

# Analysis of the Impact of Labor, Governments Expenditure Per Capita, Be Literate (Education) and Life Expectancy (Health) on Human Development In Jambi Province

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## ABSTRACT

The purpose of this study was to analyze the effect of labor, governments spending per capita, literacy (educations) and life expectancy (health) on human development in the province of Jambi. In this study data used is panel data, after testing the panel data regression and the model selection test the method estimating the appropriate parameters is correct using the random effect model. The results obtained from the study are labor does not significantly influence human development. Government expenditure per capita is a positive and significant effect on human development. Be literate (education) is not significant effect on human development. Life expectancy (health) has a positive and significantly effect to human development.

**Keywords:** Humans, trade, spending per capita, education, health

## 1. INTRODUCTION

Ultimate goal is the development of people's welfare. Humans are not only objects of development but are expected to become subjects so that they can make useful contributions to the progress of a region that is macro in the progress of a country. Development success is measured by several parameters, and the most popular at this time is the Human Development Index (HDI) or Human Development Index (HDI). This measurement tool was launched by Mahbub ul Haq in his book entitled Reflections on Human Development (1995) and has been agreed by the world through is UNDP (United Nations Development Program).

The magnitude of the index number simultaneously needs to be examined several factors that are suspected to influence the ups and downs of HDI. The level of welfare is measured by the UNDP using 3 indicator, that is : life expectancy at birth (health), adult literacy rate and mean years of schooling (educations), purchasing power parity (living standards)

Jambi Province in 2018 entered the ranks of regions with a high human development index (HDI) category at 70.65%. This figure increased by 0.66 points compared to the human development index in 2017 which amounted to 69.99%. The head of the Jambi Central Statistics Agency (BPS) said

that the Jambi Province's human development index increased from a medium to a high level. Although the HDI in Jambi province increased, the problem is the difference in HDI considerably between several districts/cities in Jambi Province. Factors thought to influence HDI are labor, government spending, education, and health.

From the description above, the problem formulation is obtained as follows:

1. How far the effect of labor, governments spending per capita, literacy (education) and life expectancy (health) to human development in Jambi Province.
2. So far the influence of labor, governments expenditure per capita, literacy (education), and life expectancy (health) simultaneously or jointly to human development in Jambi Province.

From the formulation of the problem obtained research objectives namely to find out:

1. Impact of labor governments expenditure per capita, literacy (education) and life expectancy (health) to human development in Jambi Province.
2. The influence of labor, governments spending per capita, literacy (education) and life expectancy (health) to human development in Jambi Province.

The notion of human development according to the viewpoint of UNDP (1990) is a process of expanding people's choice to build their lives which are considered valuable. Some essential things in human development are so that humans can feel a long and healthy life, be knowledgeable, and have access to the resources needed to live properly. The theory of the formation of HDI is measured in 3 dimensions (UNDP, 2004), which is a long life and healthy, shown by life expectancy at birth, which is formulated as life expectancy. The dimension of science as measured by the level of literacy and the average length of the school; these two components form

the education index. Dimensions decent living standards shown by real expenditure per capita, which was standardized in the income index.

Labor or manpower consists of the workforce and not the labor force. The labor force is part of the workforce that wants and produces goods and services. The labor force consists of those who work and those who are unemployed and looking for work, a group of non-workforce consists of people who go to school, taking care of household, and others or recipient of earning (Wijaya, 2017).

Governments spending is a share of fiscal subtlety (Sukirno, 2000), which is governments actions to regulated is economy by determinated the amount of governments income and spending every years which is reflected in the APBN documents for the national and the APBD for regions / regions.

In calculating the educations index there are 2 indicators used, namely be literate and long-term expectations of school, these 2 indicators are held in the hope that it can reflect the level of knowledge, where literacy is the number of people who can read and write in one populations group.

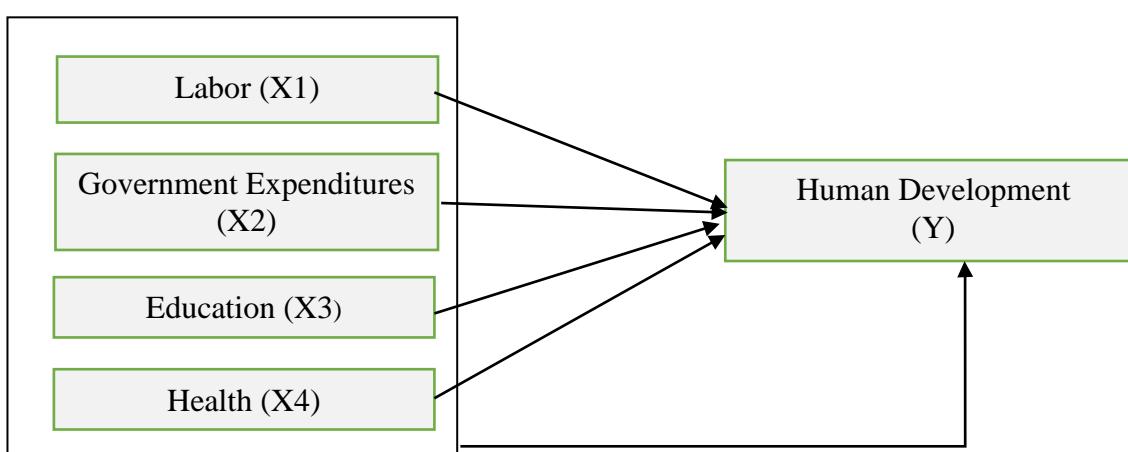
Life expectancy is is a measure of health, Life expectancy is interpreted as the age that might be achieved by someone born in a certain year. To calculate the life expectancy index the maximum life expectancy value is used consistent on UNDP standards with a maximum age of 85 year and the minimum age of 20 year.

Previous research is Anisa Syahrani's research (2018) concluded that there was no significant and insignificant influence on poverty and education on the human development index, the influence and significance of health on the human development index (HDI), the equation of the researchers with the authors that both examined the education and health

variables. The study of David and Nasri (2015) concluded that government spending and economic growth has a positive and significantly impact on HDI, the poorness rate had a negative and significant influence on human developments in West Sumatra Province, the similarity with the author's research is that both look at the influence on governments spending variables for HDI. Research Yakin Masiku, et al (2017) concluded that mining and labor investment has a positive and significant impact to West Kutai PDRB, while mining and labor investment had no significant effect on HDI in Kutai Barat District, the equation with the authors is to examine together to examine the effect of labor

variables for HDI/humane developments index.

Conceptual framework at these research human development is influenced by labor, government spending, education and health. if the workforce experiences an increase so unemployment decreases it will increase human development, government spending to improve the welfare and quality of society can improve human development, higher education will increase human development, gguaranteed public health enhances human development. To see the relationship between various variables above, shown in the form of a conceptual framework.



**Figure 1** Conceptual Framework

## 2. METHODS

These form of study is classified as descriptive and associative research. The data use that is secondary data sourced out of publication data from Indonesian Central Statistics Agency (BPS) in particular BPS Jambi Province. With the operational definition of variables namely: human development (Y) using the human development index set by UNDP to measure community welfare is an indicator of achievements in human development in Jambi Province from 2014-2018, labor (X1) is measured using labor force indicators that work in Jambi Province in 2014-2018, government expenditure (X2) in the form of per capita

expenditure per year issued by the Jambi provincial government from 2014-2018, education (X3) is measured using the literacy indicator in Jambi Province in 2014-2018, health (X4) is measured using an indicator of community life expectancy in Jambi Province from 2014-2018.

For data analysis, in determining the panel data model regression model is done through three approaches including (Widarjono, 2009): Common Effect Model (CEM), Fixed Effect Model (FEM), Random Effect Model (REM). Model selection was tested use the Chow Test, Hausmant, and the LM test (lagrange multiplier). In additions the F test is also used to determine that it independent variable

jointly affect for dependent variables, and tested to used to see the extent to which the independent variables partially influence to dependent variables.

### 3. RESULTS AND DISCUSSION

From the estimation results of the panel data model performed make use of Chow test, the Hausman, with the LM, the estimation results are obtained using the Random Effect Model.

**Table 1.** Random Effect Model Panel Regression Results

Periods included: 5

Cross-sections included: 11

Total panel (balanced) observations: 55

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-31.16835	14.66719	-2.125039	0.0385
X1	-2.56E-06	5.34E-06	-0.479500	0.6337
X2	0.001851	0.000154	11.99897	0.0000
X3	0.049075	0.040933	1.198922	0.2362
X4	1.115770	0.217603	5.127542	0.0000
Effects Specification		S.D.	Rho	
Cross-section random		1.658014	0.9769	
Idiosyncratic random		0.254999	0.0231	
Weighted Statistics				
R-squared	0.926281	Mean dependent var		4.709537
Adjusted R-squared	0.920384	S.D. dependent var		0.889413
S.E. of regression	0.250960	Sum squared resid		3.149047
F-statistic	157.0632	Durbin-Watson stat		1.890360
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.846223	Mean dependent var		68.63364
Sum squared resid	113.7390	Durbin-Watson stat		0.330932

From the random regression model estimation results above, it can be seen whether the variables of labor, governments spending per capita, be literate (education) and life expectancy (health) affect human development per Regency / city on Jambi Province during the 2014-2018 period, namely: Labor has a P-value  $0.6337 >$  from  $\alpha = 0.05\%$ , which means that the variable of labor does not

significantly influence human development. The government's spending per capita variables have value P-value  $0,0000 <$  from the value  $\alpha = 0.05\%$ , which means the government expenditure variable has a significant effect on human development. The education variable has a P-value  $0,2362 >$  of  $\alpha = 0,05\%$ , this shows the educational variables it not significant influence to human development. Health

variable has a probability value of  $0.0000 < \text{value of } \alpha = 0.05\%$ , this indicates of health variables is significantly impact to human development.

From of F-test results variables labor, governments expenditure per capita, be literate (education), and life expectancy (health) simultaneously have a positiv and significantly impact to human development, with a prob value  $< \alpha$  ( $0.0000 < 0.05\%$ ) that is labor, governments expenditure per capita, literacy (education), and life expectancy (health) together the same effect on human development in Jambi Province. The model used is the Random Effect, so classical testing is not tested.

According to Gujarati (2009) the assumption test on Random Effect is no longer needed, as it is known that random estimation is Generalized Least Square (GLS) which involves covariance variance structure in the estimation process so that it has been generalized.

#### 4. CONCLUSIONS

Labor has no significant effect on human development in Jambi Province. This can be caused by a large number of workers who work as temporary workers and family / unpaid workers, where the status of the two workers mostly work in the agricultural sector. Government spending has a significantly impact to human development in Jambi Province, the acceleration of the human development process can be done if it is supported by an adequate budget to finance education, health and community empowerment, the greater the portion spent to finance this, the faster the acceleration of human development (Rofiqi, 2013). Education has no significant effect on human development in Jambi Province. This is due to the main occupational status in Jambi Province which is still dominated by the informal sector, the high number of workers working in this sector as a result of the

low level of education, in addition to the still low level of education, the informal sector provides more and relatively more employment non-skills so that almost all people can enter it (Junaidi et al, 2014). Health has a significantly impact to human development in Jambi Province. To realize optimal health status for the community, the Jambi provincial government has undertaken health efforts with a maintenance, health promotion (promotive), disease prevention (preventive), healing (curative), and health recovery (rehabilitative) approach that is carried out thoroughly, integrated, and continuous. Labor, government expenditure, education, and health variables simultaneously have a significant effect on human development in 9 Regencies and 2 Cities in Jambi Province with a period from 2014 to 2018. This meaning each independent variable has a significance influence to the dependent variable, Labor, government expenditure, education, and health variables have contributed to the development of human development in Jambi Province.

**Suggestion:** For labor, the government needs to make efforts to open employment more intensively both in the form of government programs (skills training and capital provision) and the opening of labor-intensive employment opportunities for educated and uneducated workers to increase community income, reduce unemployment, population poor, and reduce the number of informal workers such as casual laborers and unpaid family workers. Government expenditure is a supporting factor for regional development, the government must pay attention to policy targets and optimize regional income, therefore the government is required to play an active role in providing physical and non-physical facilities to encourage human development. It is expected that the budget issued by the government for development is right on target, in particular paying attention to

development in districts/cities that have villages that are lagging either in remote or inland areas in Jambi Province. Education has a role in human development, the higher a person's education will reduce the number of illiterate people, for that the government can pay attention to matters such as:

- a. Ease the access of the community to obtain and run education, such as affordable tuition fees so that they can continue their education to a higher level.
- b. Build and improve educational facilities in rural or disadvantaged areas where education levels are still low, such as livable school buildings and qualified teaching staff.
- c. Providing scholarships for high achievers as well as scholarships for underprivileged communities for students from poor families.

Health influences human development, to improve public health the Jambi Province government can:

- a. Awaken the community the importance of healthy living by conducting counseling, especially in remote or inland areas.
- b. Providing and building health facilities, such as easily accessible health centers, adequate medical equipment, availability of transportation (ambulance) and qualified medical personnel, especially in rural areas and underdeveloped.

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