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Research article

Do Financial Deepening, Government Spending, and Unemployment benefit Poverty Reduction in Indonesia?

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Abstract: Poverty is classic problem faced in anycountry, various policies are carried out to reduce poverty to prosper the community. This study aims to analyze the effect of financial deepening, government spending, and unemployment on poverty in Indonesia. Observations were made in 33 provinces in Indonesia during the period 2012-2020. The model used is a panel data regression with fixed effect model. The results of this study indicate the financial deepening has a negative and significant effect on poverty, government spending has a negative and significant effect on poverty, and unemployment has a positive and significant effect on poverty. The implication is necessary to increase the role of the financial sector in every province in Indonesia, especially areas that are still low in financial deepening, optimize and increase government spending so that it can create new jobs and reduce the unemployment rate and poverty.

Keywords: Poverty, financial deepening, government spending, unemployment.

JEL Classification: E20, E24, H50, I32

Abstrak: Kemiskinan merupakan masalah klasik yang dihadapi di setiap negara, berbagai kebijakan dilakukan untuk mengurangi kemiskinan guna mensejahterakan masyarakat. Penelitian ini bertujuan untuk menganalisis pengaruh *financial deepening*, pengeluaran pemerintah, dan pengangguran terhadap kemiskinan di Indonesia. Pengamatan dilakukan di 33 provinsi di Indonesia selama periode 2012-2020.Model yang digunakan adalah model regresi data panel. Metode yang diterapkan adalah model *fixed effect*. Hasil penelitian ini menunjukkan *financial deepening* berpengaruh negative dan signifikan terhadap kemiskinan, belanja pemerintah berpengaruh negatif dan signifikan terhadap kemiskinan, dan pengangguran berpengaruh positif dan signifikan terhadap kemiskinan. Implikasinya adalah perlunya peningkatan peran sektor keuangan di setiap provinsi di Indonesia khususnya daerah yang masih rendah *financial deepening,* mengoptimalkan dan meningkatkan belanja pemerintah sehingga dapat menciptakan lapangan kerja baru dan mengurangi angka pengangguran serta kemiskinan.

Kata Kunci: Kemiskinan, pendalaman keuangan, pengeluaran pemerintah, dan pengangguran

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1. INTRODUCTION

Poverty is seen as the inability of the community from an economic standpoint to meet basic food and non-food needs as measured from the expenditure side, so a population is said to be poor if the population has an average monthly per capita expenditure below the poverty line (Badan Pusat Statistik, 2021). Poverty must be taken seriously because the impact of poverty is so broad, not only in the economic field but also in all aspects of life. The percentage of poor people is one way to determine the level of welfare of an area from a poverty point of view. The publication of the Indonesia Statistics (BPS) shows that Bali Province has the lowest poverty rate in 2020, which is only

4.45 percent. It contrasts with Papua Province which ranks first with the highest poverty rate of 26.80 percent. Based on BPS publication 2020, it is stated that the percentage of poor people in Indonesia in 2020 is 10.19 percent, meaning that out of 34 provinces only 19 provinces have a poverty percentage below the national poverty rate and the remaining 15 provinces have a poverty rate above the national poverty rate, therefore every province in Indonesia needs to reduce its poverty rate.

The vicious circle of poverty theory by Nurkse (1952) and Jhingan (2013) suggests that poverty and market imperfections lead to low productivity. Low productivity decrease people's income so that the portion for savings and investment decrease as well. Reducing in investment impact in low capital and will lead the market imperfections and underdevelopment or poverty and it continues to move in a cycle of poverty. The low capital, investment, productivity, income, and savings will form a vicious circle that continues to rotate so that poverty will always exist. Importance of breaking the poverty chain which can be done through the financial sector. Communities and companies can access capital in the financial sector to invest in their business, thus increasing investment. When investment rises conditions are not met, and a vicious circle is formed.

Financial deepening is a marked improvement process in the financial sector with the increase in the volume of financial institutions and the number of instruments available on the market (Prabowo, 2021). The size of financial deepening according to the world bank can be seen from financial institutions and financial markets. There are three main dimensions, namely depth, access, and efficiency. According to World Bank (2016) the depth dimension of financial institutions consists of M2, private sector credit, financial institution assets, deposits and gross added value from the financial sector to gross domestic product. Trade area country can be said to be experiencing financial deepening if the value of the financial deepening ratio is greater than 20 percent and it is experiencing shallow finance if the ratio is less than 20 percent (Aizenman & Riera-Crichton, 2022). The financial sector has a good impact on improving the economy because a good financial sector will certainly be a driver of economic activity. on the contrary, if the financial sector is not good enough it can cause the economy to face liquidity constraints to achieve a high economy from economic development (Ruslan, 2011).

Good financial deepening in an area is indicated by a high ratio of credit to Gross Regional Domestic Product (GRDP), means that the region can manage its finance well, so that the higher the ratio of financial deepening, the lower the poverty rate. In line with research results (Nyamweya et al., 2020) which show that financial deepening in the long term can reduce poverty in Kenya. Meanwhile, according to Trinugroho et al. (2020) financial deepening has no effect on poverty in Indonesia. According to Sharp et al in (Kuncoro, 2011) that poverty is caused by differences in resources, quality of human resources and differences in access to capital. The quality of human resources is greatly influenced by the government's role in improving education and health facilities because if education and health facilities are adequate and accessible to all members of society, productivity will increase. The government's role in government spending has an impact on society because development programs can create new jobs, increase people's income, and increase savings.

Government spending can also be a solution to reduce poverty levels because if government spending is done productively, it can expedite the economic activities of a region. One of the government's roles is government spending which is useful as control of economic activity. According to Keynes, government spending can increase output and reduce reaction rates because through government spending, projects can absorb labor and increase people's income so that they can improve people's welfare (Deliarnov, 2014). Government spending is the most effective means of government intervention in the economy, with government spending being able to increase production capacity, build infrastructure that absorbs labor, equalize income, and improves people's welfare.

All government spending is expected to have a positive impact on the economy, government spending on education and health has a significant and negative effect on poverty in East Lombok (Ali et al., 2020). Likewise with (Taruno, 2019) that government spending on education and health has a significant effect on poverty in Indonesia. Meanwhile, in Yogyakarta, government spending on education and health has no significant effect on poverty (Dzulhijjy, 2021). This is in line with (Lantu et al., 2017) which states that direct and indirect expenditures have no significant effect on poverty in Bitung City.

The level of social welfare in a region can be reflected in the number of unemployed. Unemployment continues to be a problem faced by various regions. According to the International Labor Organization, the unemployed are defined as those belonging to the working-age population who have not worked for a certain period, are willing to accept work, and are looking for work. Unemployment can make everyone suffer from a lack of income while spending for consumption continues so that the unemployed are forced to reduce their consumption, means that the level of welfare that has been achieved is reduced which in turn creates the problem of poverty. Open unemployment has a significant positive effect on poverty in Bali (Putra & Arka, 2018).The same thing is also in line with the research by Hasan et al. (2020) which states that the open unemployment rate has a significant positive effect on poverty in South Sulawesi. However, it is different from the results of research by (Mukhtar et al., 2019), which states that open unemployment has no significant effect on poverty in Indonesia provinces.

Based on the explanation above, it is known that there are differences in the response between each variable in the related area, which show that financial deepening, government spending, and unemployment can reduce poverty levels. Therefore, further research and updates are needed to fill the gap in research gaps with new objects in Indonesia provinces. Poverty alleviation in Indonesia: are financial deepening, government spending, and unemployment useful?

2. RESEARCH METHODS

2.1. Data collection

The design in this study is explanatory research to explain the reciprocal and interactive relationship between the variables to be studied and the extent to which these relationships influence each other. The data collection method uses a study of documentation collected through data from the website of Indonesia Central Bank (BI) and Indonesia Statistics (BPS). The type of data used is secondary data. The analysis used is panel data regression with the E-views version 10 software tool. The areas studied are 33 selected provinces in Indonesia with a period of 2010 - 2020.

2.2. Model specification

The study method used is panel data regression. Panel data is a combination of time series and cross section data. The panel data regression equation used in this study is as follows:

$$lnPV_{it} = \alpha + \beta_1 lnFD_{it} + \beta_2 lnGE_{it} + \beta_3 lnUN_{it} + \varepsilon_{it} \quad (1)$$

where, PV_{it} is percentage of poor people (%); i to province and t to year; α is the intercept coefficient; FD_{it} is financial deepening (the amount of investment credit and working capital to GRDP on the basis of constant prices) (%); GE_{it} is realization of total government spending (trillion); UN_{it} is open unemployment rate (%); and e_{it} is the error term.

The panel data regression model consists of three methods, namely common, fixed, and random effect models (Wooldridge, 2013). Based on these three methods, to find out the best model, it is necessary to do some testing using the Chow, Hausman, and Lagrange Multiplier tests (Widarjono, 2009). After getting the best model (CEM, FEM, or REM) then classic assumption test and finally hypothesis testing is carried out with an F test and t-test at significant 5 percent.

3. RESULTS AND DISCUSSION

Table 1 reports some descriptive statistics on the four variables. It is shows that the highest poverty rate in Indonesia from 2012 to 2020 is Papua Province, which has reached more than 25%. It means that Papua has not been maximal in alleviating poverty and it is ironic because Papua Province is rich in natural resources (Pratama, 2019). The province with the lowest percentage of the poor population is the Province of the Special Capital Region Jakarta in 2012-2020 of less than 5%, it can happen because Jakarta is the capital of the State of Indonesia, all economic activities take place in Jakarta. Based on (Putri & Mubin, 2021), states that if the ratio of financial deepening is higher, the deeper the financial sector in a country. The better the financial system will be in allocating and mobilizing funds to expedite the wheels of the economy. This is in line with Papua Province which had the lowest financial deepening in Indonesia from 2012 to 2020 and the province with the highest poverty rate in Indonesia from 2012 to 2020. It also happened to Jakarta Province, which had the highest level of financial deepening and the lowest poverty rate.

Furthermore, Jakarta has the highest level of government spending in 2012-2020. On the other hand, the lowest level of government spending occurred in 2012-2020, namely in the Province of West Sulawesi and alternately with Gorontalo Province. Table 1 also shows that the highest open unemployment rate occurred in 2020, namely in Jakarta Province, while the lowest occurred in 2018 in Bali Province. Bali Province is the lowest unemployment rate in Indonesia from 2012 to 2019, but in 2020, it is West Sulawesi Province.

Table 1. Description statistics of variables, 2012-2020

Variables	PV		FD		GE		UN	
Year	Min (%)	Max (%)	Min (%)	Max (%)	Min (Trillion)	Max (Trillion)	Min (%)	Max (%)
2012	3,70 (Jakarta)	30,66 (Papua)	7,51 (Papua)	57,16 (Jakarta)	0,87 (West Sulawesi)	31,55 (Jakarta)	2,10 (Bali)	9,94 (Banten)
2013	3,72 (Jakarta)	31,53 (Papua)	8,29 (Papua)	68,46 (Jakarta)	1,04 (West Sulawesi)	38,30 (Jakarta)	1,83 (Bali)	10,12 (Aceh)
2014	4,09 (Jakarta)	27,80 (Papua)	8,88 (Papua)	70,88 (Jakarta)	1,20 (Gorontalo)	37,80 (Jakarta)	1,90 (Bali)	10,51 (Maluku)
2015	3,61 (Jakarta)	28,40 (Papua)	9,10 (Papua)	70,65 (Jakarta)	1.38 (West Sulawesi)	43,03 (Jakarta)	1,99 (Bali)	9,93 (Aceh)
2016	3,75 (Jakarta)	28,40 (Papua)	8,92 (Papua)	76.21 (Jakarta)	1,60 (Gorontalo)	47,13 (Jakarta)	1,89 (Bali)	8,92 (Aceh)
2017	3,78 (Jakarta)	27,76 (Papua)	8,57 (Papua)	76,69 (Jakarta)	1,74 (Gorontalo)	51,06 (Jakarta)	1,48 (Bali)	9,29 (Maluku)
2018	3,55 (Jakarta)	27,43 (Papua)	9,35 (Papua)	81,25 (Jakarta)	1,75 (West Sulawesi)	61,41 (Jakarta)	1,40 (Bali)	8,47 (Banten)
2019	3,42 (Jakarta)	26,55 (Papua)	11,75 (Papua)	83,30 (Jakarta)	1,94 (Gorontalo)	64,94 (Jakarta)	1,57 (Bali)	8,11 (Banten)
2020	4,45 (Bali)	26,80 (Papua)	12,90 (Papua)	84,02 (Jakarta)	1,80 (Gorontalo)	52,09 (Jakarta)	3,32 (West Sulawesi)	10,95 (Jakarta)

Source: (Indonesia Central Bank, 2020), (Statistics Indonesia, 2020)

3.1. Empirical Results of Regression Model

In this study using panel data, namely combined data from cross sections and time series, it is necessary to carry out stationary tests, Panel Data Regression Estimation Model Selection, classical assumption tests and finally hypothesis testing (f-test and t-test). In this study using panel data, namely combined data from cross section and time series, it is necessary to do a stationary test.

Table 2. The results of unit root test

Variables	Level test	Probability	Description
lnPV	Level	0.0003	stationary data
lnFD	First difference	0.0000	stationary data
lnGE	Level	0.0000	stationary data
lnUN	Level	0.0000	stationary data

Source: Authors calculation

The stationary test is a test conducted to obtain a stable average value and a random error equal to zero, so that the regression model obtained has reliable predictive abilities and avoids the appearance of spurious regression (Gujarati at al., 2012). Data can be said to be stationary if the probability value is less than 0.05, if the probability value is greater than 0.05, it means that the data is not stationary (Winarno, 2015). The test used is the Unit Root Test developed by Levin Lin Chu

(LLC). Table 2 reports that the dependent variable and independent variable fulfill the stationary test requirements, namely having a probability value of less than 0.05.

As for the selection of the best model in this study, a selection test was carried out to determine which panel data regression model was most suitable for testing the hypothesis of the research model that had been developed. The Chow test is used to select which model is the best between the common effect and the fixed effect. The first thing to do in this test is to determine the alpha (α) level used. This study employs an alpha value of 5 percent (α = 0,05). Table 3 reports that the value of the probability less than α (0.000< 0.05). This result indicates that fixed effect model is precisely than common effect model.

Table 3. Chow and Hausman test

Selected test	Statistic	Prob.	Summary
Chow test	383.862921	0.0000	Fixed Effect
Hausman test	9.478308	0.0236	Fixed Effect

Source: Authors calculation

The Hausman test is used to choose which model is the best, whether it is a random effect or a fixed effect. The basis for decision-making in the Hausman test is determined based on the probability value of the random cross-section. The determination of the selected model between fixed effect model and random effect model is based on the alpha value. If the probability value is greater than the alpha value, then the selected model is random effect model, but if the probability value is less than alpha, then the fixed effect model is chosen. Table 3 also informs the Hausman test result, it declares that fixed effect model is the best model. It can be seen from the probability value where the probability score is less than the alpha (0.0236 < 0.05). Based on the Chow test, the best regression model is the fixed effect model, with a Chi-square cross-section with a significance of 5%. While the Hausman test shows that the best model is the fixed effect model because the random cross-section is significant at 5 percent. Therefore, the best regression model is the fixed effect model.

The fixed effect model uses the ordinary least squares (OLS) approach so that a classic assumption test is needed, but not all classic assumption tests are carried out in panel data regression only multicollinearity and heteroscedasticity tests (Cobbinah et al., 2015). The multicollinearity test aims to see whether there is a correlation or relationship between the independent variables (Digdowiseiso, 2017). If the correlation of each independent variable is less than 0.8 then multicollinearity does not occur, but if the correlation coefficient of each independent variable is greater than 0.80 then multicollinearity occurs. Table 4 reports that there are no variables that have a correlation value of more than 0.8, so this can be concluded that each free variable does not have a multicollinearity problem.

Table 4. Correlation matrix

Correlation	lnFD	lnGE	lnUN
lnFD	1.000	0.579	0.171
lnGE	0.579	1.000	0.339
lnUN	0.171	0.339	1.000

Source: Authors calculation

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. One way to find out whether there is heteroscedasticity in the data is to use the Glejser test, the Glejser test is a regression of the residual absolute value of the independent variables (Ghozali & Ratmono, 2017). The Glejser test show if the probability value of the independent variable is less than 0.05, it means that there is a heteroscedasticity problem, and if the probability value is greater than 0.05, there is no heteroscedasticity problem. Table 5 shows that all independent variables have a probability value greater than 0.05 meaning that there is no heteroscedasticity problem.

Table 5. The Glejser test

Variables	Coefficient	Std. Error	t-Statistic	Prob.
lnFD	-0.004389	0.003083	-1.423519	0.1558
lnGE	-0.002943	0.004921	-0.597991	0.5504
lnUN	0.015211	0.014920	1.019536	0.3089

Source: Authors calculation

Based on the stationary data test, it shows that the data is stationary, the selection of the regression model through the Chow test and the Hausman test shows that the best model is the fixed effect model (FEM). Table 6 report the summary of the regression model, the f-test hypothesis, the t-test, and the result of the model selection.

Table 6. Results of model estimation using fixed effect

Dependent variable: lnPV (Poverty)					
Variable	**Descriptions**	**Coefficient**	**Std.error**	**t-test**	**Prob.**
Constant	Intercept	12.916	0.378	34.136	0.000
lnFD	Financial Deepening	-0.065	0.011	-5.902	0.000
lnGE	Government Spending	-0.088	0.017	-5.025	0.000
lnUN	Unemployment	0.137	0.053	2.581	0.010
Summary					
R^2	0.985				
Adjusted R^2	0.983				
F-test	0.000				

Source: Authors calculations

Table 6 reports the R-square on the empirical results of the model proclaims that there is a combination of independent variables together in influencing the value of the dependent variable belonging to the strong category (R^2 = 0.98). It is indicating that 98.5% of changes in poverty are explained by the three variables consisting of financial deepening, government spending and unemployment and the remaining 1.5 percent is explained by other variables not included in this study model. The results of the probability using the fixed effect model are 0.000, which means that the probability value is less than the confidence level of 0.05. Therefore, it can be concluded that the F-test is significant, and the independent variables jointly affect the dependent variable. Furthermore, based on the t-test, Table 6 shows that all independent variables have a probability of less than 5 percent, so it can be said that partially, all three independent variables affect poverty.

The financial deepening has a negative and significant influence on poverty. This implies that every 1 percent increase in financial deepening in Indonesian Provinces will cause a decrease of 0.065 percent poverty in 33 Indonesian Provinces, assuming that other variables are considered fixed. This shows that the better the financial system, the more it can encourage poverty alleviation in Indonesia, because there are still many economic activities in Indonesia whose financing comes from banking, both the middle and upper business sectors. Financial deepening as measured by working capital and investment loans can move the economy according to (Putri & Mubin, 2021). Good use of the financial sector in society is also supported by easy access to credit and regulations that are not difficult to make the financial sector in developing countries run well so that the wheels of the economy will also run well (Sukomo & Prawiranegara, 2019).

Government spending has a negative and significant effect on poverty. This implies that poverty is reduced inelastically to the increase in government spending. Increasing government spending of 1 trillion, pushed down the poverty rate by 0.088 percent. Government spending can be one of the safety nets for poverty in Indonesia. The Indonesian government has implemented the right policy by increasing the effectiveness and sharpening the priorities of government spending in development, it will have an impact on reducing the poverty rate (Miar & Yunani, 2020), it means that the higher the level of government spending, the lower the poverty rate.

Meanwhile, unemployment has a positive and significant effect on poverty. This implies that every 1 percent increase in unemployment will cause a 0.137 percent increase in poverty, assuming that other variables are considered constant. High unemployment is one of the many factors affecting the poverty rate in 33 provinces in Indonesia in 2012-2020. The unavailability of broad employment opportunities causes a lot of unemployment and results in low incomes for the community, so poverty will continue to increase. Conversely, decreasing the unemployment rate will also reduce the poverty rate. Unemployment is related to the skill of human resources, an increase in the unemployment rate will decrease the level of productivity (Putra & Arka, 2018). This statement is also in line with the results study of Adam et al. (2022), that open unemployment has a significant positive effect on poverty, which means that an increase in the unemployment rate can increase the poverty rate.

3.2. Discussions

3.2.1. The Effect of Financial Deepening on Poverty

A country can be said to be experiencing financial deepening if the financial deepening ratio is greater than 20% and it is experiencing shallow finance if the ratio is less than 20%. Supposed there is financial deepening (Aizenman & Riera-Crichton, 2022), the economy in an area will develop, then people's income and employment opportunities will increase, the amount of savings will also increase, and savings are used as an investment in business capital. Capital increases, and production increases as well. Income that continues to increase will reduce the poverty rate in the area (Citra et al., 2018). Having access to the financial sector can show the benefits of financial development that can be felt by all people so that poverty will decrease. A high level of financial deepening indicates a good role for banking in channeling credit to Entrepreneurs. In the past, there were not many micro, small and medium enterprises (MSMEs) in Indonesia, but over time, banking has made it easier to access capital for Entrepreneurs so currently there are more and more businesses in Indonesia micro, small and medium enterprises (MSMEs), so entrepreneurs can easily obtain capital for their business, increasing community economic productivity thereby providing welfare for the community and reducing poverty levels. A good banking system in Kenya makes it easier for people to access credit so that the long-term impact of credit on poverty will reduce poverty in Kenya (Mageto Nyamweya et al., 2020), it means that the higher the level of financial deepening, the lower the poverty rate.

The financial sector is one of the channels to be able to drive the economy, accelerate poverty reduction, and reduce inequality between individuals between regions. The importance of the financial sector so that the government makes it a tool to realize the welfare of the Indonesian people. In one of the government policies outlined in the National Financial Inclusion Strategy (SNKI), it is shown that to overcome poverty in Indonesia, whose distribution is still quite large in rural areas with a percentage of 13.3% compared to urban areas of 7.02%, especially when viewed by distribution per island, Papua, Bali, Nusa Tenggara, and Sulawesi are the islands with the highest poverty rates, is to open the door for people to enjoy access to financial services formal in the form of access to savings products and financing/credit products. The low number of poor people in contact with the financial sector makes breaking the chain of poverty difficult. As is known, one of the causes of poverty is the difference in access to capital. This study proves that access to working capital credit and investment capital will have a profound impact on poverty alleviation. Therefore, the government needs to massively strengthen financial deepening, so that it is not only enjoyed by a certain group of people who have been connected to this sector before, but also for people who are unfamiliar with financial access.

Financial deepening can contribute to poverty alleviation directly by facilitating transactions and enabling the poor to benefit from these financial services and increase their income. In addition, financial deepening can also reduce poverty indirectly by stimulating economic growth. As stated in the study conducted in China, the development of financial deepening, less developed regions can have wider and easier access to credit, and credit restrictions faced by low-income communities will be relaxed, which in turn will help reduce poverty. At the same time, with respect to the widespread existence of low-income communities, the reduction of income inequality caused by financial deepening has an impact on a significant reduce in poverty and has important reference significance for poverty alleviation in China's new era (Ran et al., 2020).

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3.2.2. The Effect of Government Spending on Poverty

According to the regulation of the minister of finance number 101/PMK.02/2011 concerning the classification of types of budget spending, government spending can be categorized into nine types, namely: personnel spending, goods, capital, debt interest, subsidy, grant, social assistance, other spending, and transfers to the regions. Various types of government spending increase the productivity of society in a country. Increasing productivity in a country is very influential on government spending because the cycle of poverty theory state that if productivity is low, it will reduce the level of people's welfare, so an increase in government spending is expected to be able to increase people's welfare. Government spending plays a role in meeting public needs for the provision of facilities and infrastructure that are not provided by the private sector. Government spending in Indonesia in tandem with increased government spending and poverty reduction demonstrates the success of the government's vision of increasing government spending levels as poverty reduction. The Indonesian government has implemented the right policy, namely by increasing effectiveness and sharpening the priority of government spending in development, which will have an impact on reducing the poverty rate (Miar & Yunani, 2020).

Government policies through fiscal policy channels are considered the most effective in controlling economic stability and decreasing the quality of life of the people during the pandemic. At this time, some countries implemented lockdown policies, because of which economic activities were limited and many sectors were reducing labor, resulting in an increase in the number of poor people. Government funds disbursed can prolong the economic breath in these difficult times, several previous studies have revealed that some types of government spending can reduce poverty, such as infrastructure spending (Sasmal & Sasmal, 2016) and social spending (Mackett, 2020). Keynesian economists argue the government needs to intervene in the economy by spending more on social programs and government projects so that increased public spending supports economic activity and economic growth that leads to poverty alleviation. This thinking is based on the principle that increased government spending on infrastructure and social programs contributes to the creation of a more favorable environment for the private sector to invest in; Thus, it is better to create job opportunities and increase people's incomes which in the end the poverty rate will be reduced.

The allocation of government spending is carried out by first making a development plan or money follows function. The development planning carried out by the government aims to improve the welfare of its people. One of the main targets of government spending is a decrease in the poverty rate. Until now, the poverty rate in Indonesia has hardly changed. In the 2013-2020 period, there was a downward trend in the poverty rate accompanied by an increase in the enthusiasm of local governments in allocating their spending to sectors that are directly in contact with the poor such as social spending, health spending, and education spending. The poverty rate decreased in 2019, but again increased in 2020 along with the outbreak of the COVID-19 pandemic. This condition was immediately addressed by the government by issuing a national economic recovery (PEN) policy.

The national economic recovery policy program is regulated through Government Regulation Number 23 of 2020. The economic downturn that occurred in 2020 had an impact on households, micro, small and medium enterprises (MSMEs), corporations and the financial sector. The threat of loss of income haunts, the population is unable to work to make ends meet – especially poor and vulnerable households, people's purchasing power is declining. The economic disruption that hit caused an increase in millions of unemployment and poverty in Indonesia in 2020. Through budget policy, the government restructures the budget, each local government is instructed to accelerate spending with the allocation of health spending and social spending increased by a percentage. The government's agility in managing its budget and spending helped Indonesia survive in difficult times and was able to continue to grow better over time. It is proven that government spending can overcome the poverty rate, noting that government spending must be measured and efficient (Rambe et al., 2022).It means that the higher the level of government spending, the lower the poverty rate.

3.2.3. The Effect of Unemployment on Poverty

Unemployment has a negative impact, if unemployment occurs in a country it can have an impact on political, social chaos, and have an adverse effect on people's welfare and prospects for economic development in the long term (Budhijana, 2020). Unemployment is an indicator for measuring the degree of poverty, if the response increases in a particular country, the poverty rate will also be higher, because the people who are classified as active do not have income to meet their daily primary needs (Adam et al., 2022). Unemployment in Indonesia is still an unresolved problem, even though unemployment has a strong relationship with poverty. Provision of more job opportunities to overcome the problem of unemployment requires a long time, therefore increasing the skills of the workforce is needed, so that the workforce does not only rely on finding work but also creating jobs. The unavailability of broad employment opportunities causes a lot of unemployment and results in low incomes for the community so that poverty will continue to increase. A decrease in the unemployment rate will also reduce the poverty rate, this shows that an increase in the unemployment rate will cause a decrease in the productivity level of the Balinese people (Putra & Arka, 2018).

Indonesia, with the fourth largest population in the world, faces a serious problem with unemployment. The high unemployment rate in Indonesia is due to lack of access to education, limited opportunities for development, inability to compete and lack of skills. From the mapping of employment activities, in Indonesia, the International Labor Organization (ILO) states that 50 percent of the unemployed are recent graduates. The high rate of children and adolescents who drop out of school directly contributes to the youth unemployment rate in Indonesia. The National Development Planning Agency (Bappenas) states that unemployment is the main problem of economic development. When people are unemployed, the adverse impact is a decrease in living standards and an inability to meet the basic daily needs of the household, thus having implications for being trapped in the cycle of poverty. Therefore, when people get a job and earn a reasonable wage, they tend to compensate by increasing consumption because they are out of the poverty trap. Therefore, there is a positive relationship between the unemployment rate and the poverty rate (Mohammad & David, 2019).

People who do not have a permanent job or work part-time (part-time) are always among the very poor groups of society. Those who work for a fixed wage in the government and private sectors usually belong to the upper middle class. The adverse effect of unemployment is to reduce people's income which ultimately reduces the level of prosperity that a person achieves. The decline in people's welfare due to unemployment will certainly increase the chances of them being trapped in poverty without income. If unemployment in a country is very bad, political, and social chaos always prevails and has a bad effect on people's well-being and the prospects for economic development in the long term. Strengthening the study of the relationship between unemployment and poverty was also provided by (Andhykha et al., 2018), the Open Unemployment Rate (TPT) had a positive and significant effect on the Poverty Rate in 35 Regencies/Cities in Central Java Province. This result is in accordance with Todaro's opinion which states that the problem of unemployment is closely related to the prosperity of the community and Increased employment opportunities.

Poverty stems from the low quality of human resources. Therefore, to alleviate poverty, there needs to be tactical efforts in increasing labor productivity and expanding employment opportunities so that the unemployment rate decreases, and poverty will decrease. There are several efforts that can be made by the government in overcoming the problem of unemployment, namely, (1) Develop home industries, (2) Improve the quality of education and skills of the workforce, (3) establish and optimize the use of job training centers, and (4) encourage investment through deregulation and debirocracy in various industrial fields to stimulate new investment. Poverty alleviation will be affected by the government's comprehensive policy on the problem of unemployment. The better the quality of Indonesia's workforce and a good business climate, the more economic activities will grow so that people's income levels increase, and they are not only able to meet their primary needs, but also their secondary and even tertiary needs.

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4. CONCLUSIONS

Indonesia has been plagued by socioeconomic challenges which accompany poverty. This study concludes that financial deepening, government spending, and unemployment can simultaneously be applied in measuring poverty reduction in Indonesia from 2012 until 2020. Using the fixed effect model, it shows a negative effect between financial deepening on the poverty of Indonesian residents, and higher level of financial deepening helps to reduce the poverty of Indonesian residents. We also find evidence that government spending has a stronger effect on poverty alleviation. The higher government spending will drive a reduction in the poverty rate. Furthermore, the results regarding the roles played by unemployment level imply a light relationship between unemployment and poverty. The poverty effect tends to depend on the unemployment rate. More especially, with better quality of human resources, wide opportunity job, low unemployment rate can be more helpful in reducing poverty.

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