

DIRECT AND INDIRECT EFFECT OF GLOBALIZATION ON ECONOMIC GROWTH IN INDONESIA

Qurrota Ayu NINDIEN^{1*}, Arivina Ratih Yulihar TAHER², Asih MURWIATI³, I Wayan SUPARTA⁴, Neli AIDA⁵

¹ Master of Economic, Faculty of Economic and Business, University of Lampung, Bandar Lampung, Indonesia

^{2,3,4,5} Lecturer of Economics, Faculty of Economic and Business, University of Lampung, Bandar Lampung, Indonesia

*E-mail : qurrotaayu21@gmail.com

Abstract. *This study examines how path analysis of globalization variables can have a direct effect on economic growth. This study uses the Path Analysis method by reviewing the dynamic modeling between Economic Globalization (GEI), Social Globalization (SGI), Economic Cooperation (KEI), and Economic Growth (GDP) for the period 1970 to 2020 in Indonesia. World Bank and KOFGI ETH Zurich Switzerland publish this data. The results showed that in model (1), there was a direct and significant effect between the KEI variable and GEI of 0.792. Then, in the model (2), the F test or joint test between the GEI, KEI, and SGI variables to GDP has a direct and significant effect. Then, partially, GEI has an immediate and significant impact on GDP, and SGI has a direct and significant effect on GDP. GEI is an intermediary variable for KEI to lead to the path effect to GDP, and this is in accordance with the hypothesis that KEI has an indirect effect on GDP.*

Key words: Economic Globalization, Path Analysis, KOFGI

JEL Classification Codes: AA, EE, FF

1. INTRODUCTION

Economic growth is the result of various factors, including labor force growth, physical capital growth, and productivity growth (Blanchard & R. Jhonson, 2017). Economic growth is a very important study for countries with multiple policy formulas that can increase economic growth (Hasan, 2019). Many factors can increase economic growth, including, in Keynes's Theory, export, import, and investment activities that directly affect economic growth in a country. Then another factor is the country's efforts to improve human resources to get quality and productive human resource output which will provide a multiplier effect for economic development.

In this era of globalization, the creation of a free market in which there are many trade activities between countries, both exports, and imports, the benefits of a free market can increase the ease of imports and exports while creating jobs. This can also significantly increase economic growth. Neoclassical economics emphasizes that trade growth is the main driving force of economic growth (Raghutla, 2020), then investment will reduce the imbalance of savings and investment and increase the technology used to develop (Dinh et al., 2019). In



This is an open-access article distributed under the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>).

addition, the labor force increases as a result of population development, and education will increase the skills of human resources. This is an opportunity for the government to make the right policies in the conditions of globalization for the welfare of society.

Globalization was created by the inability of a country to meet its own needs, thus encouraging countries to carry out trade mobility between countries to meet their needs. Globalization can encourage the formation of cooperation in a group that can benefit one another means in member countries that have joined (Neagu & Dima, 2017). Then, the definition of globalization structurally is a global convergence caused by activities in the economy, socio-culture, borders, law, and politics in a country (Ladeur, 2017). In this case, globalization forms a dimension of several dimensions that form a global system (Tekbas, 2021). Based on the data obtained, there are three independent variables in the form of indices used in measuring the dimensions of globalization, namely economic globalization, economic cooperation, and social globalization.

Indonesia will have a real GDP of 5.3% in 2022 due to strong domestic consumption, exports, and investment. This is due to appropriate macroeconomic policy responses, good export performance, and smooth trade flows of domestic demand from several countries (OECD, 2023). Indonesia is also expected to have strong economic growth in the range of 4.5%-5.3%, with the contribution of household consumption and investment sectors. This is based on the expected mobility of people who are increasingly open to the policy of eliminating restrictions on community activities and the recovery of the economy due to the pandemic. So that the increase in business prospect and foreign capital investment (PMA). Then, the demand for major trading partners is still strong, so that the export figure in Indonesia is still high at 14.93% (yoy). (Bank Indonesia, 2023)

Globalization with economic growth is a debated topic in the economic growth and development literature (Khan et al., 2021). Several studies have shown that economic globalization has a positive and significant effect on economic growth.(Aderemi et al., 2020; Bataka, 2019; Beri et al., 2022; Haini & Wei Loon, 2022; Hasan, 2019; Heimberger, 2021; Kandil et al., 2017; Linh & Linh, 2023; Midiyanti & Yao, 2019; Neagu & Dima, 2017; Norli & Chia, 2021; Radulović & Kostić, 2020; Samimi & Jenatabadi, 2014; Santiago et al., 2020; Savrul & İncekara, 2017; Tekbas, 2021; Xu et al., 2021) Meanwhile, some studies show that economic globalization has a negative effect on economic growth.(Nguyen & Le, 2021; Santiago et al., 2020)

Economic globalization can provide opportunities to export goods whose production factors use abundant resources and import goods whose production factors are scarce or expensive if produced domestically (Grossman & Helpman, 2015). As well as being an access or infrastructure for investment inflows into a country. With an increase in exports, it will trigger greater productivity, increased employment and a stronger currency so that imported commodities will be obtained more cheaply and increase the country's foreign exchange reserves. As well as the smooth inflow of investment into the country of Indonesia, that is what increases economic growth. Then economic cooperation has a positive effect on economic growth. (De Silva et al., 2012; Lee, 2014; Linh & Linh, 2023; Midiyanti & Yao, 2019; Slesman et al., 2015; Tekbas, 2021; Xu et al., 2021) With economic openness, trade cooperation is more widely open, and the barriers to trade openness will be smaller than by making trade agreements that are mutually beneficial to the country.

And some research shows that social globalization has a positive and significant effect on economic growth.(Bataka, 2019; Radulović & Kostić, 2020; Santiago et al., 2020; Savrul & İncekara, 2017; Tekbas, 2021). However, some studies also state that social globalization has a negative effect on economic growth (Nguyen & Le, 2021; Santiago et al., 2020), with social interaction between countries either through student exchanges, migration, and being connected

through the internet. Then, there are no more barriers to the exchange of knowledge between countries. The exchange of knowledge between countries will result in technology transfer with the potential to increase economic growth in developing countries by increasing productivity and innovation in key economic sectors (Leylian et al., 2022). Activities such as student exchange, tourism, and cultural exchange can foster better understanding between countries. This can facilitate the reduction of bias and encourage increased cooperation between countries in various fields, including the economic sector (Ryazantsev et al., 2019). Such as tourism as a sector that provides as many jobs as possible, creates wealth, and contributes to a diverse economy (Manzoor et al., 2019).

In this era of globalization, understanding the direct and indirect effects of globalization on economic growth is very important for the government in determining economic growth policies. The novelty of this study is that by using the Path Analysis method, it can determine how the path analysis of globalization variables can have a direct effect on economic growth. The government can find out what policies are appropriate to arrive at economic growth through direct paths or intermediary paths on globalization variables. The dimension of globalization is expected as a means for Indonesia to expand economic opportunities with the aim of increasing economic growth as one of the benchmarks of a country's success.

2. METHODOLOGY

This study uses the Path Analysis method by examining the dynamic modeling between Economic Globalization (GEI), Social Globalization (SGI), Economic Cooperation (KEI), and Economic Growth (GDP) for the period 1970 to 2020 in Indonesia. The World Bank and KOFGI ETH Zurich Switzerland publish this data.

1) Descriptive Statistics

This study will explain the mean, maximum value, and minimum value of the data as a descriptive depiction of the data in the variables of this study. Then presented in the form of numerical graph data plots to see the data phenomena used in the study (Nick, 2007).

2) Box Plot

In this research using the box plot method. The box plot is one of the descriptive statistics used with graphical and numerical depictions that identify maximum and minimum values, mode, and first-quartile and third-quartile values. (Nick, 2007) The use of boxplots can show outlier values and, within the box, show the spread and skew in the data. It is assumed that the data comes from a normal population. When the sample is large enough, using the method of moments, the difference in sample quartiles $q_3 - q_1$ approximates the difference in population quartiles $Q_3 - Q_1$ by the equation $q_3 - q_1 = Q_3 - Q_1 = 2(0,67449)\sigma$ (Schwertman et al., 2004).

3) Path Analysis

In this research method, the research uses a causal model of the variables of economic globalization, social globalization, economic cooperation, and economic growth; the model can be shown through the following chart:

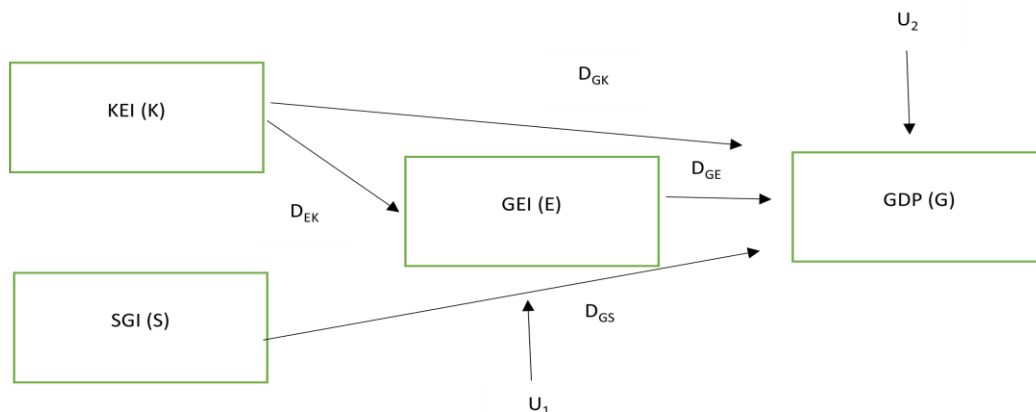


Figure 1. Model of causal relationship between GEI, SGI, KEI and GDP variables

Based on the figure above, there is a multiple linear regression model with intermediate variables, namely economic globalization (GEI) as an intermediary between economic cooperation (KEI) and economic growth (GDP). So from Figure 1, the structural model, according to Lleras, **2005** by producing two-equation models as follows:

$$\text{Model 1 : } GEI = D_{EK}KEI + u_1$$

$$\text{Model 2 : } GDP = D_{GE}GEI + D_{GK}KEI + D_{GS}SGI + u_2$$

Then, additional information, namely u_1 and u_2 are *error term* , Based on the first model of the second fund, there are null hypotheses to be tested: (1) There is no direct effect from KEI to GEI; (2) There is no direct effect from GEI, KEI, and SGI to GDP. The error term of the model can be formulated as follows:

$$u_1 = \sqrt{1 - R_i^2}, \text{ where } i = 1,2,3$$

4) Decomposition of Path Analysis

One of the unique contributions of Path Analysis testing is the ability to determine direct and indirect relationships. Direct causality is direct causality that moves one variable to another. Then indirect causality occurs if the relationship between the two variables has an intermediary, either one variable or more than one variable. Then, the magnitude of the indirect effect is the sum of the path coefficients along the variable path in determining the cause and effect.(Lleras, 2005) GEI, SGI, KEI, and GDP data are converted into data that has been standardized to mean = 0 and standard deviation = 1. Therefore, the expected value of $E(KEI, KEI) = 1$, $E(GEI, GEI) = 1$, $E(GDP, GDP) = 1$, $E(SGI,SGI)=1$, $E(KEI, GEI) = z_{12}$, $E(GEI, GDP) = z_{13}$, $E(KEI, GDP)=z_{23}$, dan $E(SGI, GDP) = z_{33}$. are the correlations between the variables KEI and GEI, SGI and GDP, KEI and GDP, GEI and GDP. Based on the above model, the algebraic and search rules used for the correlation composition are determined. Then, the correlation composition is like the following table:

Table 1. Corelation Composition

Corelation Composition	Equation
Model (1) . KEI	$E(KEI, GEI) = D_{EK} \cdot E(KEI, KEI) \rightarrow z_{12} = D_{EK}$
Model (2) . GEI	$E(GEI, GDP) = D_{GE}E(GEI,GEI) + D_{GK} E(KEI, GEI)$ $z_{13} = D_{GE} + D_{GK} \cdot z_{12} = D_{GE}+ D_{GK} \cdot D_{EK}$

Model (2). KEI $E(\text{KEI, GDP}) = D_{GE} E(\text{KEI, GEI}) + D_{GK} \cdot E(\text{KEI, KEI})$

$$z_{23} = D_{GE} \cdot z_{12} + D_{GK} = D_{GE} \cdot D_{EK} + D_{GK}$$

Model (2). SGI $E(\text{SGI, GDP}) = D_{GS} \cdot E(\text{SGI, SGI}) \rightarrow z_{33} = D_{GS}$

3. RESULT AND DISCUSSION

The results of the study will first be seen through descriptive analysis, which is an analysis that provides a general description according to the results of calculations that have been carried out based on the characteristics of each variable. The maximum value in the Indonesian GDP data in 1977 was 8.26%, and the minimum value was -2.07% in 2020. Then, in the Economic Globalization variable, the maximum value was 60.16 in 2000, and the minimum value was 24.11 in 1970. In the economic cooperation variable, the maximum value was 77.29 in 2006, and the minimum value was 33.11 in 1970 in Indonesia. Social globalization in Indonesia had a maximum value of 58.50 in 2008 and a minimum value of 11.88 in 1979. Then, the average value and standard deviation of all variables as shown in Table 2. The standard deviation is smaller than the mean, so that the data in this study is diverse.

Table 2. Mean and standard deviation values

Variable	Mean	Std. Deviasi
GDP	5.630784	2.056529
GEI	38.57275	7.303542
KEI	55.817255	11.169277
SGI	27.440588	15.345489

In Figure 2, the GDP, GEI, KEI, and SGI variables show that the median line (Q2) is in the middle of the box. In that case, it shows the result that the data is normally distributed.

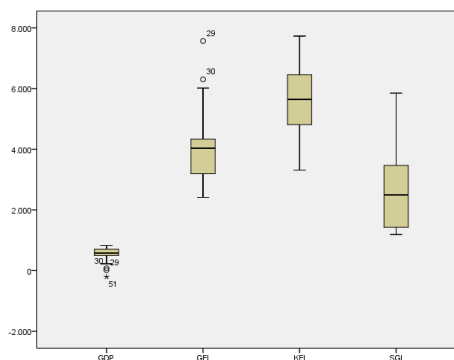


Figure 2. Box Plot GDP, GEI, KEI, and SGI

Before entering into data analysis, the first step taken in this study is to transform the data into standard form in mean zero and variance one.

Table 3. Varians Analysis and model parameter estimation

Analisis varians / INF	DF	F-Value	Pr > F	Parameter Estimate	t-value	p-value
	1	82,78	<.0001	0,7925	9,10	<.0001
	49					
$R^2 = 0,628166$	50					

In Table 3. To test hypothesis 0, namely that there is no direct effect of KEI on GEI, through an F-test of 82.78 and a p-value of <0.0001, it shows that there is insufficient evidence to accept the null hypothesis. So, there is a direct effect of the KEI variable on GEI. Then, the R2 value is 0.628, which means that the KEI variation is able to explain the model by 62.8%, and the remaining 37.2% is explained by other variables that are not in the model. The parameter in Table 2. estimated in the model (1) is $D_{EK} = 0,792$, h this is needed to test the partial parameters of the model (1) (to test $H_0 : D_{EK} = 0$), it has been calculated that the t-value is 9.10 with a p-value of <0.0001, so there is not enough evidence to accept the null hypothesis. So, based on the analysis found in the first model in this study:

$$GEI = 0,792KEI$$

In Figure 3. shows a positive trend in accordance with the value of the estimated parameter $D_{EK} = 0,792$. The increasing graph illustrates that if KEI increases by one standard deviation, GEI will increase by 0.792 standard deviations. The unexplained factor due to external influences can be interpreted as $u_1 = \sqrt{1 - 0,628} = 0,609$.

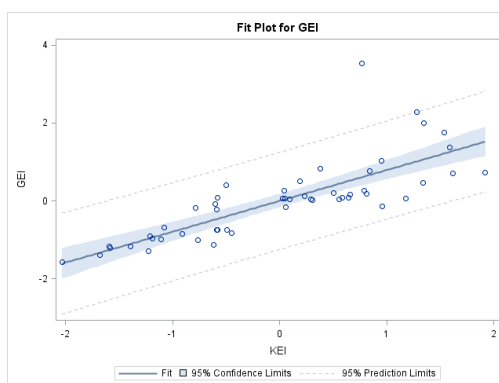


Figure 3. Fit Plot model

Table 4. Variance analysis and model parameter estimation

Analysis varians	DF	F-Value	Pr > F	Variable	Parameter Estimate	t-value	p-value
	3	6.25	0,0012	KEI	0,2541	1,09	0,2825
	47			GEI	-0,5696	-2,78	0,0078
$R^2 = 0,285299$	50			SGI	-0,2925	-1,90	0,0640*

In Table 4. To test hypothesis 0, namely whether there is no direct effect of KEI on GEI, through the F-test of 6.25 and a p-value of 0.0012, it shows that there is not enough evidence to accept the null hypothesis. So, there is a direct effect of the independent variables GEI, KEI and SGI on GEI. Then the R^2 value is 0.285, which means that the variation of GEI, KEI, and SGI is able to explain the model by 28.5%, and the remaining 71.5% is explained by other variables that are not in the model. Then based on parameter estimates in model (2) is $D_{GE} = -0,5696$, $D_{GK} = 0,2541$, and $D_{GS} = -0,2925$. In the partial test through model (2) by testing $H_0 ; D_{GE} = 0$, t-value -2,78 and p-value is $0,0078 < 0,005$ indicates that the null hypothesis is rejected, which means there is a direct effect between the GEI variable to GDP. Furthermore, the partial test on the economic cooperation variable, $H_0 ; D_{GK} = 0$, t-value 0,2541 and p-value is $0,2825 > 0,05$ indicates that the null hypothesis is accepted, which means that there is no direct effect between the KEI variable and GDP. In the partial test of the model (2), the SGI variable also presents $H_0 ; D_{GS} = 0$, t-value -0,2925 and p-value is $0,0640 < 0,10$ indicating that the null hypothesis is rejected, which means there is a direct effect between the SGI variable to GDP. The regression estimation results are:

$$GDP = -0,5696 GEI + 0,2541KEI - 0,2925SGI$$

In Figure 4 below is the fit pot model (2), which shows a positive trend between KEI to GDP; namely, if KEI increases, the value of GDP will increase while other variables are held constant. However, there is a negative trend between GEI to GDP and SGI to GDP. If GEI increases, GDP in Indonesia will decrease, while other variables are *ceteris paribus*. And if SGI increases, then GDP in Indonesia decreases while other variables are *ceteris paribus*. Factors that are not explained due to external influences can be interpreted as $u_1 = \sqrt{1-0,628} = 0,609$.

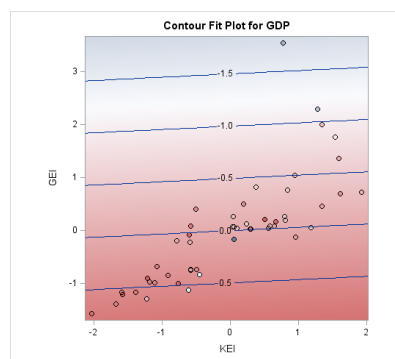


Figure 4. Fit Plot model (2)

The number of correlations between GEI variables to GDP based on the equation in Table 1 Model GEI ($z_{13} = D_{GE} + D_{GK} \cdot z_{12} = D_{GE} + D_{GK} \cdot D_{EK}$), Model KEI ($z_{23} = D_{GE} \cdot z_{12} + D_{GK} = D_{GE} \cdot D_{EK} + D_{GK}$) and Model SGI ($z_{33} = D_{GS}$) and then with the following calculation:

Table 5. Decomposition of correlation between GEI to GDP, KEI to GDP and SGI to GDP

Component	Calculation	Result	Interpretation
D_{GE}	-0,5696	-0,5696	GEI has a direct effect on GDP
$D_{GK} \cdot D_{EK}$	(0,254) . (0,792)	0,2011	KEI has a direct effect on GEI, and GEI has effect on GDP

Component	Calculation	Result	Interpretation
Total (z ₁₃)		-0,3684	
D_{GK}	0,254	0,254	KEI has an indirect effect on GDP
$D_{GE} \cdot D_{EK}$	(-0,569) \cdot (0,792)	-0,4506	KEI has a direct effect on GEI, and KEI has indirect effect on GDP
Total (z ₂₃)		-0,1966	
D_{GS}	-0,2925	-0,2925	SGI has a direct effect on GDP
Total (z ₃₃)		-0,2925	

So based on the decomposition of the path effect above, the concept of adjunct analysis can be redrawn as follows:

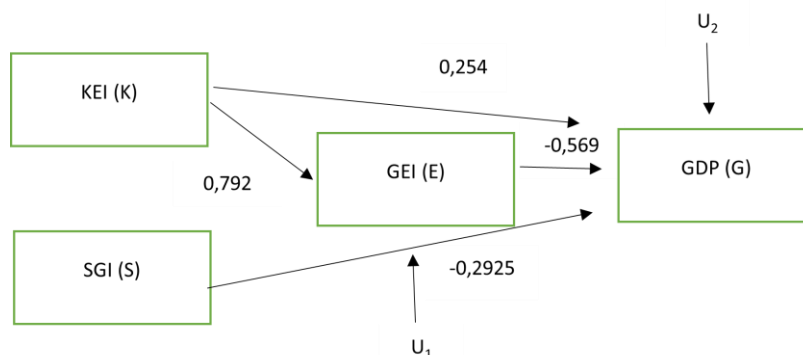


Figure 5. Parameter estimation of path analysis model

DISCUSSION

Direct Effects of Economic Cooperation on Economic Globalization

Based on the above research results, there is a direct effect from the KEI variable to GEI with a coefficient of 0.792. Trade regulations, taxes, tariffs, trade agreements, investment agreements, capital openness, and investment restrictions measure the economic cooperation index. So that with economic cooperation. In addressing the challenges of economic globalization in the 21st century, the Transatlantic Trade and Investment Partnership (TTIP) is urgently needed and should not only be seen as a deregulation and liberalization project but as an essential component of the international trading system that can have a measurable impact on the economic, environmental and social functioning of all countries (Schreyer, 2014). Economic cooperation in the trade sector will improve diplomatic relations and understanding between countries regarding international trade. So, export and import productivity can be achieved effectively because increased specialization will reduce production costs and consumer prices.

Indonesia has a lot of economic cooperation with other countries. For example, IA-CEPA is Indonesia's economic cooperation with Australia. IA-CEPA offers Australian and Indonesian businesses opportunities to expand and diversify economic partnerships. Then, the Indonesia-EFTA Comprehensive Economic Partnership Agreement (IE-CEPA) European Free Trade Association (EFTA) consists of Iceland, Liechtenstein, Norway, and Switzerland. This

cooperation is carried out to regulate the elimination of import duty tariffs as a framework for boosting the economy after the pandemic.

Direct Effects of Economic Globalization on Economic Growth

There is a direct effect from the GEI variable to GDP with a coefficient of -0.569. Economic globalization is an endogenous variable that receives arrows from economic cooperation variables to economic growth. Based on the results of the negative coefficient on the direct effect of the GEI variable on GDP, there is a problem in Indonesia's readiness to face global competition, namely competitiveness, which is quite tight, which will increase competition in the domestic market with cheaper imported goods. Then, Indonesia's manufacturing exports focus mainly on products that use natural resources and unskilled labor (Rahmaddi & Ichihashi, 2012). And only a tiny portion of commodity goods that have added value.

Therefore, Indonesia needs policies to increase productivity and innovation and skill-based policies to increase labor productivity and economic growth. Improved natural resource management policies can contribute to economic development (Mpuure & Mengba, 2023). For example, Indonesia has overcome challenges related to the "Dutch disease" (increased exploitation of natural resources causing recession in other sectors of the economy), thus helping to drive economic growth. (Garnaut, 2015)

Indirect Effect of Economic Cooperation on Economic Growth

Based on the results of the analysis using Path Analysis, economic cooperation has an indirect effect on economic growth but has a direct effect on economic globalization, as discussed above. This follows the hypothesis that economic cooperation has an indirect effect on economic growth because economic cooperation is an exogenous variable that issues arrows and does not receive indicators. Economic cooperation, such as trade or investment agreements, takes time to show a direct effect on economic growth. It requires adjustment and implementation from each cooperating country so that the effects of the cooperation will be seen according to the country's conditions (Kim et al., 2020). Implementing economic cooperation also requires several external factors, such as political and security stability, global economic conditions, and fluctuations in commodity prices in the global market.

The Direct Effect of Social Globalization on Economic Growth

The direct effect of social globalization on economic growth in Indonesia yields a parameter coefficient of -0.2925. This is consistent with the hypothesis that globalization directly affects economic growth in Indonesia. Information openness in the social globalization index that measures the Internet will cause an increase in e-commerce with information on trade transactions without setting up a conventional store will not require a lot of human resources (HR) who work, so automatically, the unemployment rate will increase and increase inequality which ultimately reduces economic growth. In an open economy, information openness also makes many foreign companies offer cheap and quality goods and services through the Internet so that domestic products lose out to foreign products so that imports soar, which causes economic growth to decline. So that this causes social globalization to have a negative effect on economic growth in Indonesia. Although social globalization has a negative effect, the results show that according to the hypothesis, globalization has a direct effect on economic growth in Indonesia.

4. CONCLUSION

This study can show the existence of a causal relationship between GEI, KEI, SGI, and GDP variables using the path analysis method. There is a significant direct effect between KEI

to GEI, GEI to GDP, and SGI to GDP, and according to the hypothesis, there is an indirect effect between KEI and GDP. This study also shows the decomposition results of the correlation between GEI to GDP, KEI to GDP, and SGI to GDP. The results show that in the model (1), there is a direct and significant effect between the KEI variable to GEI of 0.792. Then, in model (2), the F test or test together between the GEI, KEI, and SGI variables to GDP has a direct and significant effect. Then, partially, GEI has a direct and significant effect on GDP, and SGI has a direct and significant effect on GDP.

GEI is an intermediary variable for KEI to lead to the path effect to GDP, and this follows the hypothesis that KEI has an indirect effect on GDP due to one intermediary variable, namely GEI. Economic cooperation carried out by the government is the biggest supporter of economic openness in Indonesia in terms of trade and investment. So, the increase in GEI with the trade openness index factor and financial openness can increase economic growth. Then, SGI, which directly affects GDP, shows that the increase in human resource output is based on interpersonal, information, and cultural openness, so human resources become an important subject in economic activity in Indonesia.

REFERENCES

1. Aderemi, T. A., Ogunleye, A. G., Lucas, B. O., & Okoh, J. I. (2020). *Globalization and economic growth: Evidence from European countries*. *European Financial and Accounting Journal*, 15(1), 67–82.
2. Bataka, H. (2019). *De jure, de facto globalization and economic growth in Sub-Saharan Africa*. *Journal of Economic Integration*, 34(1), 133–158.
3. Beri, P. B., Mhonyera, G., & Nubong, G. F. (2022). *Globalisation and economic growth in Africa: New evidence from the past two decades*. *South African Journal of Economic and Management Sciences*, Vol 25, Iss 1, Pp E1-E12 (2022). <https://doi.org/10.4102/sajems.v25i1.4515>
4. Blanchard, O., & R. Jhonson, D. (2017). *Macroeconomics* (Edisi Keen). Erlangga.
5. De Silva, N., Malaga, J., & Johnson, J. (2012). *Trade liberalization, free trade agreements, and economic growth: The case of Sri Lanka*. *Journal of International Agricultural Trade and Development*, 8(2), 241.
6. Dinh, T. T.-H., Vo, D. H., The Vo, A., & Nguyen, T. C. (2019). *Foreign direct investment and economic growth in the short run and long run: Empirical evidence from developing countries*. *Journal of Risk and Financial Management*, 12(4), 176.
7. Garnaut, R. (2015). *Indonesia's resources boom in international perspective: policy dilemmas and options for continued strong growth*. *Bulletin of Indonesian Economic Studies*, 51(2), 189–212.
8. Grossman, G. M., & Helpman, E. (2015). *Globalization and growth*. *American Economic Review*, 105(5), 100–104.
9. Haini, H., & Wei Loon, P. (2022). *Information Communication Technologies, Globalisation and Growth: Evidence from the ASEAN Economies**. *Economic Papers: A Journal of Applied Economics and Policy*; Volume 41, Issue 1, Page 34-53; ISSN 0812-0439 1759-3441. <https://doi.org/10.1111/1759-3441.12332>
10. Hasan, M. A. (2019). *Does globalization accelerate economic growth? South Asian experience using panel data*. *Journal of Economic Structures*, 8(1), 26.
11. Heimberger, P. (2021). *Does economic globalisation promote economic growth? A meta-analysis*. *The World Economy*; Volume 45, Issue 6, Page 1690-1712; ISSN 0378-5920 1467-9701. <https://doi.org/10.1111/twec.13235>
12. Kandil, M., Shahbaz, M., Mahalik, M. K., & Nguyen, D. K. (2017). *The drivers of economic growth in China and India: globalization or financial development?* *International Journal of Development Issues*, 16(1), 54–84.
13. Khan, I., Hou, F., Irfan, M., Zakari, A., & Le, H. P. (2021). *Does energy trilemma a driver of*

- economic growth? The roles of energy use, population growth, and financial development. Renewable and Sustainable Energy Reviews*, 146, 111157.
14. Kim, K., Mariano, P., & Abesamis, J. (2020). *Trade Impact of Reducing Time and Costs at Borders in the Central Asia Regional Economic Cooperation Region*. *Emerging Markets Finance and Trade*, 58, 2602–2619. <https://api.semanticscholar.org/CorpusID:225960942>
 15. Ladeur, K.-H. (2017). *Public governance in the age of globalization*. Routledge.
 16. Lee, S. (2014). *The Effect of Free Trade Agreement (FTA) on Small Open Economics: Implications for the Korea - US (KORUS)*. <http://hdl.handle.net/11299/187014>
 17. Leylian, N., Ebrahimi, M., Zare, H., & Haghighat, A. (2022). *Presenting the foreign direct investment model and economic growth of developing countries with the mediating role of human capital and information and communication technology*. *Quarterly Journal of Quantitative Economics*, 19(3), 125–153.
 18. Linh, H. T. D., & Linh, T. N. (2023). *Impacts of globalisation on economic growth in Europe Union countries*. *Ho Chi Minh City Open University Journal of Science - Economics and Business Administration*, Vol 13, Iss 1, Pp 87-102 (2023). <https://doi.org/10.46223/HCMCOUJS.econ.en.13.1.2206.2023>
 19. Lleras, C. (2005). *Path analysis*. *Encyclopedia of Social Measurement*, 3(1), 25–30.
 20. Manzoor, F., Wei, L., Asif, M., Haq, M. Z. ul, & Rehman, H. U. (2019). *The contribution of sustainable tourism to economic growth and employment in Pakistan*. *International Journal of Environmental Research and Public Health*, 16(19), 3785.
 21. Midiyanti, R., & Yao, M. H. (2019). *The dynamic relationship between globalization and economic growth: its implication on business policy*. *International Journal of Applied Business Research*, 100–111.
 22. Mpuure, D. M.-N., & Mengba, J. D. (2023). *Natural resource dependence, policy and institutions for environmental sustainability and African welfare*. *Sustainable Development*. <https://api.semanticscholar.org/CorpusID:263244551>
 23. Neagu, O., & Dima, S. (2017). *Impact of Globalisation On Economic Growth in Romania: An Empirical Analysis of Its Economic, Social and Political Dimensions*. *Studia Universitatis Vasile Goldis Arad, Seria Stiinte Economice*, Vol 27, Iss 1, Pp 29-40 (2017). <https://doi.org/10.1515/sues-2017-0003>
 24. Nguyen, V. C. T., & Le, H. Q. (2021). *Globalization and economic growth: An empirical evidence from Vietnam*. *Örgütsel Davranış Araştırmaları Dergisi*, 6(1), 173–188.
 25. Nick, T. G. (2007). *Descriptive statistics*. *Topics in Biostatistics*, 33–52.
 26. Norli, M. A. A. Bin, & Chia, Y. E. (2021). *Re-Examining The Impact Of Globalisation On Economic Growth: Evidence From South America*. *Labuan Bulletin of International Business and Finance (LBIBF)*; Vol. 19 (2021): Volume 19, Issue 2 (2021); 55-63 ; 2600-7894 ; 1675-7262. <https://jurcon.ums.edu.my/ojums/index.php/lbibf/article/view/3361>
 27. Radulović, M., & Kostić, M. (2020). *Globalization and economic growth of Eurozone economies*. *Zbornik Radova Ekonomskog Fakulteta u Rijeci: Časopis Za Ekonomsku Teoriju i Praksu*, 38(1), 183–214.
 28. Raghutla, C. (2020). *The effect of trade openness on economic growth: Some empirical evidence from emerging market economies*. *Journal of Public Affairs*, 20(3), e2081.
 29. Rahmaddi, R., & Ichihashi, M. (2012). *How do Export Structure and Competitiveness Evolve Since Trade Liberalization? An Overview and Assessment of Indonesian Manufacturing Export Performance*. *International Journal Trade, Economics and Finance*, 272–280. <https://api.semanticscholar.org/CorpusID:54681980>
 30. Ryazantsev, S. V, Pismennaya, E. E., Akramov, S., Manshin, R. V, & Garibova, F. M. (2019). *Border trade and migration in the context of Tajikistan's international economic cooperation with neighboring countries*. *Proceedings of the International Conference on Man-Power-Law-Governance: Interdisciplinary Approaches (MPLG-IA 2019)*. <https://api.semanticscholar.org/CorpusID:213114505>
 31. Samimi, P., & Jenatabadi, H. S. (2014). *Globalization and economic growth: Empirical evidence on the role of complementarities*. *PloS One*, 9(4), e87824.
 32. Santiago, R., Fuinhas, J. A., & Marques, A. C. (2020). *The impact of globalization and*

- economic freedom on economic growth: the case of the Latin America and Caribbean countries.* Economic Change and Restructuring, 53, 61–85.
33. Savrul, M., & İncekara, A. (2017). *The effect of globalization on economic growth: Panel data analysis for ASEAN countries.* International Conference on Eurasian Economies, <https://www.avekon.org/Papers/1870.Pdf>, (21.08. 2022).
 34. Schreyer, M. (2014). *The Transatlantic Trade and Investment Partnership (TTIP) Can the Planned Agreement Deliver on Its Promises ?* <https://api.semanticscholar.org/CorpusID:199395396>
 35. Schwertman, N. C., Owens, M. A., & Adnan, R. (2004). *A simple more general boxplot method for identifying outliers.* Computational Statistics & Data Analysis, 47(1), 165–174.
 36. Slesman, L., Baharumshah, A. Z., & Ra'ees, W. (2015). *Institutional infrastructure and economic growth in member countries of the Organization of Islamic Cooperation (OIC).* Economic Modelling, 51, 214–226.
 37. Tekbas, M. (2021). *The impact of economic, social and political globalization on economic growth: evidence from BRICS-T Countries.* Gaziantep University Journal of Social Sciences, 20(1), 57–71.
 38. Xu, X., Abbas, H. S. M., Sun, C., Gillani, S., Ullah, A., & Raza, M. A. A. (2021). *Impact of globalization and governance determinants on economic growth: An empirical analysis of Asian economies.* Growth and Change, 52(2), 1137–1154.