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Public Health Services and Technology Inclusion in Poverty Alleviation and People's Economic Independence

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Abstract

This research studies the role of health services and technology adaptation in poverty alleviation and improving human resource performance as reflected in economic growth. This study uses secondary data from world banks and processed regression using the moving average autoregression method. We find that from the estimation results, health investment together with technology inclusion is positively related to economic growth. And, poverty is negatively related to economic growth. This indicates that human health services and technological inclusion in Indonesia are very important in maintaining the productivity of the Indonesian people which is reflected in the economic growth in Indonesia and is very important in reducing poverty.

Keywords: Technology Inclusion, Indonesia, Health Services
JEL Classification : C0, J24,J64

Background

Health is an important factor in keeping humans able to work optimally. When humans are in a healthy condition, they are able to work by utilizing all their abilities, knowledge, skills and physical abilities to complete work to generate income (Dening et al,2020).

With human health, people can generate money optimally so that they can meet the needs of life properly. With affordable and close health and health services, people can feel comfortable and calm at work so that the production produced by the community which is reflected in the gross domestic product can increase (Figueras & McKee,2011).

Technology plays a role in making human work easier. With technology, humans can work more quickly and the products produced will continue to increase. Adaptation of good education and health services in Indonesia can ensure that the performance of Indonesian human resources remains good so that there is an increase and equal distribution of prosperity. When equitable distribution of prosperity reaches the poor, these poor people can participate in the economy with health services they can afford and technology that they can adapt to so that their income increases and their opportunity to get out of poverty is greater (Barley,2020).

Literature review

The equitable adaptation of technology and health services provides the poor with opportunities to work and increases their income so that their participation in the economy can increase their income. This can give them the opportunity to escape poverty (Clay,2005).

Health services are services in the form of health care, healing of various diseases and treatment of wounds and other health problems. With good health services, it can provide the population's work capacity to remain high so that they can help each other and have an impact on income distribution as a result of economic interaction and public consumption. This provides the poor with an opportunity to escape poverty (Delaet,2020).

Technology can come from within the country developed by the population of the country and can come from abroad, both of which need to be adapted so as to increase the technological inclusion of the population. The more evenly distributed technology encourages people to be more productive using technology so that people's income increases including the income from the poor. With increased wages and productivity, poor people can move out of poverty in a dignified way (Dubber et al,2020).

Research methods

This research studies the role of health services and technology adaptation in poverty alleviation and improving human resource performance as reflected in economic growth. This study uses secondary data from world banks and processed regression using the moving average autoregression method with the following equation:

$$GDP_t = C_t + \beta_1 TI_{t1} + \beta_2 IH_{t2} + \beta_3 POV_{t3} + e_t$$

Where,
GDP = Gross Domestic Product
C = Constant
IT = Technology Inclusion
IH = Health Investment
POV = Poverty
e = Error Term

All financial data is calculated in USD, technology inclusion data is calculated in the number of gadgets that access the internet in Indonesia. Poverty is calculated based on the number of poor people in Indonesia who earn below USD 3.2 per day

Results and Discussion

The estimation results are as follows:

GDP = 4.2284318633*HI - 4597.40760272*POV + 1.86654264797*TI + 842182682569

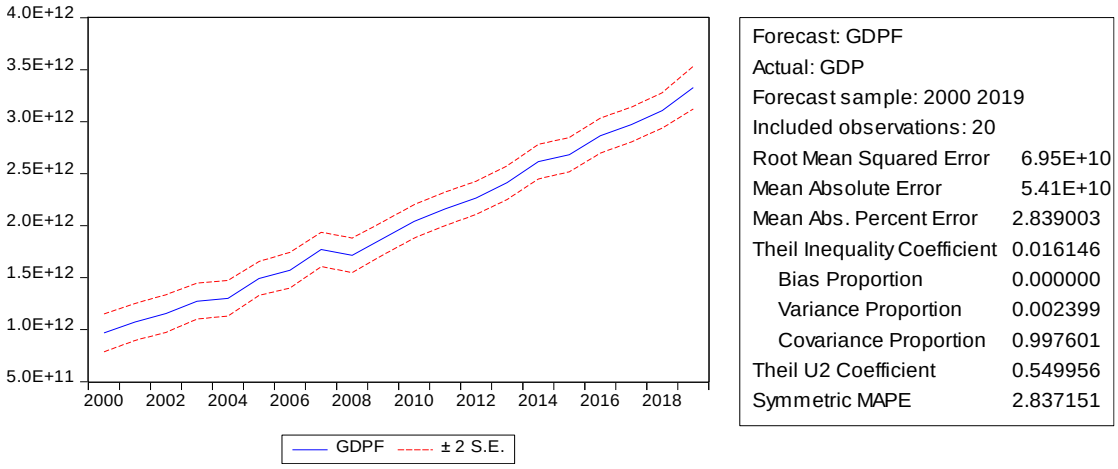
From the estimation results, health investment (HI) together with technology inclusion (IT) is positively related to economic growth. And, poverty (POV) is negatively related to economic growth / This indicates that human health services and technological inclusion in Indonesia are very important in maintaining the productivity of the Indonesian people which is reflected in economic growth in Indonesia and is very important in poverty alleviation. Table 1 illustrates the estimation results as follows:

Table 1. Estimation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
HI	4.228432	0.808326	5.231097	0.0001
POV	-4597.408	5024.66	-0.914969	0.3738
TI	1.866543	0.455007	4.102229	0.0008
C	8.42E+11	4.24E+11	1.985242	6.45E-02
R-squared	0.99	Mean dependent var		2.03E+12
Adjusted R-squared	0.99	S.D. dependent var		7.30E+11
S.E. of regression	7.77E+10	Akaike info criterion		53.16757
Sum squared resid	9.67E+22	Schwarz criterion		53.36671
Log likelihood	-527.6757	Hannan-Quinn criter.		53.20644
F-statistic	553.0865	Durbin-Watson stat		1.057369

Based on the estimation results described in Table 1., it can be seen that the R-square is quite high, namely 0.99, so the quantitative calculation results show the 99% level of truth. Figure 1. Shows the forecasting of economic growth in Indonesia

Figure 1. Forecasting Economic Growth in Indonesia



Source: Author Computing

From the results of forecasting, it can be seen that economic growth in Indonesia is experiencing very rapid growth by taking into account the inclusion of technology, poverty and health services in the process of building economic growth forecasts. This shows that health services and technology adaptation are mutually supportive in improving the performance of human resources, which is reflected in economic improvement and poverty alleviation which is reflected in the negative relationship with economic growth.

Conclusion

Inclusion of technology and health services is a key to improving community performance so that it can increase income so that citizens who are on the poverty line can gradually be freed from poverty.

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