



## ECONOMIC GROWTH: A COMPREHENSIVE ANALYSIS OF FINANCIAL AND LABOR CONTRIBUTIONS

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Eva Wulandari<sup>1</sup>, Dewi Kartikasari<sup>2</sup>, Yustirania Septiani<sup>3</sup>, Fitrah Sari Islami<sup>4</sup>

<sup>1,2,3,4</sup> Faculty of Economics, Universitas Tidar

 [yustirania.septiani@gmail.com](mailto:yustirania.septiani@gmail.com)

### Abstract

*Economic growth is an indicator that discloses the economic condition of a region. In 1990, Indonesia met its highest growth rate that had ever occurred, in which in subsequent years it tended to decline although Indonesia's financial and labor revenues actually increased. Therefore, this research aims to analyze the influence of financial and labor aspects on Indonesia's economic growth, both short and long term. The research was conducted using quantitative descriptive techniques. Secondary data is in the form of time series. The analysis technique uses multiple linear regression with the ARDL (Autoregressive Distributed Lag) model. The research explains that tax revenue, non-tax state revenue as financial indicators have a positive and significant influence, and labor has a significant negative influence in the long term, while foreign investment has a positive and insignificant influence. Tax revenues and non-tax state revenues have a positive and significant effect on Indonesia's economic growth, while foreign investment and labor have an insignificant effect in the short term for the period 1990-2022.*

**Keywords:** Economic Growth, Financial Aspects, Labor

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## **INTRODUCTION**

Economy level fluctuates each and every year, referring to the Indonesian economic growth data. The national income value is employed to determine economic growth from the previous period to the next period. According to Samuelson (1995), economic growth refers to the growth opportunities for a country's gross domestic product or output within a year (Mongan and Saputra, 2012). Last year, it was calculated based on fixed prices. Therefore, changes in the income value solely happen due to transformations in economic activity. A country's economy can be said to be improving if the current level of economic activity is higher than previous times. Since one of the goals of macroeconomic policy, namely, to increase a country's production capacity. To measure economic progress, appropriate measuring instruments are required. Gross domestic product turns out to be the most appropriate tool to measure a country's production.

Economic growth is included in the parameters to describe general economic performance in a region within a certain period of time, which can later be used to establish future policies. In fact, the government strives for economic growth to always increase from time to time, which has an impact on improving people's welfare. Boediono (1999) in (Fhathoni, 2017) explained that economic improvement is a way to increase output per capita in the long term.

(Fitria and Marginingsih, 2022) stated that growing economic growth has an impact on people's welfare, well-adjusted by increased development. Economic growth is also calculated using the nominal value of money, reflected in gross domestic product, which can be observed from the amount of output from managing goods and services. The calculation is carried out in the quarterly or yearly basis compared to the previous period of time.

Based on data from the Coordinating Ministry of Economic Affairs of the Republic of Indonesia (2022), economic growth of 5.31% is claimed the highest economic growth since 2014. Even though economic growth was recorded as negative growth during the emergence of the Covid-19 pandemic for 2 years, the Indonesian economy continues to show resilience and recover more quickly. Thus, the economies of countries throughout the world begin to show signs of future improvement.

Back in 1990, Indonesia's economic growth was very high, around 8% as abundant investment in that time resulted in economic success. The increase in economic growth in 1990 led to an increase in people's productivity at that time. After that, Indonesia's economic growth experienced a decline caused by various factors, one of which was state revenue. In 1998 Indonesia experienced an economic crisis, resulting in economic growth at that time amounting to -13.13%. In 2020 the rate of economic growth fell by -2.9%, due to

the corona virus so that all economic activities were disrupted. For the 2021 period, the economic growth rate was 3.69%, which is an increase compared to the 2020 period. In 2022, Indonesia's economic growth rate managed to recover, namely increasing by 5.31% due to increased state revenue in 2022. State revenue showed an increase in both taxes and non-tax with the amount of 115.9% equal to 2.626 trillion. The increase in state revenue was accompanied by the rise of economic growth.

Large state tax revenues support the success of various economic achievements so that they have a direct impact on people's welfare. Taxes are a source of state income which has a fundamental role in supporting infrastructure capital and demonstrating an independent economy. As stated in the State Revenue and Expenditure Budget (APBN) that taxes are described as the main component of the nation's income (Simanjuntak and Mukhlis, 2012) in (Lesfandra, 2021).

Investment is considered the most important driver of economic growth and development. The faster investment than population growth, the faster the average amount of equity per employee grows. The higher capital ratio of workers, the higher the productivity load of each worker. Human resources will show a person's quality in producing goods and services. Working age refers to the age of the population who are employed as stated by Sumarsono (2009) in the journal (Gwijangge et al., 2018).

Previous research in this topic have been done by some researcher. Sarayar (2022) examined the impact of the Covid-19 pandemic on Home Mortgage (KPR) for House Financing Liquidity Facility (FLPP) in Indonesia. This study used a descriptive statistics and parametric test of differences. The results of the research found that the Covid-19 pandemic did not have a significant negative impact on the distribution of subsidized home mortgage. On the other hand, during the Covid-19 pandemic, the distribution of subsidized home mortgages increased significantly, supported by a more effective and efficient application process because it could be done online.

Fadhilah (2022) conducted research on an analysis of the effectiveness of subsidized Islamic home mortgages at Bank BTN KC Syariah Medan. This was quantitative research using a library study and field research. The results showed that the distribution of subsidized Islamic home mortgages at Bank BTN KC Syariah Medan was effective, with an effectiveness level of 99.99 percent. This means that the distribution of subsidized Islamic home mortgage during the Covid-19 pandemic to low-income groups was effective.

Dewi *et al.*, (2021) conducted research on the impact of Covid-19 on property business. This was a library study which used a content analysis. The research results showed that the Covid-19 pandemic had an

impact on the property business in Indonesia, evident from a decrease in the purchases and demand for property, stable property prices, and disturbed distribution of home mortgages.

Dewi *et al.*, (2021) conducted research which analyzed the demand for home mortgage (a case study at BTN). The research used a multiple linear regression analysis. The variables of this study were interest rates, economic growth, inflation, and loan-to-value (LTV). The research results showed that interest rates and economic growth significantly affected the demand for mortgages. On the other hand, inflation and LTV had no significant effect on the demand for mortgages.

Atmaja *et al.*, (2018) analyzed the impact of loan-to-value policies and macroeconomic variables on the demand for home mortgages. The variables involved interest rates, inflation, economic growth, loan-to-deposit-ratio, and loan-to-value. The research used a quantitative method with multiple linear regression analysis. The results showed that interest rates and inflation had a significantly negative effect on the demand for home mortgages in Central Java, while economic growth and loan-to-deposit-ratio had a significant and positive effect on the demand for home mortgages in Central Java. On the other hand, loan-to-value had no effect on the demand for home mortgages in Central Java.

While most previous research analyze property business in wide range topic, just few of them that analyze about home mortgages. To fill this gap, this research conduct two hypothesis, as follows:

- a. RPPI (residential property price index) has a negative and significant effect on residential home mortgages in Indonesia.
- b. Interest rates presumably have a negative and significant effect on residential home mortgages in Indonesia.

## **THEORETICAL BASIS**

### **Commercial Banks, Islamic Banks, and Rural Banks**

Banking is a financial institution that plays a crucial role as a financial intermediary in the economy of a country. Indonesia has a dual banking system, so there are two types of banking operations, namely conventional and Islamic banking. In addition to these two types of banking, Indonesia also has rural banks and Islamic rural banks. According to Meriyanti and Hermanto (2021) rural banks were first established from Market Banks or Bank Pasar, Rural Business Banks (BKPD), Rural Credit Fund Institution or *Lembaga Dana Kredit Pedesaan* (LDKP), which were then transformed into rural banks through PAKTO 1988.

According to Chapter 1 Article 1 Paragraph 3 and Paragraph 4 of Law Number 10 of 1998 concerning Banking, commercial banks are conventional and or Islamic banks whose business activities are to provide

payment-related services. Rural banks, on the other hand, are conventional and or Islamic banks whose business activities are not to provide payment-related services. According to Chapter 1 Article 1 Paragraph 7 of Law Number 21 of 2008 concerning Islamic Banking, Islamic banks are banks whose business activities are carried out based on Islamic principles; there are two types of Islamic banks, namely Islamic commercial banks and Islamic rural banks.

Commercial banks and rural banks provide services for credit channeling. When commercial banks have an unlimited ceiling which can reach trillions of rupiah, rural banks have a limited ceiling. In terms of the types of home mortgages provided, both commercial banks and rural banks can distribute non-subsidized mortgages and subsidized mortgages.

### **Residential Properties**

A house is a basic human need in addition to clothing and food needs. In addition to serving as goods, houses can also serve as a form of investment. According to Krisnaputri (2016), properties are classified as residential and non-residential properties. According to Friedman et al., (2000) residential property is defined as an arrangement that consists mostly of houses, instead of stores and businesses. According to Law Number 4 of 1992 concerning Settlements and Housing, a house is a building that serves

as a residence or settlement and a place to start a family.

According to Bank Indonesia (2012), houses can be classified into small-sized houses, medium-sized houses, and large-sized houses. The small-sized houses have an area of 36 m<sup>2</sup>, medium-sized houses have an area of up to 70 m<sup>2</sup>, and large-sized houses have an area of larger than 70 m<sup>2</sup>. Laakso and Lokkanen in Anastasia & Hidayat, (2019) explain several characteristics of the housing market. First, a house is a basic need and its location remains fixed. Second, it is a very expensive item. Third, it is a heterogeneous product because it combines structural, quantitative, and qualitative characteristics. In addition to these characteristics, the housing market also have other characteristics, i.e., involving high transaction costs which comprise prices of products, taxes, and other related costs, so moving from one house to another rarely occurs.

### **Home Finance**

In principle, conventional and Islamic banks are an intermediary between lenders (those who have money) and borrowers (those who need money). Banks receive money from parties with surplus of funds and distribute it to parties who need or lack funds. Residential home finance is one of the processes of channeling funds by Islamic banks to the public. The procedures for providing financing to customers should adhere to the provisions of the Quran and Hadith. There is

a difference between residential home finance provided by Islamic banks and commercial banks, i.e., Islamic banks use a profit-sharing system, while commercial banks use an interest system.

According to Haris (2007) residential home finance products use the concept of profit- and loss-sharing instead of the interest system. The differences in the home finance can be seen in terms of the credit system and mark-up system, whether there is a bargain between customers and banks, the financing procedures, etc. Home finance is also known as Islamic home mortgage. Heykal (2014) Islamic home mortgages have different characteristics. In commercial banks, home mortgage is distributed based on a sale and purchase agreement; in Islamic banks, Islamic home mortgages use the contracts of *murabahah*, *ijarah muntahiya bit tamlik*, and *musyarakah mutanaqisah*. Santoso and Adhito in Oleh *et al.*, (2016) mention that in Islamic home mortgages, the product in the transaction is goods (houses) using the principle of sale and purchase (*murabahah*), while in conventional banks, the product in the transaction is money. The contracts used in Islamic home mortgage are stated in regulations from the National Sharia Board.

### **Home Mortgage**

Home mortgages are loans provided by banks to their customers to purchase or repair a house. According to Law Number 10 of 1998 concerning Banking, credit is the

provision of money or equivalents, based on a loan agreement between the bank and another party which requires the borrower to repay the debt with interests after a certain period of time. In general, there are two types of home mortgages in Indonesia, i.e., subsidized mortgages and non-subsidized mortgages. Subsidized home mortgages are loans given to those from lower-middle-income class to meet their housing needs or to repair the houses they already have. Meanwhile, non-subsidized home mortgages are loans provided for the entire community.

The distribution of subsidized home mortgages shall refer to the provisions of regulations set by the government, preventing this type of home mortgage from being accessed by those who are not entitled to it. The regulations concerning subsidized home mortgages are Regulation of the Minister of Finance Number 124/PMK.02/2010 concerning Procedures for Provision, Disbursement, and Accountability of Housing Subsidies through Small-Sized Home Mortgage and Regulation of the State Minister for Public Housing Number 05/PERMEN/M/2007 concerning Procurement of Houses and Settlements with Housing Subsidies through Subsidized Home Mortgages. According to Sarayar (2022) subsidized home mortgages are provided for low-income people. The loans provided include subsidized mortgages for the first purchase of a small-sized house from

developers and loans for the construction or repair of small-sized houses.

## RESEARCH METHODS

The study was conducted using quantitative descriptive methods. The type of secondary data applied is time series data. The data are derived from Statistics Indonesia (BPS) and Financial Economic Statistics for the period 1990-2022. This research employed 32 time series data. The dependent variable includes Economic Growth, while the independent variables employ tax revenue, non-tax state revenue, foreign investment, and labor. The general equation of the regression model is formulated, as follows:

$$EG = a + \beta_1 Tax_t + \beta_2 PNB P_t + \beta_3 PMA_t + \beta_4 LABOR_t + e_t$$

In which:

EG = Economic Growth

Tax = Tax Revenue

PNBP = Non-Tax State Revenue

PMA = Foreign Investment

LABOR= Total Labor

$e$  = error term

This research uses a quantitative method utilizing the Autoregressive Distributed Lag (ARDL) model which aims to see the correlation in terms of finance and labor altogether with economic growth in the short and long periods. The Autoregressive Distributed Lag (ARDL) model is used to be more effective and to reduce bias on relatively little data. The ARDL model will be effective in use and is not biased on small data. It is

**Table 1.** Stationary *First Difference Stage*

applied without considering that the regressor is integrated with a level or first difference level. It can lessen the ECM dynamic error model (Error Correction Model) with simple linear changes.

## Data analysis technique

This research aims to examine the influence of tax revenue, non-tax state revenue, foreign investment, and labor on economic growth. Data can be processed with statistical methods using the E-Views 12 computer program. The dependent variable used in this research is economic growth. Meanwhile, the independent variable is explained as a variable that causes the existence of other variables. The independent variables in the research include tax revenue, non-tax state revenue, foreign investment, and labor.

As stated previously, Autoregressive Distributed Lag (ARDL) is employed as an analysis method that uses log variables so that the units are linear. The ARDL is a method that takes into account the influence of long and short periods of a variable as explained in (Gujarati et al., 2015).

## RESULTS AND DISCUSSION

Before performing inferential analysis, descriptive statistical analysis has been done to ensure the distribution of the data. The result of descriptive statistics analysis can be seen in Table 1 below:



Variabel	Test Statistic	Probability	Conclusion
EG	-6.103468	0.0000	stationary
TAX	-3.368967	0.0207	stationary
PNBP	-6.125693	0.0000	stationary
PMA	-3.466363	0.0183	stationary
Labor	-8.566863	0.0000	stationary

Source: Eviews Processed Results, 2023 (processed)

The results of Table 1 at the level stage, indicates that economic growth variables are less than alpha 0.05, while the Tax, Non-tax revenue (PNBP), foreign investment (PMA) and Labor variables are counted more than 0.05 or equal to 5%. Integration testing is carried out because the variables are not stationary. In Table 1, the first difference level integration test results in all the variables used are stationary.

The ARDL model equation used for this research is as follows:

$$\begin{aligned} \Delta \log EG_t = & \beta_0 + \sum_{i=1}^n \beta_{1i} \Delta \log EG_{t-1} \\ & + \beta_{2i} \Delta \log TAX_{t-1} \\ & + \beta_{3i} \Delta \log PNBP_{t-1} \\ & + \beta_{4i} \Delta \log PMA_{t-1} \\ & + \beta_{5i} \Delta \log LABOR_{t-1} \\ & + \theta_1 \log EG_{t-1} + \theta_2 \log EG_{t-2} \\ & + \theta_1 \log EG_{t-1} + \theta_2 \log TAX_{t-1} \\ & + \theta_3 \log PNBP_{t-1} \\ & + \theta_4 \log PMA_{t-1} \\ & + \theta_5 \log LABOR_{t-1} + e_t \end{aligned}$$

The ARDL model in the form of an error correction model from the previous equation, as follows:

$$\begin{aligned} \Delta \log EG_t = & \beta_0 + \beta_{1i} \Delta \log EG_{t-1} \\ & + \beta_{2i} \Delta \log TAX_{t-1} \\ & + \beta_{3i} \Delta \log PNBP_{t-1} \\ & + \beta_{4i} \Delta \log PMA_{t-1} \\ & + \beta_{5i} \Delta \log LABOR_{t-1} + e_t \end{aligned}$$

Description:

$\Delta$  = lag

$\beta$  = Intercept

$\beta_1, \beta_2, \beta_3, \beta_4$  = Variable Coefficient

t = Time

e = error term

$\beta_{1i} - \beta_{3i}$  = Short-term relationship model

$\theta_1 - \theta_4$  = Long-term relationship model

**Table 2.** ARDL Estimation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
EG(-1)	-0.548109	0.165650	-3.308843	0.0048
EG(-2)	-0.388781	0.088658	-4.385162	0.0005
LOG_TAX	30.14205	2.697318	11.17482	0.0000
LOG_TAX(-1)	-10.24458	3.852889	-2.658936	0.0179

LOG_TAX(-2)	-5.360797	3.491670	-1.535310	0.1455
LOG_PNBP	5.204952	2.656401	1.959400	0.0689
LOG_PNBP(-1)	2.161266	3.030305	0.713217	0.4867
LOG_PNBP(-2)	-5.206846	2.979189	-1.747739	0.1009
LOG_PNBP(-3)	3.851653	2.509187	1.535020	0.1456
LOG_PMA	0.570693	1.041760	0.547816	0.5919
LOG_PMA(-1)	-3.022353	1.015893	-2.975071	0.0094
LOG_PMA(-2)	2.476645	1.277010	1.939409	0.0715
LOG_Labor	-39.37476	30.08460	-1.308801	0.2103
LOG_Labor(-1)	-69.18602	29.71668	-2.328188	0.0343
C	495.1355	88.03494	5.624307	0.0000
R-squared	0.963933	Mean dependent var		4.628333
Adjusted R-squared	0.930271	S.D. dependent var		3.830850
S.E. of regression	1.011581	Akaike info criterion		3.167760
Sum squared resid	15.34946	Schwarz criterion		3.868358
Log likelihood	-32.51640	Hannan-Quinn criter.		3.391887
F-statistic	28.63556	Durbin-Watson stat		1.984696
Prob(F-statistic)	0.000000			

\*Note: p-values and any subsequent tests do not account for model selection.

Source: Eviews Processed Results, 2023 (processed)

The ARDL estimation equation model

can be formulated, as follows:

$$\begin{aligned}
 \log EG_t = & 0.548109 \log EG_{t-1} - 0.388781 \log EG_{t-2} + 30.14205 \log TAX_t \\
 & - 10.24458 \log TAX_{t-1} - 5.204952 \log TAX_{t-2} + 5.204952 \log PNBP_t \\
 & + 2.161266 \log PNBP_{t-1} - 5.206846 \log PNBP_{t-2} + 3.851653 \log PNBP_{t-3} \\
 & + 0.570693 \log PMA_t - 3.022353 \log PMA_{t-1} + 2.476645 \log PMA_{t-2} \\
 & - 39.37476 \log LABOR_t - 69.18602 \log LABOR_{t-1} + e_t
 \end{aligned}$$

**Table 3.** Short-Term ARDL Estimation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(EG(-1))	0.388781	0.057939	6.710157	0.0000
D(LOG_TAX)	30.14205	1.705174	17.67682	0.0000
D(LOG_TAX(-1))	5.360797	2.343868	2.287158	0.0371
D(LOG_PNBP)	5.204952	1.990450	2.614963	0.0195
D(LOG_PNBP(-1))	1.355192	1.763727	0.768369	0.4542
D(LOG_PNBP(-2))	-3.851653	1.771713	-2.173972	0.0461
D(LOG_PMA)	0.570693	0.537426	1.061900	0.3051
D(LOG_PMA(-1))	-2.476645	0.787797	-3.143762	0.0067
D(LOG_Labor)	-39.37476	20.03899	-1.964908	0.0682
CointEq(-1)*	-1.936890	0.163255	-11.86418	0.0000
R-squared	0.980343	Mean dependent var		-0.038333
Adjusted R-squared	0.971498	S.D. dependent var		5.189103
S.E. of regression	0.876055	Akaike info criterion		2.834426
Sum squared resid	15.34946	Schwarz criterion		3.301492
Log likelihood	-32.51640	Hannan-Quinn criter.		2.983845
Durbin-Watson stat	1.984696			

\* p-value incompatible with t-Bounds distribution.

Source: Eviews Processed Results, 2023 (processed)

The short-term ARDL equation model is presented as follows:

$$\log EG = 30.14205TAX + 5.204952PNBP + 0.570693PMA - 39.37476NLABOR - 1.936890ECT + e_t$$

**Table 4.** Long-Term ARDL Estimation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG_TAX	7.505161	1.082667	6.932105	0.0000
LOG_PNBP	3.103443	0.799356	3.882427	0.0015
LOG_PMA	0.012899	0.867163	0.014875	0.9883
LOG_LABOR	-56.04903	7.923457	-7.073810	0.0000
C	255.6344	34.81002	7.343700	0.0000

$$EG = -255,6344 + 7.5052*LOG\_TAX + 3.1034*LOG\_PNBP + 0.0129*LOG\_PMA - 56.0490*LOG\_LABOR$$

Source: Eviews Processed Results, 2023 (processed)

ARDL Long-term model is formulated, as follows:

$$EG_t = 7.5052LOG\_TAX + 3.1034LOG\_PNBP + 0.0129LOG\_PMA - 56.049LOG\_LABOR + 255.6344$$

Tax revenues from 1990 to 2022 give a significant long-term and short-term effect on growth with a probability of 0.0000, which is less than the significant value of  $\alpha = 5\%$ . This is in accordance with the hypothesis stated that Tax Revenue influences Indonesia's Economic Growth. Tax revenue is also the largest income for the state, therefore the financial sector from taxes is very essential. This leads to the statement that relates the tax revenue with the capital, in which increasing tax revenues will directly increase cash capital for the government so that it can improve its economy with the aim of improving people's welfare.

These results are aligned with research carried out by Sumaryani (2019) stated that short and long period tax revenues can have a significant positive effect. Similar results are also presented by research carried out by Saragih (2018) outlined that economic growth in Indonesia can be influenced by tax revenues positively and significantly. Also supported by research conducted by Estro (2020) explained that tax revenues have an influence on Indonesia's economic growth. Based on the graphic image, it can also be seen that tax revenues have increased from year to year. In 1990 it was amounted to 22011 trillion rupiah. In 2022, Indonesia's tax revenues increased significantly, by 1717811 trillion rupiah. Tax revenue is also one of the factors that supports economic growth since taxes are the largest source of state budget revenue that eventually can support a country's financing.

According to the Ministry of Finance (2022) taxes become the backbone and

foundation of the country's economy and play a crucial role in initiating the country's security and defense. In 2022, tax growth performance showed an increase of 58.1%, and gave a good impact on economic growth by 5.31%.

Based on the research results above, it shows that Non-Tax State Revenue from 1990 to 2022 has a significant influence and relationship on Economic Growth in the short and long term. followed by probability values of 0.0195 and 0.0015 which are less than the significance level value  $\alpha = 5\%$ . It is aligned with the previous hypothesis stated that Non-Tax State Revenue has an influence on Indonesia's Economic Growth. It means that PNBP becomes one of the state incomes, which can increase economic growth. Even though this income is calculated below tax, still, PNBP can boost economic growth. The sectors that generate PNBP income are oil and gas and non-oil and gas. The oil and gas sector are capable of generating large revenues, hence, PNBP revenues are expected by the state.

According to the Ministry of Finance (2022) non-tax state revenue shows good performance, the realization of non-tax state revenue in June 2022 reached 281.0 trillion rupiah or 58.3%. In 2022, the realization of non-tax state revenues grew by 35.8% due to commodity prices starting to rise. The increase in non-tax state revenue becomes sustainable aligned with the increase of

economic growth from 1990 – 2022. These results are similar to research carried out by Arofah (2015) that non-tax state revenues have a positive and significant effect in the short and long term.

Based on the research results above, it shows that investment (PMA) in 1990 to 2022 has an insignificant correlation in the short and long term, based on the value of 0.3051 and 0.9883, which are more than  $\alpha = 5\%$ . This statement is unmatched with the hypothesis, Indonesia's economic growth is not influenced by foreign investment.

These findings are in accordance with the research conducted by Rahmawati (2022) explicated that FDI has a positive and insignificant effect on changes in economic growth in Indonesia. Foreign investment has a positive effect since the emergence of foreign investment in the capital form of skilled, physical, and new technology provides profits, such as improved production, that will eventually provide new job opportunities and escalate national income. These results are also in line with research conducted by Kustitunto (2019) suggested that investment has no influence on economic growth, either in the short or long term.

Again, based on above results, it shows that the working population in the period of 1990 - 2022 shares a negative and significant influence on economic growth in the long term, specified by a value of 0.0000, which is counted less than the significance level of  $\alpha =$

5%, while economic growth is not influenced by labor in the short term, with probability of exceeding 0.0682 significance level  $\alpha = 5\%$ . But in the short term the workforce has insignificant influence on economic growth. Thus, it is contrary to the hypothesis in the research, affirming that as labor increases, then economic growth increases. The inclining workforce must be well-adjusted with an increase in new employment opportunities for the productive age. Based on the graph, the number of Indonesian workers in 2021 is recorded as 13105052 million people and in 2022 the workforce in Indonesia will be 13529671 million people. It signifies that the workforce increases due to the growing population.

Explanation above are supported with a study conducted by Ni'mah & Islami (2023) claimed that work gives negative and significant influence, in the short and long-term. It means that if workforce increases the economic growth will run slow, and once workforce decrease, economic growth will also decline. In general, a large workforce must be accompanied with qualities, such as skills, knowledge, and work discipline. Research has found negative and insignificant results which indicate that currently, Indonesia lacks skilled workers, resulting in the need to increase education, health services and work discipline, which increases labor productivity. It will come up with a quality workforce that can contribute to Indonesia's

economic growth. If the large number of workers cannot be absorbed properly in the world of work, it will lead to a lag in economic growth, which can cause unemployment. As supported by Samuelson and Nordhaus, (2004) stated that labor growth equipped with employment opportunities will increase a region's economic production (Wulandari & Ariusni, 2022). Economic growth tends to prefer capital over national income. This is important to be considered, since without providing more jobs to workers, economic growth will slow down, affecting labor absorption, as economic growth indicators are related to increasing numbers of unemployment (Ghofari (2010) in Sumaryani, (2019). In its objective to meet long-term improvement, investment, labor and technology must be fully utilized so that they can replace one another Todaro (2011) in Wulandari & Ariusni (2022). Finally, the driver of economic growth is technology. It has a positive impact on economic development. Economic growth accelerates when there is innovation to advance technology. Innovation and technological development can be exploited to improve socio-economic welfare Sadono (2015) in Wulandari & Ariusni (2022).

## **CONCLUSIONS**

The variables, which are tax revenues, revenues, and non-tax state revenue (PNBP), have a long-term significant positive effect in Indonesia's economic growth during the period of 1990-2022, while foreign investment has an insignificant positive effect in the short

and long term since capital is considered as an important part of supporting and influencing economic growth. The variables, which are tax revenue, non-tax state revenue, influence significantly and positively the economic growth, both in the long and short periods, but economic growth in Indonesia is not influenced by labor in the short-term, yet in the long-term, labor influences significantly and negatively during 1990-2022. In another word, it can be stated that labor has a negative and insignificant influence in the short-term, but in the long-term labor has a significant negative effect.

Excessive labor can cause unemployment if the opportunity of employment cannot be balanced. It will lead to a decrease in economic growth. Currently, only a small number of Indonesian workforces is equipped with proper qualification, hence it is urgent to initiate further improvements in education, health, and work discipline that undoubtedly will enhance the workers' capability. Study, as an independent variable can influence the dependent variable by 96% and the remaining is influenced by others. Financial sources are important for economic growth because abundant state revenues will improve people's welfare, under good management. It means that capital in the form of money and labor are important for a country's economic growth. Labor capital is essential to increase production output, but if the number of labor keeps on growing while

the employment remains stagnant, an unemployment issue will arise that may lead to an economic decline.

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