# The Role of Public Health Centers on Human Resource Performance and Technology Adaptation in Indonesia

Solikin, Diah Rusminingsih STIE Jaya Negara Tamansiswa Malang

## Abstract

This study examines the relationship between technology inclusion and health investment made by the Indonesian government on economic growth in Indonesia. This study uses secondary data from world banks and processed regression using the moving average autoregression method. We find that the health investment issued by the Indonesian government including in public health centers to improve the Indonesian public health system together with technology inclusion indicates that technological adaptation is positively related to economic growth. This indicates that the role of public health centers and technology adaptation in Indonesia plays a role in improving the performance of Indonesia's human resources, which is indicated in Indonesia's economic growth.

Keywords: Technology Inclusion, Indonesia, Public Health

JEL Classification : C0, J24, J64

# Background

The public health centre which is very affordable both in terms of price and distance is an integrated public service supported by the government of the Republic of Indonesia in serving the health of the Indonesian people. The community health centre is a government program that is very helpful to the community as well as a public health safety system that helps people to live healthily and productively (Breuer et al,2018).

Public health services served by community health centres are very affordable and many services are free, especially community services that are very important and basic. Such as immunization and so on (Shi & Johnson, 2020).

Public health is very important in supporting community productivity. With public health, people can work well and get enough income. This supports the performance of Indonesia's human resources (Birkhead et al,2020).

Technology is a system and technique that makes it easy for humans to work and fulfil their daily needs. Of course, technological adaptation plays a role in the performance of Indonesia's human resources in aggregate to drive economic growth which is an indication of the nation's prosperity (Torriti,2020).

# Literature Review

Public health centers in Indonesia are known as "puskesmas". Puskesmas is a form of state presence in the health sector where the state is present to provide health services that are close at affordable prices and even free to nourish the Indonesian people (Rokx et al,2010).

Health services such as community health centers are very good government programs in ensuring public health. Health services are very important because when people are sick they will find it difficult to work and may not be able to work because of illness (Mahan & Raymond,2016).

Health is a human capital. Health is one of the human capital because when humans are not healthy, their performance will be disrupted. Health can make humans work optimally. This is of course different when humans are sick (Bucci et al,2019).

Health also makes it easier for humans to learn something, including learning new technology. Mastery of technology results in technological inclusion. When technology can be understood, understood and mastered and controlled, it can improve human performance (Stanhope & Lancaster, 2014).

## **Research Method**

This study examines the relationship between technology inclusion and health investment made by the Indonesian government on economic growth in Indonesia. This study uses secondary data from world banks and processed regression using the moving average autoregression method with the following equation:

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

Where, GDP = Gross Domestic Product C = Constant IT = Technology Inclusion IH = Health Investment 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.

#### **Result and Discussion**

The estimation results are as follows:

GDP = 459010879792 + 4.75130684482\*HI + 2.06775548145\*TI

From the estimation results, the health investment (HI) issued by the Indonesian government includes public health centers to improve the Indonesian public health system together with technology inclusion (IT), which indicates that technological adaptation is positively related to economic growth. This indicates that the role of public health centers and technology adaptation in Indonesia plays a role in improving the performance of Indonesia's human resources, which is indicated in Indonesia's economic growth. Table 1 illustrates the estimation results as follows:

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	45900000000.00	6.74E+10	6.810521	0
НІ	4.751307	0.568934	8.35125	0
TI	2.067755	0.396422	5.216051	1.00E-04
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	7.73E+10	Akaike info criterion		53.11857
Sum squared resid	1.02E+23	Schwarz criterion		53.26793
Log likelihood	-528.1857	Hannan-Quinn criter.		53.14772
F-statistic	837.2304	Durbin-Watson stat		1.107269
Prob(F-statistic)	0			

Table 1. Estimation Results

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



From the results of forecasting, it can be seen that economic growth in Indonesia has experienced very rapid growth by taking into account the role of technological adaptation and the Indonesian government's investment in improving the health service system for the Indonesian people. It shows that public health services including public health service center programs spread throughout Indonesia are very important in improving the performance of human resources supported by technological adaptation in Indonesia.

#### Conclusion

Community service centers that are close to the community and affordable are very important programs in improving the performance of Indonesia's human resources. Because healthy humans

can work optimally, supported by technological adaptation in Indonesia, can improve the performance of Indonesia's human resources which is reflected in Indonesia's economic growth.

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