THE INFLUENCE OF PRODUCTION FACTORS TOWARD ECONOMIC GROWTH IN INDONESIA

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Author's Biography

Prof. Dr. Wilson Bangun, affiliation at the Economics Faculty, Maranatha Christian University, a concentration of Human Resource Management and Organizational Behavior. Lectures on the subjects of Human Resource Management, Organizational Behavior, Microeconomic Theory, Industrial Relations, and Business Research Methods in several universities in Indonesia. The books that have been published: Teori Mikro Ekonomi. Bandung: Refika Aditama, 2007; Intisari Manajemen Refika Aditama, Bandung: 2008; Manajemen Sumber Daya Manusia, Jakarta: Erlangga, 2012; Manajemen SDM: Hubungan Industrial, Erlangga, Jakarta: 2017. Other scientific articles published in national and international journals. Also as a speaker at national and international conferences in various countries.

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Research Highlights

Each countries in the world believe that economic growth is used as a measure to achieve the welfare of people. Therefore, every country seeks to manage economic resources efficiently and effectively to increase the economic growth. Based on Neo Classical theory, the production factors of capital and labor determine of Indonesia economic growth, while the contribution of technological progress is low. Indonesia technological developments are behind compared Singapore, Malaysia, Thailand, and the Philippines (Bangun, 2017). Population is an important factor in determining a countries economic development. However, for developing countries rapid population growth will be a challenge because of unpreparedness in savings as an investment. The role of the workforce is very important, both as workers and as managerial to increase output which results in increased income. But, the challenge for Indonesia is the workforce is still dominated by unskilled workforce, which cause results in low national income (Bangun, 2018).

Research Objectives

The factor of labor production provides the biggest contribution to Indonesia economic growth, but it has employee is low. While, influence of production factors the capital and technology toward economic growth are low. The aims of this research are to knowing the influence of production factors toward Indonesia economic growth.

Methodology

To knowing the magnitude of the influence of each production factor on Indonesia economic growth is done through the Neo Classic approach using the Cobb-Douglas production function with the Ordinary Least Square (OLS) estimation method. The general equation for Indonesia economic growth is formulated as follows:

$$\ln Y = \ln a + b_i \sum_{i=1}^3 X_i + e$$

where a is an intercept, b_i is the regression coefficient that will be assumed, Y is Indonesia economic growth with the Gross Domestic Product (GDP) approach, X_1 is capital with a total investment approach, there are Foreign Direct Investment (FDI) and the domestic investment, X_2 is labor, and X_3 is Technology, and e are other factors that contribute to Indonesia economic growth. The data used is secondary data: Factors of production of capital are the data of progressing of FDI and domestic investment (government and private investment) in Indonesia using data from the World Bank, 2004-2016; Employment is the data of progressing of the Indonesian workforce, 2004-2016 sourced from the Biro Pusat Statistik Republik Indonesia.

Results

Based on the statistical output, the multiple regression equation is as follows:

$$Y = -323,291 + 33,681 X_1 - 11,274 X_2$$

Then each factor of production is analyzed dynamically so that Indonesian economic growth will be obtained equation follow:

$$rY = rX_3 + 33,681rX_1 - 11,274rX_2$$

$$11,65\% = rX_3 + 33,681(1,61\%) - 11,274(2,72\%)$$

$$rX_3 = -12,15\%$$

The results of statistical analysis show that Indonesia economic growth is determined by factors of labor production and capital positively. While the technology production factor is negative at -12.15%. At this level of economic growth, the growth of Indonesian labor is 1.61% and

capital growth is 2.72%. Capital is a factor of production that is used both directly and indirectly in production activities to increase economic growth. Capital is a portion of income saved for reinvestment with the aim of increasing future income. Capital in increasing a countries economic growth is domestic investment and foreign investment. Technology is a production factor that functions to convert raw materials into products that have higher economic value.

Findings

The findings of this study indicate that there are significant effects of production factors on Indonesia economic growth. The factor of labor production has a major influence on Indonesia economic growth, but it must also increase the number of FDI and technology. The phenomenon of income inequality is caused by differences in technological advances between countries and is an asymmetric impact of globalization of world trade and financial markets (Wijoyo Santoso. 2012). Capital in increasing a countries economic growth is domestic investment and FDI. Some studies show that FDI will increase work productivity (Liu, et al., 2000).

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