



## Commercial Bank Stimulus on Economic Growth and Labour Absorption in Indonesia

Irawan<sup>1✉</sup>, Rio Dhana Kusuma<sup>2</sup>, Kevin Chandida Irawan<sup>3</sup>

<sup>1</sup>Faculty of Economics and Business, Universitas Palangka Raya, Indonesia

<sup>2</sup>Postgraduate Program Universitas Palangka Raya, Indonesia

<sup>3</sup>Economic Development Department FEB Universitas Palangka Raya, Indonesia

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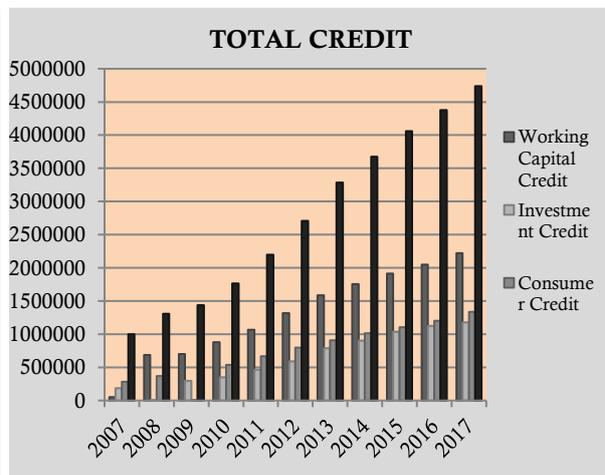
### Abstract

This study aims to find out the effect of Commercial Bank credit on Economic Growth and Labour Absorption in Indonesia. The data source used was secondary data obtained through the publication of the Central Bureau of Statistics, Bank Indonesia, and the Financial Services Authority. The method of data collection is the periodic report data (time series) for the years 2007-2017. The analytical tool used quantitative analysis. The data analysis technique used path analysis. The results show that: 1) Commercial bank credit has a direct and significant effect on economic growth in Indonesia; 2) Commercial bank credit has a direct and significant effect on labour absorption in Indonesia; 3) Commercial bank credit does not have a significant effect on labour absorption through economic growth in Indonesia; 4) Economic growth does not have a direct and significant effect on labour absorption in Indonesia.

✉ Correspondence :  
Faculty of Economics and Business, Universitas Palangka Raya,  
Indonesia  
E-mail: [irawan60@yahoo.co.uk](mailto:irawan60@yahoo.co.uk)

## INTRODUCTION

Economic growth is one of the most important indicators in analyzing the economic development that occurs in a country. To achieve economic growth, sources of funding are needed to encourage the business world. The large amount of funds needed for development in various business and industrial sectors is largely determined by the banking sector. This is seen from the development of total bank credits as sources of funding for economic sectors so that it can affect economic growth and the national economic system. In relation to the use of public funds, the role of the banking world is very large as a financial institution that plays a role in the circulation of bank funds. Banking stimulus through the distribution of commercial bank credits is a driving factor for economic growth in Indonesia in addition to other factors such as consumption, investment, and government spending as well as export-import performance. As one of the stimuli, commercial credit distribution also experiences growth from year to year, as shown in Figure 1 below:



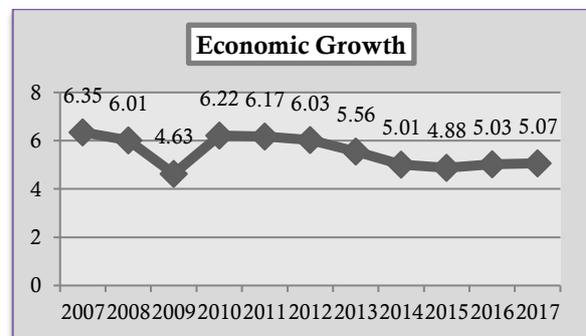
Source : Bank Indonesia, Indonesian Banking Statistics, 2007-2013

**Figure 1.** The Graph of Commercial Bank Credit Growth by type of use 2007-2017 (in billion Rp.)

Figure 1 shows that from 2007-2017, the growth of commercial bank credits based on the type of use continued to increase. The distribution

of working capital credits has the largest proportion, followed by the distribution of consumer credit, and investment credit. Based on the explanation, it shows that working capital credit is very important for the economy because the support for the real sector is very high. Thus, the increase in working capital credit growth every year will affect the productivity of the business world which will impact macroeconomic conditions.

One of the macroeconomic indicators that can be used as a reference to assess whether the economy of a country is developing or not, is by looking at the level of economic growth. Figure 2 describes Indonesia's economic growth for the period 2007 – 2017 as follows.



Source : BPS (Central Bureau of Statistics from Various Editions

**Figure 2.** Indonesia's Economic Growth period 2007 - 2017

According to Figure 2 above, the trend of Indonesia's economic growth in the last 10 years has generally shown a downward trend, where the average decrease in the rate of economic growth is 1.28%. This decrease is certainly influenced by internal (domestic) factors as well as external (global) factors. Indonesia's economic growth in the last three years (2015 - 2017) has experienced positive growth even though the category is slow. This positive growth was made possible by a stimulus from the banking sector to push investment thus expanding output creation.

The development of the financial sector through the stimulus of commercial banks plays a very important role in stimulating economic growth in a region, reducing poverty, and

reducing macroeconomic volatility. The development of a financial system which can carry out its functions effectively and has high resilience is a very strategic step in supporting the acceleration of Indonesia's economic recovery and maintaining macroeconomic stability (Utami, 2012). The study of Zulfita and Nazaruddin, (2010) concluded that commercial bank distribution drives economic growth. Economic growth is a quantitative measure that describes the development of an economy in a certain year when compared to the previous year (Sukirno, 2013). High and sustainable economic growth is a necessity for the continuity of economic development and increasing welfare. Lee (2015) explained that there are at least two possible relationships between financial variables and real variables. The first relationship is that financial sector development follows economic growth. In this case, economic growth will cause an increase in demand for financial products thus increasing financial market activity and credit. Separately, Demirgüç-Kunt and Maksimovic (2002) in their study showed that companies that receive credit tend to experience an increase in income.

In relation to the role of the banking sector which occupies an important position at the level of the macro economy, apart from having a function as a bank intermediary institution, it also functions as media for transmitting central bank monetary policy. With this special function, banks become an important object in the analysis of monetary policy effectiveness. Credit distribution is the focus and the main activity of banks in carrying out the intermediation function. Therefore, credit cannot be separated from the movement of economic growth in Indonesia (Syahfitri, 2013).

Population growth is related to economic growth which considers it as production factor, an increase in population will increase the number of labour force. The more labours, the more productive labours will increase, so that it will increase production. On the other hand, the increasing population will increase the production of goods and services which in turn will increase market potential.

Thus, job opportunities are also one of the factors that affect the output of a region. With the creation of new job opportunities, it means the creation of community income which will boost people's purchasing power. The creation of new job opportunities can also encourage induced investment, which in turn will stimulate regional economic growth (Gravitiani, 2006).

High economic growth will certainly affect job opportunities as it will increase productivity and produce high output so that high economic growth will open up opportunities for job seekers to get jobs. Indonesian labour data for the period 2007 - 2017 experienced an increasing trend, where in 2007, the number of labours were 99,930,217 people, increasing to 121,022,425 people in 2017, or an increase of 17.42% in the last ten years, where the Indonesian labours have increased by 1.42% every year. The increase in labours is possible due to an increase in the commercial bank stimulus through investment schemes which in turn increase the output resulting from labour contributions as one of the production factors. In this case, it is assumed that there is a relationship between economic growth and labour. If economic growth increases, job opportunities will increase. Conversely, if economic growth decreases, so job opportunities will also decrease.

The step and effort of local governments to push ahead investment is by conditioning the accessibility of investment funding for the business world. The role of banking institutions as agents of development through easy equitable access to banking will drive investment credit and working capital credit. The two credits are long-term credit and short-term credit to increase the stock of capital goods including machinery, equipment, land, and inventories (Agus Sumanto, 2016). Access and ease of obtaining credit facilities, it is important to be coupled with the ease of getting a location, ease of promotion/marketing, and ease with respect to human resources.

High accessibility of investment funds, especially from both conventional and sharia banks, does not necessarily guarantee high investment. If the infrastructure in an area is poor and the bureaucratic services are unsatisfactory,

the investment will be still low, even though the funds offered by banks are abundant. Investors who experience losses will stop investing and relocate to other areas. Likewise, if interest rates are high so that investors do not get profit, they will stop using funds from banks. Augier and Soedarmono, 2011; Crouzille et al., 2012; Deidda and Fattouh, 2002) said that bank credit does not always drive economic growth. The positive effect of banking credit on the economy will only occur if the fundamental quality of a country - such as physical capital (gross capital formation) or the quality of infrastructure has reached a certain level which is sufficient to boost productivity and competitiveness in the real sector.

Moreover, Crouzille et al. (2012) explained that the positive relationship between the financial sector and economic growth can only be seen in countries with development levels that have reached fairly good levels. At the individual bank level, banks will boost optimal financial intermediation by providing more competitive credit interest rates if bank management has reached a certain level of cost-efficiency in obtaining and processing information from debtors periodically (Bose and Cothren, 1996; 1997). In this context, the theory shows that there is a certain threshold effect that must be achieved before the financial sector has a positive impact on economic growth.

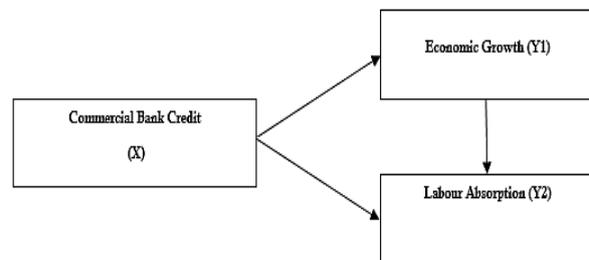
The results of other research related to the relationship between financial sector development, particularly banking, and economic growth also reaches the reverse causality aspect. It is stated that it is not financial sector development that strengthens economic growth, but it is strong economic growth that will push demand for financial services and boost national production. Furthermore, Agus Sumanto (2016) said that besides investment will increase output, in turn, it will increase employment. Investment expansion is possible if investors have access and easy to get an injection of funds from the banking sector.

## RESEARCH METHODS

The type of this research was quantitative research that is research that aims to explain the

causal relationship between variables through hypothesis testing (Sugiyono, 2013). The scope of this research was quantitative research using secondary data from 2007-2017, which consisted of commercial bank credit data, economic growth, and labour absorption in Indonesia for the period 2007-2017. The data collection technique is through literature study and documents obtained from the Central Bureau of Statistics, Bank Indonesia, and the Financial Services Authority. The analysis technique used to answer the problems/questions in this study was Path Analysis. According to Sandjojo N (2011), path analysis is a technique to estimate the magnitude of the effect between one variable on another variable in a causal hypothesis and is also used to examine the fit of the hypothesized model.

The following is the path analysis used in this research:



a). The Path of direct effect :

1. Commercial bank credit (X) on Economic Growth (Y<sub>1</sub>).

$$Y_1 = \rho Y_1 X + \varepsilon$$

2. Commercial bank credit (X) on Labour (Y<sub>2</sub>).

$$Y_2 = \rho Y_2 X + \varepsilon$$

3. Economic Growth (Y<sub>1</sub>) on Labour (Y<sub>2</sub>).

$$Y_2 = \rho Y_2 Y_1 + \varepsilon$$

b). The Path of indirect effect :

1. Commercial bank credit (X) on Labour (Y<sub>2</sub>) through Economic Growth (Y<sub>1</sub>).

$$Y_2 = (\rho Y_1 X) (\rho Y_2 Y_1) + \varepsilon$$

Based on the path analysis of the research used, the research equation model is obtained as follows:

$$1. \text{ Model Equation I : } Y_1 = \rho Y_1 X + \varepsilon$$

2. Model Equation II :  $Y_2 = \rho Y_2X + \rho Y_2Y_1 + \varepsilon$

Description:

$\rho$  = Path Coefficient

X = Commercial Bank Credit

$\varepsilon$  = Error Term

## RESULTS AND DISCUSSION

From the data that has been collected, it can be described as follows. The development of Indonesian commercial bank credits from 2007 to 2017 has always increased with an average credit rate of Rp. 2,777 trillion per year. This is an amazing development, with the highest value in 2017 of Rp. 4,737 trillion. Economic growth in Indonesia has an average annual rate of 5.5% between 2007 and 2017, with the highest percentage in 2010 by 6.38%, while the lowest

percentage was in 2009 by 4.55%. The absorption of labour in Indonesia in 2007-2017 has always increased with an average labour absorption of 111 million.

Path analysis is a regression expansion model used to examine the alignment of the correlation matrix with two or more causality relationship models compared by researchers. The model is depicted in the form of circles and arrows where a single arrow indicates the cause. Regression is imposed on each variable in a model as dependent variable (the respondent) while the others are the cause. The regression weighting is predicted in a model which is compared with the correlation matrix which is observed for all variables and a statistical conformity test is also calculated (David Garson, 2003). The following are the results of the path analysis on the research data:

**Table 1.** The Output of the Path Coefficient I

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	.064	.004		15.329	.000
X_CommercialCredits	-2.900E-09	.000	-.580	-2.134	.062

a. Dependent Variable: Y1\_ EconomicGrowth

The path coefficient I is to examine the direct effect of the Commercial Bank Credit variable (X) on Economic Growth (Y1). The hypothesis in the study can be said to be influential if the significance value (p-value)  $< \alpha = 10\%$ , whereas if the significance value (p-value)  $> \alpha = 10\%$  then the hypothesis on the data does not affect. In the calculation using SPSS, it can be

seen that the significance value (p-value) = 0.062  $< 10\%$ , this means that  $H_0$  is rejected, This means that there is a direct effect between the Commercial Bank Credit variable (X) on Economic Growth (Y1). Thus, Commercial Bank Credit (X) has a direct and significant effect on Economic Growth (Y1) in Indonesia. Table 2 describes the analysis results on the path coefficient II :

**Table 2.** The Output of the Path coefficient II

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	94439107.300	6229466.119		15.160	.000

X_CommercialCredit	4.994	.481	.999	10.380	.000
Y1_EconomicGrowth	42101570.933	96180629.360	.042	.438	.673

a. Dependent Variable: Y2\_LabourAbsorption

The coefficient path II is to examine the direct effect between the Commercial Bank Credit variable (X) on Labour Absorption (Y2) and to examine the indirect effect between the Commercial Bank Credit variable (X) on Labour Absorption (Y2) through Economic Growth (Y1). In the calculation using SPSS to examine the direct effect between the Commercial Bank Credit variable (X) on Labour Absorption (Y2), it can be seen that the significance value (p-value) = 0.000 < 10%, this means that  $H_0$  is rejected, meaning that there is an effect between the Commercial Bank Credit variable (X) on Labour Absorption (Y2). Thus, Commercial Bank Credit (X) has a direct and significant effect on Labour Absorption (Y2) in Indonesia.

In the calculation using SPSS, to examine the indirect effect between the Commercial Bank Credit variable (X) on Labour Absorption (Y2) through Economic Growth (Y1) is the Beta multiplication between X on Y1 and Y1 on Y2, which is as follows:

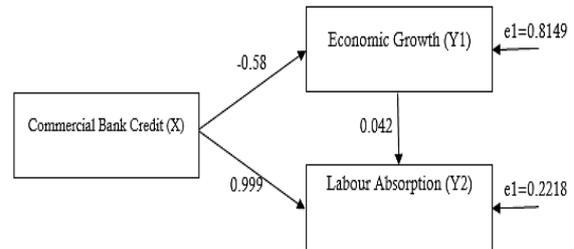
$$\begin{aligned}
 \text{Beta } (X \rightarrow Y_1 \rightarrow Y_2) &= \text{Beta } (X \rightarrow Y_1) \\
 &\times \text{Beta } (Y_1 \rightarrow Y_2) \\
 &= (-0.58) \times (0.042) = -0.0244
 \end{aligned}$$

Based on the calculation, it is known that the direct effect between X and Y2 is 0.999 and the indirect effect is -0.0244. This means that the value of the direct effect is greater than the value of the indirect effect. This result indicates that indirectly X does not have a significant effect on Y2 through Y1. Thus, Commercial Bank Credit (X) does not have a significant effect on Labour Absorption (Y2) through Economic Growth (Y1) in Indonesia.

In the calculation using SPSS to examine the direct effect between the Economic Growth variable (Y1) on Labour Absorption (Y2), it can be seen that the significance value (p-value) = 0.673 < 10%, this means that  $H_0$  is accepted, meaning that there is no effect between the

Economic Growth variable (Y1) on Labour Absorption (Y2). Thus, Economic Growth (Y1) does not have a direct and significant effect on Labour Absorption (Y2) in Indonesia.

The path analysis diagram in this study is as follows:



The effect of the commercial bank credit stimulus on economic growth is -0.58 with a negative coefficient. This means that every 1 unit increase in the credit value of a commercial bank will have an impact on decreasing economic growth by 0.58%. The effect given by commercial bank credit on labour absorption is 0.999 with a positive coefficient. This means that every 1 unit increase in the commercial bank credit value will have an impact on the increase in labour absorption by 0.999%. The effect given by commercial bank credit on labour absorption through economic growth is -0.58 + 0.042 = -0.538 with a negative coefficient. This means that every 1 unit increase in the commercial bank credit value will have an impact on the decrease in labour absorption by 0.538% through the economic growth variable. The effect of economic growth on labour absorption is 0.673 with a positive coefficient. This means that every 1 unit increase in economic growth will have an impact on the increase in labour absorption by 0.673%..

## CONCLUSION

Based on the results and discussion, it can be concluded that there is a significant direct effect between commercial bank credit variable on economic growth. There is a significant direct effect between commercial bank credit variable on

labour absorption. Indirectly, commercial bank credit does not have a significant effect on labour absorption through economic growth. Economic growth variable does not have a direct and significant effect on labour absorption. As we know that credit, economic growth is closely related to employment. Therefore, the government as the policy maker must be able to control credit according to need. Credit management must be simplified and not complicated in order to increase credit absorption so that it can improve the economy and will have implications for increasing employment.

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