

Analysis of Regional Expenditure in Education, Health and Infrastructure Sector on Human Development Index and Labor Productivity in Medan City

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ABSTRACT

The government plays an important role in development, one of which is human development and increasing productivity which can be achieved through education, health and infrastructure. The higher the level of quality to be achieved will increase productivity and human development index. Using path analysis tools and time series from 2010 to 2017 The results of the first analysis, that the direct effect of Regional Expenditure in the Education Sector (X1) is -0,135 less than the value of the indirect effect -0,384, which means that the Education Sector has a significant influence on Productivity Labor and Human Development Index in Medan City. For the direct effect of Regional Health Expenditures (X2) of 0.341, it is smaller than the value of the indirect effect of 0.606, meaning that the Health Sector has a significant effect on Labor Productivity and Human Development Index in Medan City. Finally, the direct influence of Regional Expenditure in the Infrastructure Sector (X3) of 0.125 is greater than the value of the indirect influence of -0.056, meaning that the Infrastructure Sector does not have a significant effect on Labor Productivity and Human Development Indexes such as in Medan City.

Keywords: *Regional Education Sector Expenditure, Health Sector, Infrastructure Sector, Labor Productivity and Human Development Index*

I. Introduction

According to The Conference Board data in the total Economy Database, said productivity per Indonesian worker in 2017 has reached USD24.6 thousand. APO ranks Indonesia eleventh out of 20 countries with the best labor productivity. If seen from some ASEAN countries, Indonesia ranks fourth. High and low quality of labor will affect the quality of the economy of a country or region, especially the productivity of the output it produces. Productivity of an area can be seen from the state of the value of regional production which is reflected in the value of the GRDP with the number of workers who work in accordance with existing business fields in the area concerned. The main issue of manpower originates from the lack of competitiveness of the workforce towards the pace of labor growth. This issue does not actually stand alone but is an interrelated chain in the overall national development process. If you want to investigate it, first the population growth, following the problem of

education, then the problem of economic growth and finally the impact on the growth of employment and workforce opportunities. In terms of infrastructure, it is very important in an area. If the infrastructure is well built, the economy of a regional road runs smoothly. During the period of infrastructure in the city of Medan there was a very significant increase. Like the Medan-Tebing Tinggi toll road infrastructure, the Medan-Binjai toll road and other infrastructure, as well as the presence of this infrastructure can improve connectivity so that it can smoothen distribution and reduce logistics costs for goods and services.

II. EASE OF USE

A. Labor Productivity

According to Dharma (2004: 355) there are standards covering how to measure Productivity which covers three things, namely:

1. Quantity, i.e. the amount that must be completed must be achieved.
2. Quality, i.e. the quality that must be produced (good or bad).
3. Timeliness, i.e. according to whether or not it is planned.

Many factors can affect employee work productivity both related to the workforce itself and factors related to the company environment and overall government policy.

B. Human Development Index

The value of the Human Development Index (HDI) in a country or region shows that the extent to which the country or region has reached the target to determine life expectancy, education, expenditure levels, and consumption that has reached a decent standard of living. HDI is a sensitive measurement tool to be able to provide the direction of change that actually occurs. The development paradigm places humans as the focus and target of the end of development, namely the occurrence of mastery over resources, improving education and improving health status (Suharto, 2010: 73). The formula for calculating HDI according to Suharto, (2010: 80) namely, as follows:

$HDI = 1/3 (\text{Index X (1)} + \text{Index X (2)} + \text{Index X (3)}) \dots\dots\dots$

Where : X (1): Life expectancy index

X (2): Education index = $2/3$ (literacy index) + $1/3$ (average length of school index)

X (3): Index of decent living standards

C. Development Growth

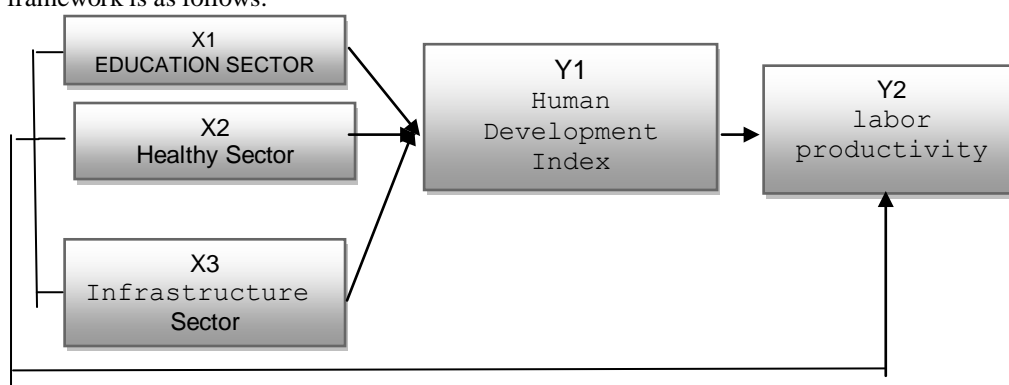
Economic growth can occur if there is an increase in per capita output which explains the increase in living standards is measured by real output per person. An economy is said to experience economic growth if the amount of production of goods and services always rises. To find out the economic conditions in an area / region or province within a certain period indicated by the Gross Regional Domestic Product (GRDP) data. The value of GRDP will provide a demonstration in the description of how regions / regions develop and utilize existing resources.

D. Gross Regional Domestic Product (GRDP)

One indicator that is important to know the economic development in a region in a certain period, both viewed on the basis of current prices and on the basis of constant prices. GRDP is basically the amount of added value generated by all units in the business in a given area. The total value of final goods and services provided from production must be the same as the value of goods used on the GRDP and viewed from the basis of current prices shows the added value of goods and services calculated using prices in the current period, while GRDP at constant prices depicts the value added of goods and services is calculated using prices that apply to one year that is determined as the base year.

Devitasari (2010) also said that education has a very important role in increasing labor productivity, because of increasing labor productivity aimed at education. Basically, it aims to improve the ability of

human work and to improve the living standards of all members of society. Research conceptual framework is as follows:



Concept Framework Drawing

III. PREPARE YOUR PAPER BEFORE STYLING

Table :Medan City Government Total Spending2010-2017 (In Rupiah)

Tahun	Total Belanja Daerah
2010	2.582.065.326.653,00
2011	3.395.728.853.449,00
2012	4.080.935.662.619,00
2013	4.237.560.638.891,00
2014	4.625.169.942.881,00
2015	5.467.952.757.114,00
2016	5.737.738.289.895,00
2017	5.554.084.308.979,40

Source: financial management and regional assets of Medan City

The existence of government expenditure determined by the Medan City government so that the expenditure of funds is used for development that really builds for the community so that people feel it in the existing development.

Table of Realization of Total Spending in Education Sector
Medan City in 2010-2017 (In Rupiah)

Tahun	Sektor Pendidikan
2010	733.266.652.917,00
2011	983.774.581.356,00
2012	983.289.538.550,00
2013	1.109.133.107.469,00
2014	1.079.853.934.544,00
2015	1.162.361.929.743,00
2016	1.195.515.428.591,00
2017	883.069.743.930,00

Source: financial management and regional assets of Medan City

**Table Total Realization of Regional Health Sector Expenditures
Medan City in 2010-2017 (In Rupiah)**

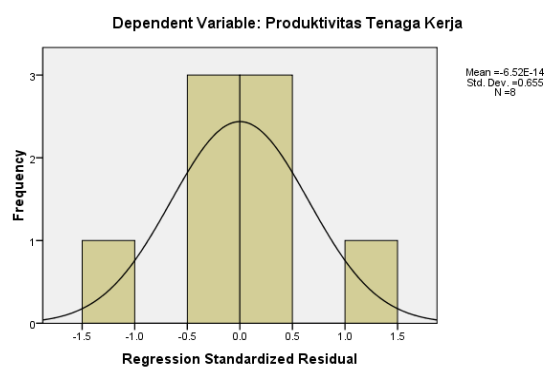
Tahun	Sektor Kesehatan
2010	294.671.898.434,58
2011	373.568.879.990,22
2012	423.878.270.895,25
2013	389.133.311.196,48
2014	495.610.513.080,28
2015	627.008.258.405,00
2016	691.863.259.661,01
2017	615.211.142.256,00

Source: financial management and regional assets of Medan City

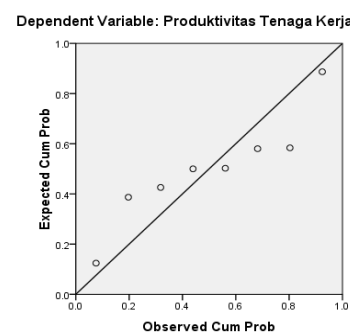
**Table of Realization of Total Spending on Infrastructure Sector
Medan City in 2010-2017 (In Rupiah)**

Tahun	Sektor Infrastruktur
2010	894.447.095.338,91
2011	1.276.292.315.813,11
2012	1.210.637.409.110,42
2013	1.239.130.487.061,16
2014	1.162.369.583.640,77
2015	1.941.167.065.109,17
2016	1.973.444.225.304,52
2017	2.206.708.786.843,31

Histogram



Normal P-P Plot of Regression Standardized Residual



Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	-3846.794	733.909		-5.242	.014					
SektorPendidikan	-.012	.009	-.095	-1.451	.243	-.385	-.642	-.080	.701	1.427
SektorKesehatan	.123	.072	.277	1.707	.186	.950	.702	.094	.114	8.747
SektorInfrastruktur	.032	.013	.157	2.370	.099	-.443	.807	.130	.686	1.458
Indeks Pembangunan Manusia	50.242	9.786	.780	5.134	.014	.975	.948	.282	.130	7.682

a. Dependent Variable: Produktivitas Tenaga Kerja

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.995 ^a	.991	.979	9.19905	.991	82.362	4	3	.002	2.908

a. Predictors: (Constant), Indeks Pembangunan Manusia, SektorPendidikan, SektorInfrastruktur, SektorKesehatan

b. Dependent Variable: Produktivitas Tenaga Kerja

The autocorrelation test results above show that the Durbin Watson value is between 1 to 3 which is 2,908 then the data is declared to have passed the autocorrelation test. Thus the data is valid and can be further analyzed. The Human Development Index becomes the variable mediating / intervening between the Education Sector, the health sector to Labor Productivity, the Human Development Index functions as an intervening variable. For the Human Development Index not to be a variable mediating / intervening between the Infrastructure Sector to Labor Productivity, the Human Development Index does not function as an intervening variable.

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