia

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Abstract:

Indonesia will encounter booming demographic bonus in the period 2020-2030. Demographic bonus is a phenomenon which structure of population is very advantageous in terms development. Population of productive age is very large, while proportion of young age is still few and proportion of elderly age is not lot. However, labor productivity and economic growth in Indonesia have been low over the past seven years. Objective of this research was to analyze the determinants of labor productivity and economic growth in Indonesia during the period 2013-2019. Independent variables were human development index, economic infrastructure, provincial minimum wage, labor force participation rate, regional expenditure, and regional generated revenue. Dependent variables were labor productivity and economic growth. Secondary data obtained from BPS - Statistics Indonesia and analyzed by using simultaneous equation model with E-Views10 statistical program. The results of research showed that human development index, economic infrastructure, and provincial minimum wages have significant positive effect on labor productivity in Indonesia. Then, labor productivity, labor force participation rates, regional expenditure, and regional generated revenue have significant positive effect on economic growth in Indonesia.

Key Word: Labor Productivity; Human Development Index; Economic Infrastructure; Provincial Minimum Wage; Economic Growth; Labor Force Participation Rates; Regional Expenditure; Regional Generated Revenue.

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I. Introduction

Labor productivity is one of indicators used to measure the achievement of Sustainable Development Goals (SDGs). Under the eighth goal, which it is to support inclusive and sustainable economic growth, a full and productive labor, and decent work for all (United Nations, 2015). Then, productivity is also one of the priority agendas by Indonesia's government. This is reflected in inclusion of a productivity improvement programme in Nawacita that was initiated by government during the period 2014-2019. In the sixth objective, Nawacita emphasized government's programme is, "Increasing productivity of people and competitiveness in international market so that Indonesia's people can advance and rise together with other Asian nations" (Asnawi, 2018). From these premises, labor productivity can be seen as an aspect that needs to be improved.

International Labor Organization (ILO) releases labor productivity data on the period 2019 from countries around the world. The results show that labor productivity in Indonesia is still low in terms of competitiveness in the international market, it can be seen from following figure:

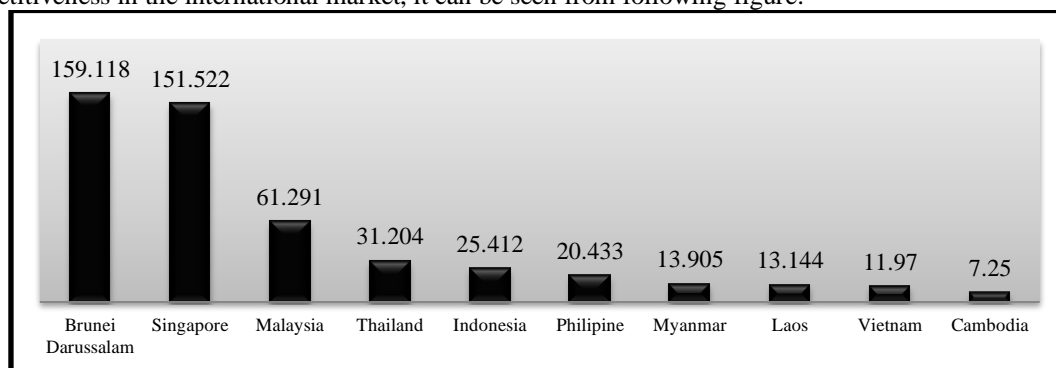


Figure 1. Labor Productivity in ASEAN on the period 2019 (GDP constant 2011 international \$ in PPP)
Source: International Labor Organization Statistics (ILOSTAT)

From Figure 1, countries with highest labor productivity are Brunei Darussalam, Singapore, Malaysia, Thailand, and in the fifth rank is Indonesia. The phenomenon that occurs is Indonesia has more employment than Brunei Darussalam, Singapore, Malaysia and Thailand. However, labor productivity in Indonesia is lower than all four neighbors countries. To find out the progress of labor productivity in Indonesia during the period 2013-2019, it can be seen in this following figure:

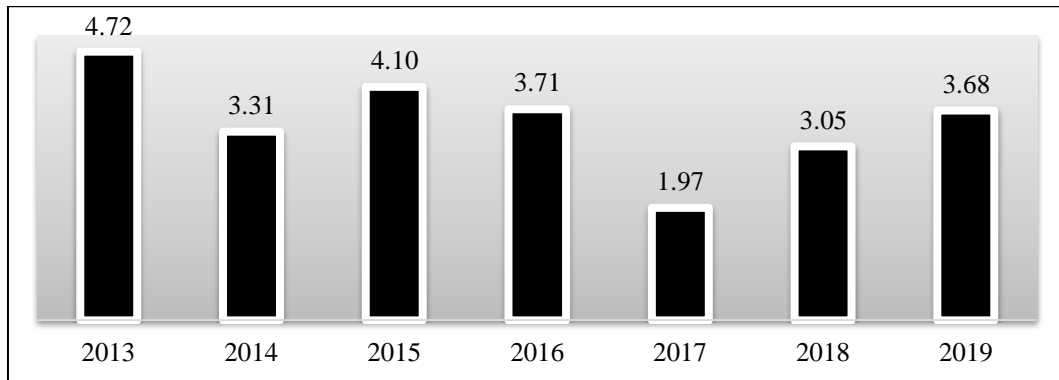


Figure 2. Growth of Indonesian Labor Productivity (%)
Source: International Labor Organization Statistics (ILOSTAT).

From Figure 2, ILOSTAT released data of labor productivity in Indonesia with a growth rate, specifically year of 2013 (4,72%), year of 2014 (3,31%), year of 2015 (4,10%), year of 2016 (3,71%), year of 2017 (1,97%), year of 2018 (3,05%), dan year of 2019 (3,68%). From these data, progress of labor productivity in Indonesia tends to be low in percentage and fluctuates every year.

Government had focus on increasing Indonesia's labor productivity is one of the work programmes carried out by Ministry of Manpower. Directorate General of Training and Productivity Development (Ditjen Binalattas) is one of implementing elements who are under and responsible to Minister of Manpower. Ditjen Binalattas officiates to organizing the formulation and implementation of policies in the field to increasing labor competitiveness and productivity (Kemnaker, 2018).

Several things that can be done to support government programmes at an effort to improve labor productivity performance in Indonesia include: (1) Improving the level of human development index, so that the quality of labor can increase productivity and economic competitiveness; (2) Effective use of economic infrastructure and facilitating productive activities; (3) It is necessary to stipulate minimum wage regulations to protect the decent living needs of employment in Indonesia.

Training programmes, apprenticeship, and competency standardization are the government's efforts to increase national output through labor productivity. If labor productivity was higher, so increasing value added production follows "Agregat Demand" can be maintained by opening up the breadth of employment opportunities. If more workers participate in the economic sectors, rate of economic growth can be increased (Blanchard dan Johnson, 2017:277).

Conversely, if labor productivity has decreased, ability of labor to produce output will not be absorbed by the economic sectors. The value added of production that decreased previously will have an impact on effectiveness of existing labor, so that employment is not opened. This will disrupt the economy because it will result in massive unemployment. So, this indicator becomes interesting to study. Then data on percentage of economic growth in Indonesia during the period 2013-2019 can be seen in this following figure:

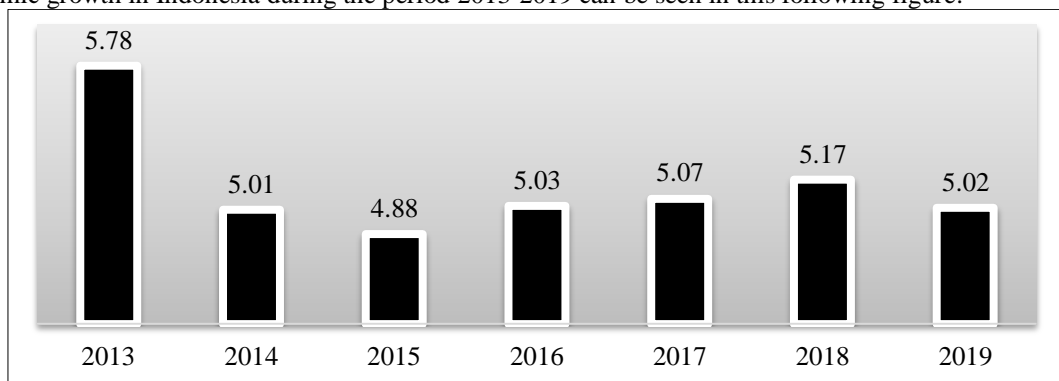


Figure 3. Economic Growth (%) in Indonesia
Source: BPS - Statistics Indonesia.

Figure 3. shows that BPS - Statistics Indonesia provides data of Indonesian's economy is only able to grow in range of 5%, specifically year of 2013 (5,78%), year of 2014 (5,01%), year of 2015(4,88%), year of 2016 (5,03%), year of 2017 (5,07%), year of 2018 (5,17%), dan year of 2019 (5,02%). It means, Indonesia has experienced not too fast growth last seven years. The phenomenon occurs economic growth is far from target of National Medium-Term Development Plan (RPJM) on the period 2015-2019 which is 8%.

The sluggish economic growth can be promoted by an increase in community output caused by increasing number of production factors used in community production process. Remember that Indonesia is a large country which has the fourth largest population in the world. There are three main factors or components in economic growth of every nation, specifically accumulation of capital, population growth which ultimately leads to a growth of labor, and technological advances. (Todaro dan Smith, 2011:170).

Fiscal policy plays a dynamic role in developing countries. As said in United Nations Report "Taxes and Fiscal Policy", fiscal policy was assigned the main task of capturing sufficient savings from low output of developing countries to fund economic development programmes and prepare some place for greater public investment activity. In a development plan, a balance is reached both in real terms and money terms. In other words, physical plan must be matched with financial plan. In condition to increase the rate of investment, government must early establish investment policies in public sector (Jhingan, 2018:376).

II. Material And Methods

This research focuses on determinants of Labor Productivity, specifically Human Development Index, Economic Infrastructure, and Provincial Minimum Wages. Then, determinants of Economic Growth are Labor Productivity, Labor Force Participation Rate, Regional Expenditure, and Regional Generated Revenue. This research used secondary data.

Data type is panel data. Panel data is aggregated of time series data and cross section data. This research used time series data for 7 years ($t = 7$) specifically from 2013 until 2019. While cross section data in this research were 33 provinces ($n = 33$) so that total data used in this research is 231 data. Secondary data were obtained from BPS-Statistics Indonesia and other reports relating to this research. Identification and operational definition of the research variables are as follows:

1. Labor productivity is comparison of a work result achieved (output) with total resources used (input) to increase economic growth and achieve national development targets. International Labor Organization (2020) set the formula for labor productivity is:

$$\text{Labour Productivity} = \frac{\text{GDP at constant prices}}{\text{number of employed persons}}$$

2. Human development index is a measuring tool that can show percentage of achievement in human development by taking into account three factors, specifically: health, education, and purchasing power to represent the quality of human resources. Published formula by BPS - Statistics Indonesia (2020) is:

$$\text{IPM} = \sqrt[3]{I_{\text{health}} \times I_{\text{education}} \times I_{\text{purchasing power}} \times 100}$$

This variable used human development index data by province in Indonesia (new method).

3. Economic infrastructure is services and facilities needed by wider community so that economic activity can run well. In this research, economic infrastructure is percentage of population who own cellular phone. As Bappenas (2020) released the types of economic infrastructure from indicators of inclusive economic development with the following calculation method is:

$$\text{Cellular phone users} = \frac{\sum \text{Population who own cellular phone}}{\sum \text{Population}} \times 100\%$$

This variable used percentage of population who own cellular phone data by province.

4. Provincial minimum wage is lowest monthly wage consisting of basic wage including a fixed allowance which is determined by governor was taking into account recommendations from Provincial Wage Council, which is a tripartite element. Minimum wage calculation formula is as follows:

$$\text{Minimum wages}_n = \text{Minimum wages}_t + \{ \text{Minimum wages}_t \times (\text{Inflation}_t + \% \Delta \text{Gross Regional Domestic Product}_t) \}$$

This variable used provincial minimum wage data per month by province in Indonesia.

5. Economic growth is an increase in public output or output that describes development of economy in a certain year when compared to previous year, regardless of whether increasing causes changes in economic structure or not. This variable uses data on gross regional domestic product at constant 2010 prices by province in Indonesia.

6. Labor force participation rate is percentage of total labor to working age population (population aged 15 years and over) capable of carrying out production activities. BPS - Statistics Indonesia (2020) declaring labor force participation rate can be calculated as follows:

$$\text{Labor force participation rate} = \frac{\text{total labor force}}{\text{total of population aged 15 years and over}} \times 100\%$$

This variable used Labor force participation rate data by province in Indonesia.

7. Regional expenditure is obligation of regional government which recognized as a reduction in net asset value that prioritized for increasing regional economic activity. This variable used total realization of provincial government expenditures data overall Indonesia by type of expenditure.

8. Regional generated revenue is all regional revenue from originally region economic sources and that is collected based on statutory regulations. This variable used realization of revenue data by provinces in Indonesia.

This research was conducted by created an econometric model in a system of simultaneous equations used panel data. The analytical tool used in data processing is E-views 10. Variables's data are different units, so that it uses logarithmic transformations. Logarithmic transformation can reduce the difference in measurement scale of variables. Another benefit of logarithmic transformations is variable constant slope coefficient that measure of the elasticity variable Y with respect to variable X, specifically percentage change in variable Y for each percentage change in variable X (Ghozali dan Ratmono, 2018:104). Equations of structural models are:

$$\begin{aligned} \text{LogLP}_{it} &= \alpha_{0it} + \alpha_1 \text{LogHDI}_{it} + \alpha_2 \text{LogEI}_{it} + \alpha_3 \text{LogPMW}_{it} + \varepsilon_{1it} \\ \text{LogEG}_{it} &= \beta_{0it} + \beta_1 \text{LogLP}_{it} + \beta_2 \text{LogLFPR}_{it} + \beta_3 \text{LogRE}_{it} + \beta_4 \text{LogRGR}_{it} + \varepsilon_{2it} \end{aligned}$$

Explanation:

- α_0, β_0 = intercept
- $\alpha_{1,2,3}$ = constant predetermined variable equation 1
- $\beta_{1,2,3,4}$ = constant predetermined variable equation 2
- LP = Labor Productivity (million rupiah)
- HDI = Human Development Index (ratio)
- EI = Economic Infrastructure (percent)
- PMW = Provincial Minimum Wage (million rupiah)
- EG = Economic Growth (billion rupiah)
- LFPR = Labor Force Participation Rate (percent)
- RE = Regional Expenditure (billion rupiah)
- RGR = Regional Generated Revenue (billion rupiah)
- i = cross section data, specially 33 province in Indonesia
- t = time series data, specially on period from 2013 until 2019
- ε = error term

Reduce form in this research into the following two equations are:

$$\begin{aligned} \text{LP} &= \Pi_0 + \text{HDI } \Pi_1 + \text{EI } \Pi_2 + \text{PMW } \Pi_3 \\ \text{EG} &= \Pi_4 + \text{LP } \Pi_5 + \text{LFPR } \Pi_6 + \text{RE } \Pi_7 + \text{RGR } \Pi_8 \end{aligned}$$

Explanation:

$$\begin{aligned} \Pi_0 &= \alpha_0 = [\text{LP} \quad \text{HDI} \quad \text{EI} \quad \text{PMW}] \\ \Pi_1 &= \alpha_1 = (\text{HDI}' \text{HDI})^{-1} \text{HDI}' \text{LP} \\ \Pi_2 &= \alpha_2 = (\text{EI}' \text{EI})^{-1} \text{EI}' \text{LP} \\ \Pi_3 &= \alpha_3 = (\text{PMW}' \text{PMW})^{-1} \text{PMW}' \text{LP} \\ \Pi_4 &= \beta_0 = [\text{EG} \quad \text{LP} \quad \text{LFPR} \quad \text{RE} \quad \text{RGR}] \\ \Pi_5 &= \beta_1 = (\text{LP}' \text{LP})^{-1} \text{LP}' \text{EG} \\ \Pi_6 &= \beta_2 = (\text{LFPR}' \text{LFPR})^{-1} \text{LFPR}' \text{EG} \\ \Pi_7 &= \beta_3 = (\text{RE}' \text{RE})^{-1} \text{RE}' \text{EG} \\ \Pi_8 &= \beta_4 = (\text{RGR}' \text{RGR})^{-1} \text{RGR}' \text{EG} \end{aligned}$$

Simultaneous system of equations identification procedure is as follows:

Table 1. Order Condition

Equation	K	K	m-1	Identification	Clarification
(1) Labor Productivity	8	3	2-1	$5 > 1$	Over-Identified
(2) Economic Growth	8	3	2-1	$5 > 1$	Over-Identified

Source: data was compiled.

Explanation:

m = number of endogenous variables in a given equation

k = number of predetermine variables in a given equation

K = number of predetermine and intercept variables in overall models

So in this research, simultaneous equation model is using Two Stage Least Square (2SLS) method.

III. Result

Gujarati (2012:340) explained that simultaneity problems arise because several independent variables are endogenous so that they tend to be correlated with the error term. Therefore, simultaneity test is basically a test whether there is a simultaneous relationship between endogenous variables that have been determined in research equation model. To find out concretely, according to Ghozali dan Ratmono (2018:262) can use Hausman's specification error test as follows:

Table 2. The Result of Simultaneity Test

Dependent Variable: LOGEG
 Method: Panel Least Squares
 Date: 01/03/21 Time: 11:44
 Sample: 2013 2019
 Periods included: 7
 Cross-sections included: 33
 Total panel (balanced) observations: 231

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.476661	1.765950	0.836185	0.4039
LOGLP	0.207679	0.044282	4.689900	0.0000
LOGLFPR	0.650733	0.348447	1.867527	0.0631
LOGRE	0.078325	0.051355	1.525156	0.1286
LOGRGR	0.796954	0.034677	22.98199	0.0000
RES	0.472174	0.065316	7.229046	0.0000
R-squared	0.944596	Mean dependent var	32.79503	
Adjusted R-squared	0.943365	S.D. dependent var	1.208945	
S.E. of regression	0.287706	Akaike info criterion	0.371874	
Sum squared resid	18.62429	Schwarz criterion	0.461288	
Log likelihood	-36.95146	Hannan-Quinn criter.	0.407938	
F-statistic	767.2203	Durbin-Watson stat	0.188153	
Prob(F-statistic)	0.000000			

Source: E-Views10 output.

The result of E-views10 output shows that coefficient of residual variable is significant with p value 0,0000. It means that simultaneity test shows there is a simultaneous relationship between equations of Labor Productivity and Economic Growth in Indonesia. The result of simultaneous equation test for Labor Productivity are:

Table 3. Simultaneous Equation Test for Labor Productivity

Dependent Variable: LOGLP
 Method: Panel Two-Stage EGLS (Period SUR)
 Date: 01/11/21 Time: 00:04
 Sample: 2013 2019
 Periods included: 7
 Cross-sections included: 33
 Total panel (balanced) observations: 231
 Linear estimation after one-step weighting matrix
 Period SUR (PCSE) standard errors & covariance (d.f. corrected)
 Instrument specification: C LOGHDI LOGEI LOGPMW LOGLFPR
 LOGRE LOGRGR
 Constant added to instrument list

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.488889	2.978078	-0.835737	0.4042
LOGHDI	1.724265	0.865320	1.992633	0.0475
LOGEI	1.278526	0.138599	9.224626	0.0000
LOGPMW	0.577349	0.074434	7.756561	0.0000
Weighted Statistics				
R-squared	0.715642	Mean dependent var	15.79082	
Adjusted R-squared	0.711884	S.D. dependent var	14.97120	
S.E. of regression	0.973792	Sum squared resid	215.2574	
F-statistic	190.4299	Durbin-Watson stat	2.104363	
Prob(F-statistic)	0.000000	Second-Stage SSR	215.2574	
Instrument rank	7	Prob(J-statistic)	0.000000	

Source: E-Views10 output.

The result of E-Views10 output shows simultaneous equation test for Labor Productivity becomes:

$$\text{LogLP} = -2,489 + 1,172\text{LogHDI} + 1,278\text{LogEI} + 0,577\text{LogPMW}$$

Constant coefficient is -2,489. This coefficient means in a constant state or there is no change in variables of Human Development Index, Economic Infrastructure, and Provincial Minimum Wages, Labor Productivity in Indonesia is -2.489 million rupiah. So, variables of Human Development Index, Economic Infrastructure, and Provincial Minimum Wages must be continue to increase every year so that Labor Productivity also increases. The adjusted R² value is 0,715. This means 71,5% of Labor Productivity variable can be explained by independent variables, specifically Human Development Index, Economic Infrastructure, and Provincial Minimum Wage. While the rest (100% - 72% = 28%) is explained by variables outside from equation model. Furthermore, the results of simultaneous equation test for Economic Growth are:

Table 4. Simultaneous Equation Test for Economic Growth

Dependent Variable: LOGEG				
Method: Panel Two-Stage EGLS (Period SUR)				
Date: 01/11/21 Time: 00:08				
Sample: 2013 2019				
Periods included: 7				
Cross-sections included: 33				
Total panel (balanced) observations: 231				
Linear estimation after one-step weighting matrix				
Period SUR (PCSE) standard errors & covariance (d.f. corrected)				
Instrument specification: C LOGHDI LOGEI LOGPMW LOGLFPR LOGRE LOGRGR				
Constant added to instrument list				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.827188	1.329781	0.622049	0.5345
LOGLP	0.425232	0.085253	4.987864	0.0000
LOGLFPR	0.536378	0.193863	2.766789	0.0061
LOGRE	0.207927	0.054931	3.785247	0.0002
LOGRGR	0.560761	0.045793	12.24566	0.0000
Weighted Statistics				
R-squared	0.854622	Mean dependent var	18.67548	
Adjusted R-squared	0.852049	S.D. dependent var	44.61814	
S.E. of regression	0.856442	Sum squared resid	165.7695	
F-statistic	220.0016	Durbin-Watson stat	1.661502	
Prob(F-statistic)	0.000000	Second-Stage SSR	232.9998	
Instrument rank	7	Prob(J-statistic)	0.041835	

Source: E-Views10 output.

The result of E-Views10 output shows simultaneous equation test for Economic Growth becomes:

$$\text{LogEG} = 0,827 + 0,425 \text{LogLP} + 0,536 \text{LogLFPR} + 0,208 \text{LogRE} + 0,561 \text{LogRGR}$$

Constant coefficient is 0,827. This coefficient means if in a constant state or there is no change in the variables of Labor Productivity, Labor Force Participation Rate, Regional Expenditure, and Regional Generated Revenue, then Economic Growth in Indonesia will be 0,827 billion rupiah or 827 million rupiah. The adjusted R² value is 0,85. This means that 85% of the Economic Growth variable can be explained by the independent variables, specifically Labor Productivity, Labor Force Participation Rate, Regional Expenditure, and Regional Generated Revenue. While the rest (100% - 85% = 15%) is explained by variables outside of equation model.

IV. Discussion

Based on the results of E-Views10 output, analysis of each variable determinants of Labor Productivity and Economic Growth in Indonesia are as follows:

1. Effect of Human Development Index on Labor Productivity

Human Development Index has positive effect on Labor Productivity in Indonesia. This means if Human Development Index rises, labor productivity will also increase and on the contrary. If Human Development Index increases by 1 ratio, value of Labor Productivity will increase up to 1,172 million rupiah. Then, significance probability value is 0,0475 < 0,05. This means Human Development Index has significant effect on Labor Productivity in Indonesia.

Health is a fundamental necessity for every human being, without public health can not generate productivity for the country. And then, welfare of civilization will be directly related to people needs for quality education so that literacy rate will increase. The higher education someone make productivity will increase so that it will increase both individual and national income. This result is in accordance with the research by Fitri et al. (2015) that explained Human Development Index has significant and positive effect on labor productivity in West Sumatra.

2. Effect of Economic Infrastructure on Labor Productivity

Economic Infrastructure has positive effect on Labor Productivity in Indonesia. This means if Economic Infrastructure increases, Labor Productivity will also increase and on the contrary. If Economic Infrastructure increases by 1 ratio, then Labor Productivity value will increase up to 1,278 million rupiah. Then, significance probability value is $0,0000 < 0,05$. This means Economic Infrastructure has significant effect on labor productivity in Indonesia.

Using mobile phones for Start Up and Fintech companies had function of reaching and maintaining relationships with their customers. Mobile phones are connected to internet provider was accessing to new markets for running a business. All have been mentioned are positive effects of advances in technology and communication to create efficiency and productivity. These results are consistent with the research by Widayati (2010) that revealed: all infrastructures (roads, electricity, telephones, and clean water) have influence on economic productivity in Java.

3. Effect of Provincial Minimum Wages on Labor Productivity

Provincial Minimum Wage has positive effect on Labor Productivity in Indonesia. This means if Provincial Minimum Wage increases, Labor Productivity will also increase and on the contrary. If Provincial Minimum Wage increases by 1 million rupiah, Labor Productivity value will increase up to 0,577 million rupiah or 577 thousand rupiah. Then, significance probability value is $0,0000 < 0,05$. This means Provincial Minimum Wage has significant effect on Labor Productivity in Indonesia.

Direct effect of wage fixing is labor will be willing to work in a company. Then labor will also be willing to spend more time and effort to obtain overtime allowances in accordance with Efficiency Wage Theory. More time and energy that is devoted to labor force will increase productivity in output. This result is in accordance with the research by Novianto and Marsisno (2019) that explained real wages have significant positive effect on Labor Productivity in Indonesia.

4. Effect of Labor Productivity on Economic Growth

Labor Productivity has a positive effect on Economic Growth in Indonesia. This means if Labor Productivity increases, then Economic Growth will also increase and on the contrary. If Labor Productivity increases by 1 million rupiah, value of Economic Growth, specifically Gross Regional Domestic Product, will increase up to 0,425 billion rupiah or 425 million rupiah. Then, significance probability value is $0,0000 < 0,05$. This means Labor Productivity has significant effect on Economic Growth in Indonesia.

Productivity and global market expansion into key Economic Growth in the current and coming years. If the external sector stability is conducive, then Indonesia gets opportunity to focus on efforts to increase productivity through human resources and other state assets as the strength to compete in international markets. These results are consistent with the research by Abdullah et al. (2013) that interpreted, there are short term causality between Labor Productivity and Economic Growth in OECD countries.

5. Effect of Labor Force Participation Rate on Economic Growth

Labor Force Participation Rate has a positive effect on Economic Growth in Indonesia. This means if Labor Force Participation Rate increases, then Economic Growth will also increase and on the contrary. If Labor Force Participation Rate increases by 1 percent, value of economic growth, specifically Gross Regional Domestic Product, will increase up to 0,536 billion rupiah or 536 million rupiah. Then, significance probability value is $0,0061 < 0,05$. This means Labor Force Participation Rate has significant effect on Economic Growth in Indonesia.

Workforce, working population, and unemployment rate of labor is a resource for development activities. Number and composition of workforce will continue to change in line with demographic process. Increasing Labor Force Participation Rate partly caused by social conditions better national economy which influenced production factors in Indonesia. This result is in accordance with the research by Sunardi et al. (2017) that revealed Labor Force Participation Rate has positive and significant effect on Economic Growth of Bolaang Mongondow Timur Regency.

6. Effect of Regional Expenditure on Economic Growth

Regional expenditure has a positive effect on Economic Growth in Indonesia. This means if Regional Expenditures increase, then Economic Growth will also increase and on the contrary. If Regional Expenditures increase by 1 billion rupiah, then value of Economic Growth, specifically Gross Regional Domestic Product, will increase up to 0,208 billion rupiah or 208 million rupiah. Then, significance probability value is $0,0002 < 0,05$. This means Regional Expenditure has significant effect on Economic Growth in Indonesia.

Generally, regional government will try to determine Regional Expenditure targets, then determine level of income at least to cover total budget that has been determined. Regional government expenditure is generally divided into expenditures for purchase of goods or services and transfer spending (subsidies, disaster relief, and etc). Each Regional Expenditure allocation has different multiplier coefficient, but both have positive impact on income and Economic Growth. These results are consistent with the research by Dudzevičiūtė et al. (2017) that interpreted eight European Union countries have significant relationship between Government Expenditure and Economic Growth.

7. Effect of Regional Generated Revenue on Economic Growth

Regional Generated Revenue positive effect on Economic Growth in Indonesia. This means if Regional Generated Revenue increases, then Economic Growth will also increase and on the contrary. If Regional Generated Revenue increase by 1 billion rupiah, then value of Economic Growth specifically Gross Domestic Product will increase up to 0,561 billion or 561 million rupiah. Then, significance probability value is $0,0000 < 0,05$. This means Regional Generated Revenue has significant effect on Economic Growth in Indonesia.

Increasing Regional Generated Revenue occurred because of rising profit of Regional Owned Enterprises. However, local taxes and user charges remain a major part of revenue value. Positive and significant impact of Regional Generated Revenue on Economic Growth reflects the success of income value in developing regions. If Regional Generated Revenue is higher, so is regional development budget. This result is accordance with the research by Priambodo (2015) that explained Regional Generated Revenue and labor have positive and significant effect at $\alpha = 5\%$ on Economic Growth in Central Java Province.

V. Conclusion

Based on data from BPS - Statistics Indonesia in September 2020, total population of Indonesia is 270,20 million people. Annual population growth rate (2010-2020) is 1,25% with fairly large proportion of population aged 70,72%. Under these conditions, increasing Labor Productivity and Economic Growth can be done through:

1. National Health Insurance and National Social Security System for Labor must be able to guarantee a decent life for employment. Then, expansion the Job Training Development Center needs to be carried out in every region/city, including coastal and inland areas order to train community job skills.
2. Building continue Base Transceiver Station (BTS) in Kalimantan Island include areas bordering Malaysia, in Papua Island, include areas bordering with Papua New Guinea, and in East Nusa Tenggara Province, include areas bordering Timor Leste. Equitable development transmitting station can be a solution imbalances in information and communication facilities across the provinces.
3. Regulation of wage in Job Creation Law must be monitored so that it will always have effect on increasing labor productivity nationally.
4. Encouraging the strength and developing capacity of Indonesian Human Resources Excellence through vocational training by building workshops and provision of vocational training equipment through Training Center.
5. Encouraging flexibility and labor mobility to enter and exit labor market is one of the reason Indonesia active in ASEAN Economic Community programme. One of programmes ASEAN Economic Community is free work profession across ASEAN, which consists by 8 professions, specifically engineers, architects, tourism workers, accountants, dentists, survey workers, medical practitioners, and nurses.
6. Efficient regional expenditure takes into account Expenditure Standards Analysis, price standards, activity benchmarks, and Minimum Service Standards. With Expenditure Standard Analysis, budget ceilings preparation of Budget Ceiling Temporary priorities have been based on output, benchmarks, and indicators of expected performance. Additionally, it can determine reasonableness cost of an implementation and minimize unclear costs.
7. Regional government collaborations with Ministry of Economy Creative should have same mission to generate economic activities based on local wisdom. It can be a solution as new local revenues other than tax and levies.

Suggestions that can be submitted from this research are as follows:

1. Human development index can be optimally affect productivity if supported by expansion of healthy and social security coverage for employment, as well as expansion of universal secondary education, training, vocational education and industry for labor force who does not work yet.
2. Economic infrastructure can optimally affect productivity with construction of Base Transceiver Station (BTS) or called transmitter stations that are evenly distributed throughout the country. This is intended to facilitate communication activities, facilitate access to information, and expand access to new markets for running a business.

3. Provincial minimum wage should be fully implemented as a safety net for those who are low wage. Companies and unions better to rely on negotiations at the plant level where increased productivity is an important consideration for setting wages for workers, rather than relying on minimum wage increases as a determinant of wage mechanism.
4. Labor productivity can optimally influence economic growth through improvement of human resources and development of adequate infrastructure, as well as regulation of the wage system that benefits all parties.
5. Labor force participation rate can be optimally affect economic growth when much of the labor force actively participate in the economy. People should be entrepreneurs rather than relying on the availability of jobs. Even in developing businesses, entrepreneurs can create new jobs.
6. Regional expenditure which continue to experience increase in future should prioritize expenditure allocations that directly related to public services such as education, health, and other social institutions. Budget allocation to productive sectors such as road repair, irrigation development and community micro-enterprises assistance will be driving force for the economy.
7. Regional generated revenue will continue to increase if area is able to manage the new potentials. In addition, public services facilitate the payment of taxes necessary for local taxes can be absorbed optimally.

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