# ICEBIT

# Poverty Dynamics In Indonesia
# (A Comparison Of Condition Prior To And During
# The Covid-19 Pandemic)

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## ABSTRACT

This study aims to determine the effect of the economic growth rate (GRDB rate), participation rate of the labor force (TPAK), average years of schooling (RLS), bank credit, and information and communication technology (ICT) on poverty levels in Indonesia before and during the COVID-19 pandemic. The research method used panel data analysis using a random effect approach. The results of data analysis show that the economic growth variable before COVID-19 had an insignificant positive effect, while during the COVID-19 pandemic it had a significant positive effect on the poverty rate, while TPAK in Indonesia before and during the COVID-19 pandemic had a negative and insignificant effect on the poverty rate. RLS before the pandemic has a significant negative effect; during the COVID-19 pandemic, it has a negative and insignificant effect on poverty. Bank credit before the COVID-19 pandemic has a significant negative effect; during the pandemic, it has an insignificant negative effect on the poverty rate. ICT before the pandemic has an insignificant positive effect, and during the pandemic it has an insignificant negative effect on poverty in Indonesia. ICT use in the community was relatively low prior to the pandemic, but it increased as a result of the transition to digital systems for all activities.

**Keywords :** Poverty rate, GRDP rate, Average Years Of Schooling, Bank Loans and Credit, ICT.

## 1. INTRODUCTION

Economic development is a multidimensional process that involves many aspects such as social structure, community attitudes, national institutions, the acceleration of economic growth, and the absolute elimination of inequality and poverty (Todaro, 2011). Empirically, poverty in Indonesia still cannot be resolved, especially with the emergence of COVID-19. The poverty rate in Indonesia continues to increase. It was noted that in 2019, before COVID-19 appeared, the poverty rate in Indonesia was 9.32%, but when COVID-19 appeared, the poverty rate in Indonesia had increased significantly to reach 9.99%. There was an increase before and during COVID-19 of 0.67 percent (National BPS, 2022). (Setyadi & Indriyani, 2021) stated that the increase in the number of COVID-19 cases resulted in an increase in the poverty rate in Indonesia. The emergence of COVID-19 in Indonesia has had an impact on increasing poverty in Indonesia in all regions, especially East Java (Alfiah et al., 2021). Poverty is a social problem that always occurs both in provinces and regions. Therefore, the government is making various efforts and policies, as outlined in programs through the RPJMD, to reduce poverty so that prosperity occurs in society (Rah Adi Fahmi et al., 2018).
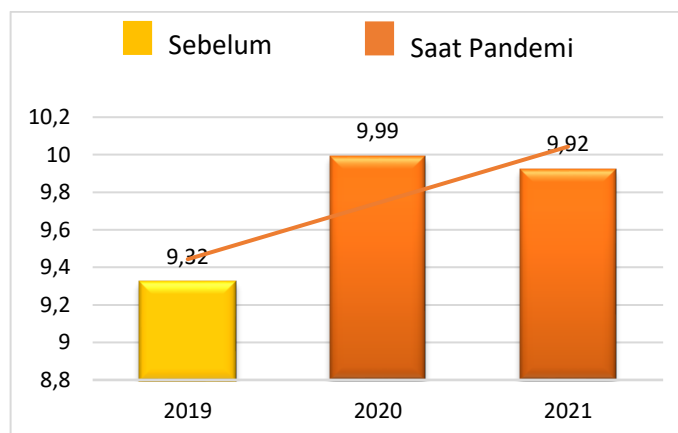
**Figure 1. Comparison of Poverty Levels Before and During the COVID-19 Pandemic in Indonesia**
Source: Central Bureau of Statistics

According to David Ricardo's theory, capital accumulation and technological progress have an important role in increasing labor productivity. This will slow down the decline in the level of life towards a minimum level of life. Factors of capital accumulation and technology are indispensable for economic development (Arsyad, 1992):52). Teori ini menjelaskan bahwa untuk mencapai kemakmuran diperlukan peningkatan akumulasi modal dan teknologi. Poverty is also interpreted as a multidimensional problem where human needs are varied, so that poverty has many aspects ((Arsyad, 1992):188). According to research by (ALIFAH et al., 2020) poverty is a condition of a low standard of living for people who cannot meet their basic needs. According to Booth's theory (1996), there are five factors that cause poverty, namely economic, socio-cultural, environmental and geographical, physical and limitations in accessing several things. Poverty is also a multidimensional problem where human needs vary, so it has many aspects (Arsyad, 1992):188).

By using the poverty line, the BPS establishes the poverty line in Indonesia. The poverty line is the minimum income level that a household must reach in order to meet its basic needs. The emergence of the COVID-19 pandemic had a huge impact on increasing poverty in Indonesia (Natalia & Putranto, 2022). The COVID-19 pandemic has disrupted economic activity (Nuryanti & Soebagijo, 2021). Disrupted economic sectors have an impact on decreasing labor productivity, thereby disrupting economic growth. High economic growth is an indicator of the success of development in a country. ADHK's economic growth rate in the business sector can be used as an indicator (Arsyad, 1992:18). Economic growth has an effect on poverty (Susanto & Pangesti, 2021). Empirically, economic growth in Indonesia has decreased during COVID-19. It was recorded at BPS that economic growth in 2019 decreased by 0.15% from the previous year and continued again in 2020, which also experienced a significant decrease of 7.09% from the previous year. This happened because of the impact of COVID-19, which appeared in Indonesia.

COVID-19 has also affected the labor force participation rate (TPAK) in Indonesia. During COVID-19, to be precise, in 2021, BPS noted that TPAK in Indonesia had decreased by 0.55% compared to the previous year. This data indicates that the supply of labor in society has decreased, which has an impact on increasing poverty. The level of participation in the workforce is very influential on poverty (Mirah et al., 2020).

Human capital also has an important role in alleviating poverty, one of which is education. Education is a solution for someone to get out of poverty; with higher education, individuals have the opportunity to increase their income so that they can meet their needs (Ishak et al., 2020). It is noted that education in Indonesia continues to increase every year. In 2021, education in Indonesia will increase by an average of 8.54%.

Then bank credit is also a solution for individuals to achieve prosperity. With banks channeling funds to the public, it will provide opportunities for the community to do business. The business being carried out aims to be developed so that people can get out of poverty (Ismail, 2021). However, empirically, Bank Indonesia noted that the loans disbursed by banks experienced a decline during COVID-19.

In addition, technology also plays an important role in economic development. In accordance with David Ricardo's theory, which states that technology has an important role in alleviating poverty, IP-TIK, which is growing rapidly, shows the quality of human resources in a quality area. There are four key elements for alleviating poverty, one of which is access to information (Narayan, 2002). It is noted that IP-TIK in Indonesia is experiencing very good development, especially since COVID-19 appeared and all activities turned into digital systems.

## 2. THEORETICAL BASIS
### 2.1 Anne Booth's Theory of Poverty

According to (Booth, 1996), there are five factors that result in poverty. The first is the economic factor, which consists of a lack of technology and capital. The second is socio-cultural factors, where these factors consist of education and low expertise. The third is environmental and geographical factors, where these factors consist of the lack of fertile soil, the existence of epidemics or diseases, and the isolation of the region. The fourth consists of physical factors, which

consist of gender, age, and level of health. Fifth, there are limitations on accessing various things, such as credit facilities, market products, and public facilities.

According to (Todaro & Smith, 2006), the concept of poverty explains the existence of absolute poverty. Absolute poverty, according to these two experts, means that some residents cannot meet their basic needs due to limited resources and a low real minimum income. The poverty line is constantly defined in real terms to track progress in the fight against poverty over a long period of time. This idea is based on the idea that the minimum standard of living in "human absolute misery" is the poor health of the individual.

### 2.2 Classical Economic Growth Theory

David Ricardo's theory of capital accumulation and technological progress has an important role to play in increasing labor productivity so that it will slow down the law of diminishing returns. This will slow down the decline in the level of life towards a minimum level of life. Factors of capital accumulation and technology are indispensable for economic development (Arsyad, 1992). Economic growth, according to Adam Smith in (Kuncoro, 1997), increases if there is a division of labor between actors in economic activity. The division of labor will later be able to increase labor productivity.

### 2.3 Becker's Human Capital Theory

(Becker, 1993) states that human capital investment can not only be obtained from capital. Gery S. Becker has a different opinion: the most important investment in human capital for increasing people's welfare comes from education, training, and health. Higher education is a long-term investment that will increase individual income in the future. The length of education of the population can be seen from the average length of schooling (RLS). RLS is the average number of years spent by residents aged 15 and over pursuing all types of education that have been undertaken.

### 2.4 IP-TIK concept

According to (Booth, 1996), economic factors such as capital and technology are the root causes of poverty. Technology has an important role in reducing poverty. According to Solow's theory of economic growth, there is a very close balance between full-capacity income and full employment. This is what causes Solow to build long-term economic growth by assuming a fixed proportion. This theory argues that economic growth depends on the increase in production factors such as population, labor force, capital accumulation, and the level of technological progress (Arsyad, 1992). With the development of increasingly sophisticated technology, it will facilitate the transformation of a number of inputs into outputs that can add value to productivity (Radhi, 2010).

## 3. RESEARCH METHODS

This research is a type of quantitative research using two-panel data regressions. This research is also explanatory. Explanatory research is a research method that intends to explain the position of the variables studied and their effects. The reason for using explanatory research is to test the proposed hypothesis so that it can explain the influence or relationship between two or more variables (Sugiyono, 2017). The object of this research focuses on 34 provinces in Indonesia. The data period used was before the COVID-19 pandemic in 2018–2019 and during the COVID-19 pandemic in 2020–2021. The sample in this study is the percentage of poor people (Y), economic growth rate (X1), labor force participation rate (X2), average length of schooling (X3), bank credit (X4), and IP-TIK (X5) in 34 provinces in Indonesia. Stata Software Version 15 was helpful for this research. The regression model proposed in this study is as follows:

$$POV_{it} = \beta_0 + \beta_1 GROWTH_{1it} + \beta_2 TPAK_{2it} + \beta_3 logRLS_{3it} + \beta_4 logPKB_{4it} + \beta_5 logTIK_{5it} + \varepsilon_{it}$$

| | |
|---|---|
| POV | : Poverty Percentage in Indonesia |
| $\beta_0$ | : Constant |
| $\beta_1 - \beta_5$ | : independent variable regression coefficient values |
| GROWTH | : The rate of economic growth in Indonesia |
| TPAK | : Labor Force Participation Rate in Indonesia |
| RLS | : Average length of schooling in Indonesia |
| PKB | : Bank Indonesia Credit Loans |
| TIK | : Information and communication technology |
| t | : time series (201–2021) |
| i | : cross section (34 provinces in Indonesia) |
| $\varepsilon_{it}$ | : error term |

## 4. RESEARCH RESULT AND DISCUSSION

Poverty in Indonesia before the pandemic decreased, but when the emergence of the COVID-19 pandemic occurred, it increased. This is a significant comparison of the percentage of poor people in Indonesia before and during the COVID-19 pandemic. The figure below shows the trend of the percentage of poor people in Indonesia from 2017 to 2021. The percentage of poor people has decreased significantly in 2019 to 0.42%. In 2019, the percentage of poor people decreased due to an increase in the wage value of informal workers and a decrease in the retail price of basic goods. However, in 2020, poverty in Indonesia will have increased significantly by 0.67%. The COVID-19 pandemic, which had a significant impact on the poor, was what caused the increase in the poverty rate (Katadata, 2021). Furthermore, in 2021, poverty will decrease due to the efforts made by the government to alleviate it.
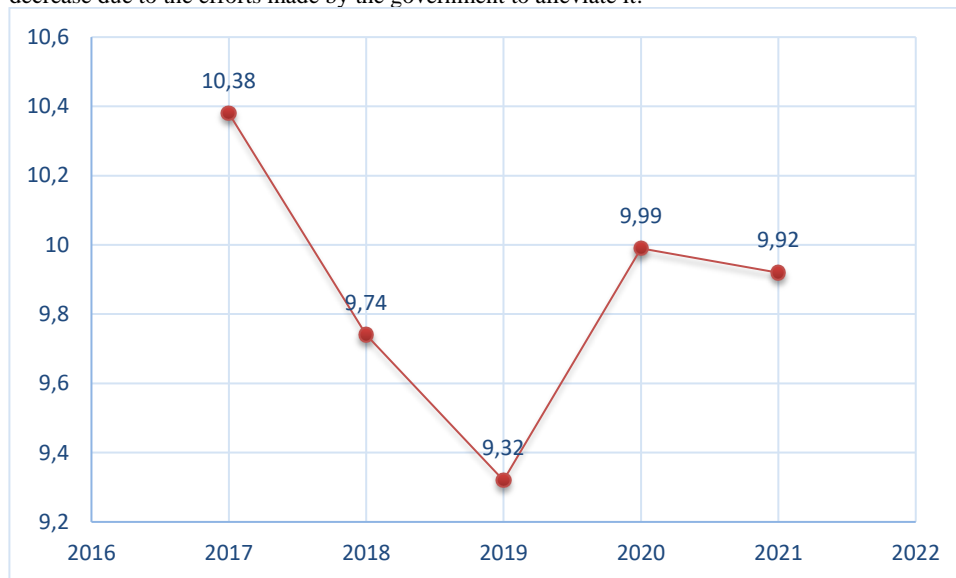


**Figure 2. Poverty Rate in Papua Province, 2017-2021**

Source: Central Bureau of Statistics

According to data on Indonesia's poverty rates from 2017 to 2021, Papua has the highest rate at 27.12 percent, and West Kalimantan has the lowest rate at 4.63 percent. High levels of poverty in Papua are a result of the physical characteristics of the area, including growing environmental damage, unequal resource distribution, frequent natural disasters, rising population growth that depletes natural resources, ineffective government policies, and agricultural technology that is still underutilized, particularly in light of the emergence of COVID-19. Then, the low poverty rate in West Kalimantan is due to the harvest season for food and horticultural crop commodities such as agriculture, forestry, and fisheries (Ministry of Finance, 2021).

### 4.1 Analysis Result and Classical Assumption Testing

Based on the classical assumption test results (normality test, multicollinearity test, heteroscedasticity and autocorrelation), the research data has passed the classical assumption test. The model chosen in this study based on the Chow Test, Hausman Test and Langrange Multiplier Test is the Random Effect Model (REM)

### 4.2 Estimation Test Result

- **Random Effect Models Before the COVID-19 Pandemic**

$$POV_{it} = \beta_0 + \beta_1 GROWTH_{1it} + \beta_2 TPAK_{2it} + \beta_3 logRLS_{3it} + \beta_4 logPKB_{4it} + \beta_5 logTIK_{5it} + \varepsilon_{it}$$

$$POV_{it} = 60.21283 + 0.178146 GROWTH - 0.0731508 TPAK - 12.89125 RLS - 1.67584 PKB + 0.6832364 TIK + \varepsilon_{it}$$

Based on the results of the equation above, the relationship between the independent variable and the dependent variable can be analyzed as follows:

a. The constant ($\beta 0$) shown in table 4.10 has a value of 60.21283%, meaning that the Economic Growth Rate, TPAK, RLS, PKB, and ICT are constant, so the poverty rate is 60.21283%.

b. The economic growth rate (GROWTH) shown in table 4.10 has a coefficient value of 0.178146%, which means that if the economic growth rate increases by 1%, it will increase the poverty rate in Indonesia by 0.178146%. Assuming TPAK, RLS, PKB, and ICT are considered constants,

c. The Labor Force Participation Rate (TPAK) shown in table 4.10 has a coefficient value of -0.0731508%, which means that if the TPAK increases by 1%, it will reduce the poverty rate by -0.0731508%. Assuming the Economic Growth Rate, RLS, PKB, and ICT are considered constants,

d. The average length of schooling (RLS) shown in Table 4.10 has a coefficient value of -12.89125%, which means that if the RLS increases by 1%, it will reduce the poverty rate by -12.89125%. Assuming the Economic Growth Rate, TPAK, PKB, and ICT are considered constants.

e. Bank Credit Loans (PKB) shown in Table 4.10 have a coefficient value of -1.67584%, so it can be interpreted that if the PKB increases by 1%, then the poverty reduction rate will be -1.67584%. Assuming the Economic Growth Rate, TPAK, RLS, and ICT are considered constants.

f. Technology, information, and Communication (ICT) shown in Table 4.10 has a coefficient value of 0.6832364%, which means that if ICT increases by 1%, it will increase poverty by 0.6832364%. Assuming the Economic Growth Rate, TPAK, RLS, and PKB are considered constants.

- **Random Effect Model During the COVID-19 Pandemic**

$$POV_{it} = \beta_0 + \beta_1 GROWTH_{1it} + \beta_2 TPAK_{2it} + \beta_3 logRLS_{3it} + \beta_4 LogPKB_{4it} + \beta_5 LogTIK_{5it} + \varepsilon_{it}$$
$$POV_{it} = 49.98436 + 0.0330953 - 0.0143878TPAK - 12.24735RLS - 0.7160222PKB - 2.388661TIK + \varepsilon_{it}$$

Based on the results of the equation above, the relationship between the independent variable and the dependent variable can be analyzed as follows:

a. The constant ($\beta0$) shown in table 4.11 has a value of 49.98436%, meaning that the Economic Growth Rate, TPAK, RLS, PKB, and ICT are constant, so the poverty rate is 49.98436%.

b. The economic growth rate (GROWTH) shown in Table 4.11 has a coefficient value of 0.0330953. So it can be interpreted that if the rate of economic growth increases by 1%, it will increase Indonesia's poverty rate by 0.0330953%. TPAK, RLS, PKB, and ICT are considered constants.

c. The Labor Force Participation Rate (TPAK) shown in Table 4.11 has a coefficient value of -0.0143878%. So that it can be interpreted that if the TPAK increases by 1%, it will reduce the poverty rate by -0.0143878%. Assuming GROWTH, RLS, PKB, and ICT are considered constants,

d. The average length of schooling (RLS) shown in Table 4.11 has a coefficient value of -12.24735%. So it can be interpreted that if the RLS increases by 1%, it will reduce the poverty rate by -12.24735%. Assuming growth, TPAK, PKB, and ICT are considered constants,

e. Bank Credit Loans (PKB) shown in Table 4.11 have a coefficient value of -0.7160222%. So it can be interpreted that if the PKB increases by 1%, it will reduce the poverty rate by -0.7160222%. Assuming GROWTH, TPAK, RLS, and ICT are considered constants,

f. Technology, Information, and Communication (ICT) shown in Table 4.11 has a coefficient value of -2.388661%. So it can be interpreted that if the PKB increases by 1%, it will reduce the poverty rate by -2.388661%. Assuming GROWTH, TPAK, RLS, and PKB are considered constants,

## 5. DISCUSSION

For the results before the pandemic, which showed a positive and insignificant relationship to the poverty rate, it indicated that if economic growth increased, it would increase the poverty rate, but not in a real way. These results are not in accordance with the hypotheses and theories that have been included. With high output, it will increase economic growth, thereby reducing poverty. So if the poor receive little benefit from the total existence of economic growth, it will only have a slight reduction in the number of poor people (Kuncoro, 1997). This finding is almost the same as that of Nainggolan's research (Nainggolan, 2020) in that his research resulted in economic growth having a positive and insignificant effect on the level of poverty in North Sumatra Province. According to (Prasetyoningrum, 2018), economic growth has a positive but insignificant impact because the distribution of development outcomes in Indonesia is not equitable, with a few select regions enjoying a high economy. Wulandari & Nugraha Pratama's research (Wulandari & Nugraha Pratama, 2022) also found that economic growth has a positive but insignificant effect on the level of poverty in Indonesia. This is because economic growth is not spread evenly. Empirically, prior to the pandemic, precisely in 2019, trade policies tended to be domestic, and geopolitical risks across countries had an impact on the uncertainty of world financial markets and suppressed global economic growth. Weakening world economic growth has had an impact on Indonesia's export performance (Bank Indonesia, 2019).

The same results during the COVID-19 pandemic showed that the rate of economic growth had a significant positive effect on the poverty rate. This means that if the rate of economic growth increases, it will increase poverty. This means that the results obtained are not in accordance with the theory but not with the hypothesis. This is not in accordance with

Smith's theory, which explains that capital accumulation is an important part of measuring fast or slow economic growth. Economic growth has a relationship with one another. This finding is almost the same as research by (Ishak et al., 2020), which shows that economic growth has a positive and significant effect on the poverty rate. This is because in Makassar City there is very high urbanization, resulting in an increasing population with limited employment opportunities and a lack of skills possessed by the community. Nadhifah's research (Nadhifah, 2018) also states that economic growth has a positive and significant effect on the poverty rate in East Java. Empirically, the poverty rate in Indonesia during COVID-19 experienced a significant increase. Economic growth during a pandemic had a very hard impact on economic growth (Ministry of Finance, 2022). COVID-19, which emerged in 2020, reduced aggregate demand and aggregate supply, which had an impact on decreasing world and Indonesian economic growth (Bank Indonesia, 2019). The global and domestic economies depend on the country's economic recovery process (Bank Indonesia, 2019).

The Labor Force Participation Rate before the COVID-19 pandemic showed a negative and insignificant relationship to poverty. If the TPAK increases, it will reduce the poverty rate, but not significantly. The results of this study are in accordance with the hypotheses that have been included and also with the theory that has been described. The theory that is in accordance with these results, namely Economic Growth according to Solow in Arsyad, 1992:55), states that economic growth depends on the increase in the providers of factors of production such as population, labor, capital accumulation, and the level of technological progress. These results are in accordance with research by (Salmah et al., 2019), which states that TPAK has a negative and insignificant effect on the poverty rate in Berau District. TPAK before the pandemic had increased, but this was not proportional to the increasing population in Indonesia. The population's participation in the labor force will decline as a result of population growth without accompanying opportunities and employment. That way, it will have an impact on people who are not working because they will find it difficult to earn an income, which has an impact on poverty.

Then the same results were shown when the COVID-19 pandemic showed a negative and insignificant relationship to poverty. If the TPAK increases, it will reduce the poverty rate, but not significantly. The results of this study are in accordance with the hypotheses that have been included and also with the theory that has been described. The theory that is in accordance with these results, namely Economic Growth according to Solow in (Arsyad, 1992:55), states that economic growth depends on the increase in the providers of factors of production such as population, labor, capital accumulation, and the level of technological progress. Research by (Alfionika et al., 2021) states that TPAK has no significant effect on the poverty rate in Jambi Province. In 2021, TPAK will drastically decrease as a result of the COVID-19 pandemic. The global economy is slowing down, and high uncertainty has an impact on trade wars that affect the service sector and workforce. This trade tension resulted in disruptions in economic activities such as the service sector and the labor market. Another thing that affected the economy was deteriorating business sentiment and a weakening economy, which resulted in lower wages and labor (Bank Indonesia, 2019).

For the results before the COVID-19 pandemic on the education variable through the average length of school, it had a negative and significant effect. This means that if education increases, it will reduce the poverty rate significantly. The results of this study are in accordance with the hypotheses and theories included. The theory that supports that is (Becker, 1993) has the view that in order to increase investment in human capital with the aim of social welfare, the most important thing is to get it from education, training, and health. Higher education is a long-term investment that will increase individual income in the future. Faritz & Soejoto's research (Faritz & Soejoto, 2020) states that education through the average length of schooling has a negative and significant effect on poverty in Central Java. The Central Bureau of Statistics (BPS) records that the average length of schooling in Indonesia continues to increase. In 2019, the average length of schooling in Indonesia increased by 0.17% from the previous year (BPS, 2022).

Then the results of education through the average length of school during the COVID-19 pandemic had a negative and insignificant effect. This means that if education increases, it will reduce the level of poverty, but not significantly. This research is almost the same as the research by (Adhitya et al., 2022) which states that education has a negative and significant effect on the poverty rate. The COVID-19 pandemic has had a major impact on education in Indonesia. Whereas the COVID-19 pandemic has had a substantial impact on areas such as education, the food industry, and poverty (Vollmer & Alkire, 2022). This condition causes education to adapt to these conditions and make new policies. The national economy, households, and foreign aid will all be hit hard as a result of the impact of the COVID-19 pandemic, and putting pressure on the education sector, especially on the most vulnerable children, will have a devastating effect on the educational gap in technology. UNICEF estimates that the pandemic pushed 150 million low- and middle-income children into poverty. Regarding community-wide cash assistance programs to reduce educational disparities (Lennox et al., 2021).

The results before the pandemic showed that bank loans had a negative and significant impact. This means that by increasing credit loans provided by banks, it will reduce the level of poverty in Indonesia. This result is consistent with existing hypotheses and theories. According to (Booth, 1996), a lack of credit facilities is the root cause of poverty. So if the credit facility increases, it will reduce the level of poverty. This research is almost the same as Ismail's research (Ismail, 2021), which states that bank credit has a negative and significant effect on poverty. According to data from the Indonesian Economic and Financial Statistics (Bank Indonesia), there was a 3.4% increase in the amount of credit that commercial banks and rural banks extended from the previous year. This indicates an increase in the banking sector. The increase in the banking sector has had a positive impact on reducing the poverty rate in Indonesia.

Then, for the results during the COVID-19 pandemic, bank credit loans had a negative and insignificant effect. This means that if credit loans by banks increase, it will reduce the level of poverty, but not significantly. This result is in accordance with the existing theory. According to Booth (1996), a lack of credit facilities is the root cause of poverty. So if the credit facility increases, it will reduce the level of poverty. This research is almost the same as the research by (Adam & Atmanti, 2021), which states that the banking penetration index has a negative and insignificant effect on poverty. Banking penetration is an important indicator of financial inclusion, as is credit. The COVID-19 pandemic presents a big challenge for banking. COVID-19 gave a big shock to maintaining banking capital and played a role in supporting the economy amid the COVID-19 crisis, even though the impact was not significant. Credit losses due to COVID-19 may be at the specified minimum capital position, increase banking financial stability, and end the real financing role of the economy during the recovery period (Bitar & Tarazi, 2022). The COVID-19 pandemic caused a weakening of domestic demand, which limited credit distribution. In 2021, loans that will have positive credit growth include consumer loans and working capital loans (Bank Indonesia, 2021). The detrimental impact of the COVID-19 pandemic depends on the characteristics of the bank and market structure. Good institutional quality and financial inclusion can increase the strength and resilience of banks to channel bank loans when COVID-19 is ignored (Shabir et al., 2023).

The Technology, Information, and Communication Development Index (ICT) before the COVID-19 pandemic had a positive but insignificant effect. This result is not in accordance with existing theories and hypotheses. The results are contrary to Booth's theory (1996) due to economic factors, which consist of capital and technology. The findings are in accordance with this study, namely (Setiawan1 et al., 2022), which stated that IP-TIK had a positive but insignificant effect in the WITA area. Then (Hakim & Zuber, 2008) also stated the same thing: technology had a positive effect on poverty in the former Surakarta residence. This is because poor families do not have access to electricity and do not have access to agricultural land management. The lowest ICT occurred in 2018, with a scale of 5.07. This shows that ICT, with indicators of access, infrastructure, use, and expertise, still cannot absorb the community. Internet usage in that year was still low. Young people are the only demographic who enjoy using the internet. Other factors indicate a low ICT because the level of education in Indonesia is only on average up to SD and SMP (BPS, 2018).

Then the different results for the Technology, Information, and Communication Development Index (IP-TIK) during the COVID-19 pandemic had a negative and insignificant effect. This means that if the IP-TIK results are in accordance with the existing theory, The results are in accordance with Booth's theory (1996) due to economic factors, which consist of capital and technology. Research by (Nisa & Budiarti, 2020) states that IP-TIK has a significant negative effect on poverty. BPS recorded IP-TIK when COVID-19 continued to increase. This is due to the condition of the people who require all their activities to be carried out online or in a digital system. So the government is intensifying all activities to make good use of technology. With good technology, it shows that Indonesia is able to compete in the global market. Technological developments promote the efficiency and effectiveness of the economy. People's consumption patterns have moved to digital platforms, which have an impact on digital economic activity. This digital era will increase economic growth through digital productivity (Bank Indonesia, 2019).

## 6. CONCLUSION

Poverty before the COVID-19 pandemic had a higher impact than during the COVID-19 pandemic. The pace of economic growth before and during the Covid-19 pandemic proved unable to reduce the poverty rate in Indonesia. The Labor Force Participation Rate (TPAK) before and during Covid-19 was proven to be able to reduce the poverty rate in Indonesia, but not significantly. The average length of schooling was proven to be able to reduce the poverty rate before Covid-19, while when COVID-19 was proven to be able to reduce the poverty rate, it was not real. Bank credit before COVID-19 was proven to be able to reduce poverty, while during COVID-19 it was proven to be able to reduce poverty, but not in real terms. The Technology, Information and Communication Development Index (IP-TIK) before COVID-19 proved unable to reduce the poverty rate, while during COVID-19 it was proven to be able to reduce the poverty rate not significantly. The government must pay attention to the community and business actors in each region to encourage improvement and development in the economic sector. That way it will also increase people's income and have a positive impact on their welfare. The government should encourage people to care about technology. With high technology, it shows the quality of Human Resources is higher. Government efforts must be made to safeguard the banking sector, especially in the credit sector, given the challenges of the COVID-19 pandemic. With the increase in the credit sector, it will provide guarantees for the community to obtain income from their business.

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