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DETERMINANTS OF INCLUSIVE GROWTH IN G20 COUNTRIES WITH GENDER INEQUALITY INDEX AS A MODERATING VARIABLE

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ABSTRACT

Introduction: Inclusive growth involves substantial discussions aimed at fostering inclusivity in global society. This research is important because it seeks to explain inclusive growth driven by investment, government spending, and trade openness, with the gender inequality index as a moderating variable in G20 countries over the period from 2007 to 2021.

Methods: This research is a quantitative study using Ordinary Least Squares (OLS) regression and Moderated Regression Analysis methods (MRA).

Results: The findings from the three variables included in this study indicate that two variables can influence inclusive growth, namely government spending and trade openness, while the investment variable does not affect inclusive growth.

Conclusion and suggestion: This is due to the fact that G20 countries have not been able to realize the impact of investment rates on inclusive growth. In addition, the gender inequality index is capable of moderating the influence of government spending on inclusive growth. Thus, in creating inclusive growth, the government must be able to allocate its funds wisely and equitably to all elements of society, both men and women.

INTRODUCTION

Inclusive growth has attracted the attention of many academic disciplines due to its substantial potential for discussion aimed at fostering inclusivity in global society. Economic growth in recent decades has experienced rapid expansion and has saved less fortunate countries (Zhu, 2022). Although economic growth is an essential and necessary dimension of development, its dominance in understanding state and government models does not provide adequate guidance for building a developing and equitable society (Gupta & Pouw, 2017).

Inclusive growth is becoming increasingly important and recognized, and it is a focal point in the work plans and strategies of international institutions to realize the global economic development agenda. A number of institutions have developed the concept of inclusive growth, which is a type of growth that allows all members of society to participate and contribute to the growth process based on the principle of equality, regardless of their individual circumstances (Pratiwi & Krisnawati, 2020). This has become a major concern for countries experiencing high economic growth, especially those that are part of the G20 forum.

The G20 (The Group of Twenty) is a multilateral cooperation forum consisting of 19 major countries and the European Union (UE). The full members include South Africa, the United States, Saudi Arabia, Argentina, Australia, Brazil, India, Indonesia, the United Kingdom, Italy, Japan, Germany, Canada, South Korea, Mexico, France, Russia, China, Turkey, and the European Union. The data that is often highlighted is that the G20 accounts for about 80% of the Gross Domestic Product, facilitates around 75% of international trade, and encompasses approximately 60% of the world's population (Hardyanto, 2022). The data description indicates that the countries included in the G20 forum have a high economic growth rate. According to Zhu (2022), the impact of this economic growth will eventually give rise to inequality and income disparity within society.

The issue that is often seen in both developed and developing countries is inequality (Wairooy & Haryono, 2023). Developed and developing countries, such as those in the G20, often find themselves trapped in exclusive economic patterns. This refers to the drive to pursue economic progress that is largely determined by rapid growth in the manufacturing sector (secondary industry) and services (tertiary industry) in order to emulate the economic achievements of developed countries. Although both sectors contribute significantly to economic growth, they tend to have little labor involved. On the contrary, the most fundamental sectors, such as agriculture, receive less attention, even though this sector employs a large number of workers. The impact is that income inequality occurs between workers in the agricultural sector and those employed in the manufacturing and service sectors (Shaleh, 2021). Thus, inclusivity should not be limited to the concept of growth but must pay attention to and embrace other dimensions. (Mamat et al., 2016). Another dimension in this regard relates to the aspects of investment, government spending, trade openness, and the gender inequality index.

Countries need significant investment to better utilize the available resource potential and improve efficiency to ensure economic growth that involves all parties. Although the concept of inclusive economic growth is appealing, significant investment is needed to create new opportunities and utilize the existing economic capacity more efficiently (Munir & Fatima, 2020). Research conducted by Fu (2023) and Lestari et al.

(2022) explains that investment significantly influences and drives inclusive growth. According to Salsabila & Pramukty (2023), investments must be equitable and decentralized in order to support inclusive growth. Unlike the research mentioned above, the studies conducted by Nkoro & Uko (2020) and Rasool et al. (2022) indicate that investment has a significant negative impact on inclusive growth. Investment hinders inclusive growth because it can only be accessed by certain groups that have access to capital and political influence.

Government spending plays a crucial role in economic policy, as it is implemented by the government as an operational instrument of that policy to encourage strong and sustainable growth (Ahuja & Pandit, 2020). The research results by Bado et al. (2023) indicate that government spending in the long-term has a positive impact on the inclusiveness of growth. In line with the above research, Ernawati et al. (2021) explains that government spending promotes inclusive growth as a policy that favors the poor and is pro-employment but not pro-equality. According to Wahyudi (2023), increased government spending will improve the quality of human resources and expand job opportunities, which will impact inclusive growth. Unlike the results of the above research, according to the findings of another study by Harun & Maski (2022), government spending has a negative impact due to the ineffectiveness of the government in allocating budgets for unimportant expenditure such as employee salaries and business trips.

Trade openness can enhance economic growth and inequality simultaneously. The magnitude of trade complexity can affect the degree of inequality in an economy, as the complexity of the economy reflects its development. Although trade can promote inclusive growth, it can also undermine inclusive growth through the pathways of trade inequality (Agyei & Idan, 2022). Free trade opponents doubt trade as a driver of inclusive growth. They argue that trade poses a threat to domestic jobs, increases economic output, and income growth. On the other hand, proponents of free trade argue that trade is a crucial condition for economic progress, welfare, and the long-term development of everyone. Thus, trade will enhance inclusive growth. Research conducted by Ozegbe et al. (2019) and Wang et al. (2023) explains that trade openness significantly and positively enhances inclusive growth at both the individual and interaction levels, but caution is needed regarding inflation.

Gender inequality remains an issue in society, where there are differences between men and women in terms of basic human needs. These basic needs involve various aspects such as employment, health, and education. Therefore, gender equality is necessary to enhance inclusive growth (Kemenpppa, 2021). Research conducted by Adika & Rahmawati (2021) explains that gender equality has a significant impact on inclusive

growth. This indicates that inclusive growth occurs when all sectors of society participate and contribute without exception.

Based on the previous explanation, this study becomes relevant and necessary to conduct as it seeks to explain inclusive growth driven by investment, government spending, and trade openness as the factors contributing to inclusive growth in G20 member countries. Furthermore, research on inclusive growth has been extensively conducted by previous researchers, and there are still many inconsistencies in the studies. Therefore, the addition of the gender inequality index variable as a moderating variable brings novelty to this research.

LITERATURE REVIEW

Inclusive Growth

Inclusive growth refers to a type of growth that ensures equal access to growth opportunities without discrimination, and is capable of reducing the gap between different groups. According to the World Bank, inclusive growth encompasses the expansion of access to economic assets, the development of markets, and broader economies of scale, as well as the ability to create equal opportunities for future generations (Safitri et al., 2021). According to the Commission on Growth and Development (2020), inclusive growth is defined as a type of growth that is sustainable, encompasses various economic sectors, and involves a large number of workers.

According to Birdsall in Amalina et al. (2013), inclusive growth is a type of growth that supports the increase in size and economic capacity of the middle class. Therefore, economic growth in Indonesia, which aligns with the growth of the middle class, significantly demonstrates the inclusive nature of that growth. Various ideas proposed to formulate the concept of inclusive growth have unique perspectives on how growth should operate within the economy. Inequality, poverty, sectoral issues, and workers are often mentioned when explaining several concepts tied into inclusive growth. Inclusive growth can be considered an indicator of whether the economic growth of a country is of good quality. Economic growth is considered inclusive when it can reduce poverty, decrease income distribution inequality, and create more job opportunities.

Investment

Investment is the act of placing capital or funds into a specific company or project with the hope of gaining profits in the future. The term ‘investment’ is often applied in the context of finance and economics. This is commonly done by economic actors because it can increase their income or earnings. According to the Great Dictionary of the Indonesian Language (KBBI), investment is defined as the placement of money or capital in a company or project with the aim of obtaining profit (Nadya et al., 2019).

Foreign direct investment (FDI) is the flow of capital that comes from abroad and enters the private sector, either in the form of direct investment from foreign entities or indirect investment in the form of portfolios. According to the United Nations Conference on Trade and Development (UNCTAD), Foreign Direct Investment is an investment made by a company from one country into a company in another country with the aim of controlling the operations of the company in the host country (Vebriadi & Nugroho, 2020). In this case, the investment is intended to expand its business in another country (Jufri et al., 2022). So, in Foreign Direct Investment (FDI), there is a connection between the parent company and its affiliated companies abroad.

Government Expenditure

Government spending, as part of fiscal policy, is a measure taken by the government to regulate the economy by determining the amount of annual revenue and expenditure, which is reflected in the State Budget (APBN) at the national level and the Regional Budget (APBD) at the local level. According to Aries Djaenuri, government expenditure is the money or funds disbursed from the government treasury to finance government activities or other purposes that fall under the authority of the government (Nahumuri, 2019). Government expenditure is a representation of the policies adopted by the government. In this case, where the government's expenditure is used to finance the more important public sector and prioritize it (Simarmata & Iskandar, 2022).

The theory of government expenditure in macroeconomics was introduced by three different economists: Rostow and Musgrave, Adolf Wegner, and Peacock and Wiseman. Rostow and Musgrave link the development of government expenditure with the stages of economic development, namely the early, middle, and advanced stages. Adolf Wagner stated that as the per capita income increases in an economy, government spending will proportionally rise. Therefore, the curve of government expenditure tends to show exponential growth. Wagner is known for his principle, "The Law of Expanding State Expenditure," where government spending continues to grow due to the increasing role of the government in managing all activities related to society, the legal system, education, recreation, and culture (Ningrum et al., 2020).

Trade Openness

Trade openness is considered to be a global trend and a prerequisite for development. Although trade openness is actively promoted as an important component of development strategy, in theory, the impact of trade openness on inclusive growth is still logically ambiguous (Gonese, et al., 2023b). Trade openness is important in meeting

the needs of the country and can enhance both economic growth and challenges (Wulandari et al., 2023).

In a structured context, this can be explained as the total combined value of a country's exports and imports, which is then divided by that country's Gross Domestic Product (GDP). Trade openness brings with it a number of benefits, such as an increased variety of choices for consumers due to the availability of the goods and services in the economy. Trade can be a driver of growth (trade as engine of growth). If international trade activities include exports and imports, then one or both of these components can serve as a driving force for growth in itself (Nuraeni et al., 2022).

Gender Inequality

Several studies have shown that sustainable development cannot be achieved without empowering women and achieving gender equality. Therefore, gender equality is a crucial issue in relation to the human condition and serves as one of the indicators in the process of sustainable development. The increase in gender equality is defined as an effort to invest in physical capital. The incentives that encourage investment are realized through the expected return from that investment. The more productive the workforce and education, the higher the expected return from the investment will be. The impact of this will stimulate an increase in investment and economic growth (Padang et al., 2019).

The phenomenon of there being differences in education level, wage, and working hours between men and women indicates that gender equality has not yet been fully achieved. According to the United States Agency for International Development/USAID, gender equality is a condition in which both women and men are given equal opportunities to enjoy human rights, have equal access to goods, opportunities, resources, and benefit from social development outcomes. Gender equality holds significance beyond just as a moral issue; it has become a vital economic concern. For the global economy to reach its potential, we need to create conditions where all women can realize their potential to support economic growth (Vininda & Yuliana, 2020).

Previous Study and Hypothesis

Rostow's modernization theory is a five-stage growth process that views growth as a metamorphosis, meaning a revolution from traditional to modern (Herdiyati & Ismail, 2022). Rostow made efforts to achieve high growth, and one of those efforts was capital, which can significantly contribute to growth and the development of a nation. The term here refers to tax policies, investment, and international trade exchange rates. Investment will also enhance inclusive growth because investment activities will boost economic activities and increase job opportunities. Every community will experience an increase in income. Research conducted by Fu (2023) and Lestari et al. (2022) explains that investment significantly influences and drives inclusive growth. Unlike the research

mentioned above, the studies conducted by Nkoro and Uko (2020) and Rasool et al. (2022) indicate that investment has a significant negative impact on inclusive growth. Based on this explanation and supported by the previous research mentioned above, the researcher proposes the following hypothesis:

H1: Investment has a positive impact on inclusive growth.

Musgrave's fiscal policy theory explains that the fiscal policy should promote macroeconomic stability, reduce distributional imbalances, optimize resource allocation, and advance equal opportunities. It is clear that government spending must be able to enhance inclusive growth, allowing society to gain access to equitable income as a result of government expenditure (Herdiyati & Ismail, 2022). Fiscal policy can also reduce disparities in terms of spending and income, indicating that government spending has a far more significant impact. The research conducted by Ernawati et al. (2021) explains that government spending promotes inclusive growth as a policy that favors the poor and is pro-employment, but not pro-equality. Unlike the research mentioned above, the study conducted by Bado et al. (2023) states that government spending in the long-term has a positive impact on the inclusiveness of growth. Based on this explanation and supported by the previous research above, the researcher proposes the following hypothesis:

H2: Government Spending has a positive effect on Inclusive Growth.

The Heckscher-Ohlin (HO) theory explains that trade openness is an important factor in enhancing inclusive growth. Trade openness can reduce unemployment by accelerating resource allocation, increasing productivity, and enhancing competitiveness. Trade openness will create jobs and boost community income, contributing to inclusive growth (Gonese, et al., 2023a). Research previously conducted by Ozegbe et al. (2019) and Wang et al. (2023) explains that trade openness significantly and positively enhances inclusive growth at both individual and interaction levels, although caution is needed regarding inflation. Based on the explanation and supported by the previous research mentioned above, the researcher proposes the following hypothesis:

H3: Trade openness has a positive effect on inclusive growth.

According to Tambunan (2016), there are 34 characteristics of inclusive development, which can be simplified into 7 key characteristics that represent all aspects. One of the seven characteristics is gender equality. The explanation above corresponds to what was determined by Gracia et al. (2018), who stated that inclusive economic growth is achieved through the contributions of all layers of society without exception. Gender differences lead to economic injustice for women, both individually and collectively, as they hinder women's careers and income (Bangun, 2021).

Investment affects the employment conditions in a country. Higher wages and better job opportunities for workers in foreign companies in a country will change the relative prices of inputs, which will then impact different groups, including gender, subsequently affecting inclusive growth (Sangaji et al., 2018). Government spending must be able to pay attention to the equitable allocation for both men and women. Gender equality is important, so then decision-making considers women's needs to enhance inclusive growth (Kemenpppa, 2021). Trade openness allows women to engage in exports and broader industry. The dominance of female workers in industry creates income disparities, as women tend to receive lower wages and have less access to social protection rights, which impacts inclusive growth (Ekaningtyas, 2021). The research conducted by Adika and Rahmawati (2021) explains that inclusive growth occurs with the contribution of all layers of society without exception. Based on the explanation and supported by previous research mentioned above, the researcher proposes the following hypothesis:

H4: The Gender Inequality Index is able to moderate the influence of investment on Inclusive Growth.

H5: The Gender Inequality Index is able to moderate the influence of government spending on Inclusive Growth.

H6: The Gender Inequality Index is able to moderate the influence of trade openness on Inclusive Growth.

RESEARCH METHODS

This research is a quantitative study using the Ordinary Least Squares (OLS) regression method and Moderated Regression Analysis. (MRA). The population in this study included all G-20 member countries that utilize Foreign Direct Investment, General Government Final Consumption Expenditure, Trade, Gross National Income (GNI) Per Capita, and the Gender Inequality Index in their countries. The research period was from 2007 to 2021. This research combines cross-sectional secondary data with time series data sourced from the World Bank and the United Nations Development Programme (UNDP), and the combination of the two is referred to as panel data. Formulas using the equation for Moderated Regression Analysis can be expressed in the following equation:

$$Yit = \alpha + \beta 1X1_{it} + \beta 2X2_{it} + \beta 3X3_{it} + \beta 1X1_{it}Z + \beta 2X2_{it}Z + \beta 3X3_{it}Z + e_{it}$$

Explanation:

Y = Inclusive Growth (Y)

X1 = Foreign Direct Investment (FDI)

X2 = Government Expenditure (GE)

X3 = Trade Openness (TO)

Z = Gender Inequality Index (GII)

X1Z = Interaction between Investment and the Gender Inequality Index
X2Z = Interaction between Government Expenditure and the Gender Inequality Index
X3Z = Interaction between Trade Openness and the Gender Inequality Index
e = Error
i = Country
t = Year

RESULT AND ANALYSIS

Table 1. Descriptive Statistics

	FDI	GE	TO	GNI_PC	GII
Mean	24.23540	26.56735	3.926828	10.16233	-1.589566
Median	24.21595	26.49330	3.998965	10.45420	-1.527858
Maximum	28.02138	28.96164	46.59339	11.17226	-0.410980
Minimum	17.36803	24.30886	3.095848	8.160518	-2.918771
Std. Dev.	1.400533	1.118234	0.365878	0.665768	0.678142
Skewness	0.165616	0.362777	0.324170	0.852815	-0.055177
Kurtosis	4573309	2.421511	2.403714	2.936224	1.661187
Jarque-Bera	32.31271	10.76347	9.698770	36.41549	22.55748
Probability	0.000000	0.004600	0.007833	0.000000	0.000013
Sum	7270.620	7970.205	1181.048	3048.700	-476.8699
Sum Sq. Dev	586.4862	373.8835	40.02606	132.5310	137.5032
Observation	300	300	300	300	300

Source: Processed Power, 2023

Description:

FDI = Investment
GE = Government Expenditure
TO = Trade Openness
GNI_PC = Inclusive Growth
GII = Gender Inequality Index

The results from the descriptive statistical analysis can be found in Table 1, which provides the following information:

1. This study used unbalanced panel data with a total of 300 observations, obtained from 15 cross-sections, namely 20 G20 member countries, covering the research period from 2007 to 2021.
2. The investment variable has an average value of 24.23540, a maximum value of 28.02138, a minimum value of 17.36803, a median value of 24.21595, and a standard deviation of 1.400533.

3. The government expenditure variable shows an average value of 26.56735, a median of 26.4933, a maximum value of 28.96164, a minimum value of 24.30886, and a standard deviation of 1.118234.
4. The trade openness variable has an average value of 3.926828, a median of 3.998965, a maximum value of 46.59339, a minimum value of 3.095848, and a standard deviation of 0.365878.
5. The inclusive growth variable has an average value of 10.16233, a median of 10.45420, a maximum value of 11.17226, a minimum value of 8.160518, and a standard deviation of 0.665768.
6. The gender inequality index variable has an average value of -1.589566, a median of -1.527858, a maximum value of -0.410980, a minimum value of -2.918771, and a standard deviation of 0.678142.

Selection of Regression Model

In this study, three testing stages were used to determine the best model, namely the Chow test, Hausman test, and LM test.

Chow Test

The hypotheses used in the Chow test are:

H_0 = The best model is the common effect model

H_1 = The best model is the fixed effect model

Table 2. Chow Test Results

Effects Test	*Statistic*	*d.f*	*Prob*
Cross-section F	*429.842090*	*(19,276)*	*0.0000*
Cross-section Chi-square	*1026.207622*	*19*	*0.0000*

Source: Processed Power, 2023

Based on the results from the Chow test presented in Table 2, it is known that the chi-square probability value is 0.0000 < 0.05, which means that we accept $H1$ and reject $H0$. Thus, it can be interpreted that the best model used is the fixed effect model.

Hausman Test

The criteria in the Hausman test are as follows:

H0 = The best model used is the random effects model.

H1 = The best model used is the fixed effect model.

Table 3. Hausman Test Results

Test Summary	**Chi-Sq Statistic**	**Chi-Sq d.f**	**Prob**
Cross-section random	13.515163	4	0.0090

Source: Processed Power, 2023

Table 3 shows that the chi-square statistic probability value is 0.0090 < 0.05, which means rejecting $H0$ and accepting $H1$. Thus, it can be assured that the fixed effect model is better than the random effect model. Based on the results of the two model selection tests, namely the Chow test and the Hausman test, it can be concluded that the best model used in this study was the Fixed Effect Model (FEM), and that there is no need for further testing.

Classical Assumption Test

Normality Test

This research employed the Jarque-Bera statistical approach, presented in the table below.

Table 4. Results of the Normality Test

Series: Standardize Residual	
Sample 2007 2021	
Observation 300	
Mean	6.29e-18
Median	-0.003866
Maximum	0.265496
Minimum	-0.220261
Std. Dev.	0.085783
Skewness	0.252403
Kurtosis	3.270457
Jarque-Bera	4.099824
Probability	0.128746

Source: Processed Power, 2023

Referring to Graph 4, the Jarque-Bera probability value is 0.128746 > 0.05, thus H1 is not accepted and H0 is accepted. Therefore, it can be concluded that the data used in this study is normally distributed.

Multicollinearity Test

The results of the multicollinearity test are as follows:

Table 5. Results of the Multicollinearity Test

	FDI	**GE**	**TO**	**GNI_PC**	**GII**
FDI	1.000000	0.703244	0.005657	0.142263	0.289575
GE	0.703244	1.000000	0.060934	0.452389	0.531797
TO	0.005657	0.060934	1.000000	0.241502	0.189938
GNI_PC	0.142263	0.452389	0.241502	1.000000	0.643261
GII	0.289575	0.531797	0.189938	0.643261	1.000000

Source: Processed Power, 2023

Based on the results of the multicollinearity test, it is known that the coefficient values among the independent variables are all less than 0.85, which means that there are no multicollinearity issues in this study.

Heteroskedasticity Test

The results of the heteroskedasticity test are as follows:

Table 6. Results of the Heteroskedasticity Test

Variable	Coefficient	St. Error	t-Statistic	Prob
C	-0.184462	0.404531	0.455990	0.6488
FDI	0.000955	0.003032	0.315021	0.7530
GE	0.003670	0.013323	0275477	0.7832
TO	0.039551	0.023940	1652105	0.0997
GII	0.015248	0.012548	1.215158	0.2253

Source: Processed Power, 2023

As shown in Table 6, all probabilities for the independent variables are greater than 0.05, indicating that there is no evidence of heteroskedasticity.

Autocorrelation Test

The results of the autocorrelation test are as follows:

Table 7. Results of the Autocorrelation Test

Durbin-Watson stat	0.346268

Source: Processed Power, 2023

Referring to Table 7, the results of the Fixed Effect Model (FEM), or the model selected as the best model, show that the Durbin-Watson statistic is 0.346268, which is greater than -2 and less than +2. With this finding, it can be concluded that the results of this study are free from autocorrelation issues.

Partial Test (t-test)

The results from the t-test can be seen in the table below:

Table 8. Results of the Partial Test (Uji-t)

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	-5.073.511	0.969032	-5.235.647	0.0000
FDI	0.011210	0.007263	1.543387	0.1239
GE	0.483931	0.031915	15.16298	0.0000
TO	0.407973	0.057347	7.114.102	0.0000
GII	-0.315349	0.030059	-10.49118	0.0000

Source: Processed Power, 2023

Referring to Table 8, it was determined that investment has a coefficient value of 0.011210. Meanwhile, the probability value is 0.1239 > 0.05, which means that investment does not affect inclusive growth. When investment experiences an increase or decrease, it will not affect inclusive growth. These findings are not in line with the proposed hypothesis that investment has a positive and significant impact on inclusive growth.

The government expenditure variable has a coefficient value of 0.483931 with a probability value of 0.0000 < 0.05. Thus, it can be interpreted that government spending has a positive and significant impact on inclusive growth. When government spending increases by 1%, it will boost economic growth by 0.483931. The findings are in line with the hypothesis proposed in the research, which states that government spending has a positive and significant impact on inclusive growth.

The trade openness variable has a coefficient value of 0.407973 with a probability value of 0.0000 < 0.05. Thus, it can be interpreted that trade openness has a positive and significant impact on inclusive growth. When government spending increases by 1%, it will boost economic growth by 0.407973. The findings are in line with the hypothesis proposed in the research, namely that trade openness has a positive and significant impact on inclusive growth.

Simultaneous Test (F-Test)

The results from the F-test can be found in the table below:

Table 9. Results of the Simultaneous Test (Uji-F)

F-statistic	710.8173
Prob(F-statistic)	0.000000

Source: Processed Power, 2023

Referring to the results of the F test in Table 9, the information obtained shows that the probability value of the F-statistic is 0.000000 < 0.05, which means that investment, government spending, and trade openness simultaneously influence inclusive growth in the G20 member countries. The significant results from the F test also confirm that the equation model in this study is suitable for use.

Test of the Coefficient of Determination (R2)

The results of the coefficient of determination test can be seen in the table below:

Table 10. Results of the Determination Coefficient Test (R2)

R-squared	0983398
Adiusted R-squared	0.982015

Source: Processed Power, 2023

Referring to the results from the regression testing using the fixed effect model approach displayed in Table 10, it is noted that the adjusted R^2 value is 0.983398 or 98.34%. This means that the variables of investment, government spending, and trade openness can explain and influence the variable of inclusive growth by 98.34%, while the remaining 1.66% is influenced by other variables outside the model or the error term.

Moderated Regression Analysis (MRA)

The moderating variable in this study is the Gender Inequality Index (GII), which will moderate Foreign Direct Investment (FDI), Government Expenditure (GE), and Trade Openness. (TO). The results of the moderation test are as follows:

Table 11. Results of the Moderated Regression Analysis (MRA)

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	-3.414668	1.412.640	-2.417.225	0.0163
FDI	0.019689	0.025752	0.764585	0.4452
GE	0.400650	0.046390	8.636581	0.0000
TO	0.484537	0.102510	4.726727	0.0000
ZFDI	0.005604	0.013694	0.409247	0.6827
ZGE	-0.070259	0.025405	2.765541	0.0061
ZTO	0.073748	0.060609	1216771	0.2247
Z	1.110271	0.802058	1.384278	0.1674

Source: Processed Power, 2023

Based on the table following the Moderated Regression Analysis (MRA) testing, the following can be concluded:

1. In the interaction between the Gender Inequality Index and Foreign Direct Investment, the probability value is 0.6827 > α 0.05, thus H0 is rejected. This means that the Gender Inequality Index cannot moderate (strengthen) the effect of Foreign Direct Investment on inclusive growth.
2. In the interaction between the Gender Inequality Index and Government Expenditure, the probability value is 0.0061 < α 0.05, so H0 can be accepted. This indicates that the Gender Inequality Index can moderate (strengthen) the effect of Government Expenditure on inclusive growth.
3. In the interaction between the Gender Inequality Index and Trade Openness, the probability value is 0.2247 > α 0.05, hence H0 is rejected. This means that the Gender Inequality Index cannot moderate (strengthen) the effect of Trade Openness on inclusive growth.

The Influence of Investment on Inclusive Growth in the G20 from 2007 to 2021

Based on the results of the statistical testing, it was found that FDI does not affect inclusive growth, with a coefficient value of 0.011210 and a probability value of 0.1239 > α 0.05. The test results do not align with the established hypothesis that FDI has a positive and significant impact on inclusive growth. The results of this research reject the modernization theory proposed by Rostow, which states that FDI will drive inclusive growth and also enhance it as well, because the presence of investment activities will boost economic activities and increase job opportunities, so then every community will experience an increase in income.

The findings are in line with the research conducted by Nadzir & Setyaningrum Kenda (2023); Nkoro & Uko (2020); Rasool et al. (2022) that indicates that investment does not influence inclusive growth. Investment is considered to be a key driver of inclusive growth. From the results above, the researchers observe that G-20 countries have not been able to realize the impact of investment rates on inclusive growth. G-20 countries are still focused on their national income rather than the equitable distribution of income among their populations.

The Influence of Government Expenditure on Inclusive Growth in the G20 from 2007 to 2021

Based on the results from statistical testing, it was found that government expenditure affects inclusive growth, with a coefficient value of 0.483931 and a probability value of 0.0000 < α 0.05. The test results align with the established hypothesis that government spending has a positive and significant impact on inclusive growth. The results of this research support Musgrave's fiscal policy theory, which explains that government spending should be able to enhance inclusive growth, allowing society to gain equal access to income as a result of government expenditure. The fiscal policy must promote macroeconomic stability, reduce distribution imbalances, optimize resource allocation, and advance equal opportunities. The findings are in line with Bado et al. (2023); Ernawati et al. (2021); Mintarti (2017), where government expenditure is defined as spending used to finance development, which has implications for the creation of welfare in society. Government spending will enhance the development of economic facilities and create job opportunities for income distribution among its people, as well as promote inclusive growth.

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The Influence of Trade Openness on Inclusive Growth in the G20 from 2007 to 2021

Based on the results from the statistical test, it was found that trade openness affects inclusive growth, with a coefficient value of 0.407973 and a probability value of 0.0000 < α 0.05. The results of the testing align with the established hypothesis that trade openness has a positive and significant impact on inclusive growth. The results of this study support the Heckscher-Ohlin (HO) theory, which explains that trade openness is an important factor in enhancing inclusive growth. This research aligns with the studies conducted by Gonese et al. (2023a); Ozegbe et al. (2019); Wang et al. (2023), which explain that trade openness significantly and positively boosts inclusive growth at both the individual level and in interactions. Trade openness can reduce unemployment by accelerating resource allocation, increasing productivity, and enhancing competitiveness. Trade openness will create job opportunities and increase people's income, or in this case, promote inclusive growth.

The Gender Inequality Index Moderates the Impact of Investment on Inclusive Growth in the G20 from 2007 to 2021

Based on the results from the Moderated Regression Analysis (MRA), it was found that the gender inequality index cannot moderate the effect of investment on inclusive growth. The probability value obtained was 0.6827, which is greater than the significance level of 0.05. The test results do not align with the established hypothesis that the gender inequality index moderates the effect of investment on inclusive growth.

The test results also do not align with the research conducted by Sangaji et al. (2018), which explains that investment affects employment conditions in a country. Higher wages and better job opportunities for workers in foreign companies in a country will change the relative prices of inputs, which will then impact different groups, including gender, subsequently affecting inclusive growth.

The Gender Inequality Index Moderates the Effect of Government Expenditure on Inclusive Growth in the G20 for the Period 2007-2021

Based on the results from the Moderated Regression Analysis (MRA), it was found that the gender inequality index can moderate the effect of government expenditure on inclusive growth. The probability value obtained was 0.0061, which is smaller than the significance level of 0.05. The test results align with the established hypothesis that the gender inequality index moderates the effect of government spending on inclusive growth.

The results of this research align with the study conducted by Kemenpppa (2021), which explains that government spending must be able to pay attention to equitable allocation for both men and women. Gender equality is important so then decision-making considers the needs of women to enhance inclusive growth.

The Gender Inequality Index Moderates the Effect of Trade Openness on Inclusive Growth in the G20 for the Period 2007-2021

Based on the results from the Moderated Regression Analysis (MRA), it was found that the gender inequality index does not moderate the effect of trade openness on inclusive growth. The obtained probability value of 0.2247 is greater than the significance level of 0.05. The test results do not align with the established hypothesis that the gender inequality index moderates the effect of trade openness on inclusive growth. The results above are inconsistent with the research by Ekaningtyas (2021), which explains that trade openness allows women to engage in exports and a broader range of industries. The dominance of female workers in the industry creates a wage gap between men and women, who tend to receive lower wages and have less access to social protection rights, impacting inclusive growth.

CONCLUSION

Based on the research findings, the researchers discovered that investment in a country does not influence inclusive growth in G20 countries. This is because G20 countries have not been able to realize the impact of investment rates on inclusive growth. G20 countries have remained focused on their national income rather than on income distribution among their respective populations. Unlike government spending and trade openness, both of which influence inclusive growth, government spending enhances the development of economic facilities and creates job opportunities for income equality among its citizens, as well as promoting inclusive growth. Meanwhile, trade openness can accelerate resource allocation, boost productivity, and enhance competitiveness, which will undoubtedly create job opportunities for the community to earn an income. The results of this research also explain that the gender inequality index is capable of moderating government spending on inclusive growth. Meanwhile, investment and trade openness cannot be moderated. Thus, in creating inclusive growth, the government must be able to allocate its funds wisely and equitably to all elements of society, both men and women.

This research has several limitations, such as the limited availability of data in several G20 countries and the short time period examined, which may affect the generalization of the results. In addition, the use of the Gender Inequality Index as a moderating variable may not fully capture all dimensions of gender inequality that impact inclusive growth. The differences in the characteristics among the G20 countries and the limitations of the analytical methods used are also factors that need to be considered.

Future research should expand the indicators of gender inequality by including additional variables and conducting analyses based on regions or groups of countries. The use of more

complex methods is also recommended to examine the causal relationships more deeply between gender inequality and inclusive growth.

REFERENCES

Adika, N. D., & Rahmawati, F. (2021). Analisis Indikator Ketimpangan Gender dan Relevansinya terhadap Pertumbuhan Ekonomi Inklusif di Indonesia. *Ecoplan*, *4*(2), 151–162.

Agyei, S. K., & Idan, G. A. (2022). Trade Openness, Institutions, and Inclusive Growth in Sub-Saharan Africa. *SAGE Open*, *12*(2). https://doi.org/10.1177/21582440221099008

Ahuja, D., & Pandit, D. (2020). Public Expenditure and Economic Growth: Evidence from the Developing Countries. *FIIB Business Review*, *9*(3), 228–236. https://doi.org/10.1177/2319714520938901

Amalina, D. H., Hutagaol, M. P., & Asmara, A. (2013). Pertumbuhan Inklusif: Fenomena Pertumbuhan Inklusif di Kawasan Indonesia Bagian Barat dan Indonesia Bagian Timur. *Jurnal Ekonomi Dan Kebijakan Pembangunan*, *2*(2), 85–112.

Bado, B., Alam, S., Haeruddin, M. I. M., & Irwandi. (2023). *ANALISIS PERTUMBUHAN INKLUSIF DI INDONESIA : BERKELANJUTAN PERSPEKTIF TUJUAN PEMBANGUNAN (SDGs)*. *15*(2), 365–397. https://doi.org/10.34109/ijefs.202315218

Bangun, W. (2021). The Gender Inequality Index: Indonesian Efforts to Enhance Human Development within ASEAN. *Journal of Southwest Jiaotong University*, *56*(1). https://doi.org/10.35741/issn.0258-2724.56.1.7

Ekaningtyas, R. M. (2021). Dampak Keterbukaan Perdagangan terhadap diskriminasi Upah Gender: Telaah Sistematis. *Syntax Literate: Jurnal Ilmiah Indonesia*, *6*(5), 2418–2429.

Ernawati, E., Tajuddin, T., & Nur, S. (2021). Does government expenditure affect regional inclusive growth? An experience of implementing village fund policy in Indonesia. *Economies*, *9*(4). https://doi.org/10.3390/economies9040164

Fu, S. (2023). Foreign Direct Investment And Inclusive Growth: The Role Of The Financial Sector Development. *SHS Web of Conferences*, 1–7.

Gonese, D., Sibanda, K., & Ngonisa, P. (2023a). Trade Openness and Unemployment in Selected Southern African Development Community (SADC) Countries. *Economies*, *11*(10), 1–26. https://doi.org/10.3390/economies11100252

Gonese, D., Tsegaye, A., Khumalo, S. A., & Kapingura, F. M. (2023b). Trade openness and non-income poverty in Southern African Development Community (SADC) countries: A panel Autoregressive Distributive Lag (ARDL) analysis. *Cogent Economics and Finance*, *11*(2). https://doi.org/10.1080/23322039.2023.2242668

Gracia, L. C., Brio, E. B. Del, & Victorio, M. L. O. (2018). Gender Factors and Inclusive Economic Growth: The Silent Revolution. *Sustainability*, *10*(121), 1–14.

Gupta, J., & Pouw, N. P. (2017). Towards a Trans_Disciplinary Conceptualization of Inclusive Development. *Current Opinion in Environmental Sustainability*, *24*, 96–103. https://doi.org/10.1016/j.cosust.2017.03.004

Hardyanto. (2022). G20 dan Bahasa Dunia. Retrieved March 24, 2023, from Sekretariatan Kabinet Republik Indonesia website: https://setkab.go.id/g20-dan-bahasa-dunia/

Harun, L., & Maski, G. (2022). Analisis Pengaruh Pengeluaran Pemerintah Daerah dan

Pertumbuhan Ekonomi Terhadap Ketimpangan Pembangunan Wilayah (Studi pada Kabupaten dan Kota di Jawa Timur). *Jurnal Ilmiah Mahasiswa FEB*, *1*(2), 1–17.

Herdiyati, L., & Ismail, M. (2022). Government Spending and Investment for Inclusive Growth in Indonesia: A Panel Data Analysis. *Southeast Asian Journal of Economics*, *10*(3), 27–73.

Jufri, A., Mulyadi, S., Wibowo, M. G., & Rafiqi, I. (2022). Determinan Penanaman Modal Asing Di Indonesia Periode 1970-2020: Pendekatan NARDL. *Jurnal Dinamika Ekonomi Pembangunan*, *4*(3), 232–244. https://doi.org/10.14710/jdep.4.3.232-244

Kemenpppa. (2021). Pembangunan Manusia Berbasis Gender. In *Kementrian Pemberdayaan Perempuan dan Anak*. Jakarta.

Lestari, T. K., Santoso, D. B., & Samputra, P. M. A. (2022). Link of Globalization to Inclusive Growth in Middle-Income ASEAN Countries. *Buletin Ilmiah Litbang Perdagangan*, *16*(1), 79–102.

Mamat, M. Z., Boon, K. N., Azizan, A. A., & Chang, L. W. (2016). An Attempt at Implementing a Holistic Inclusive Development Model: Insights from Malaysia's Land Settlement Scheme. *Asia Pacific Viewpoint*, *57*(1), 106–120. https://doi.org/10.1111/apv.12115

Mintarti, S. (2017). *Pengaruh investasi dan tenaga kerja serta pengeluaran pemerintah terhadap pertumbuhan ekonomi serta kesempatan kerja The influence of investment and labor and government spending on economic growth and employment*. *13*(1), 28–38.

Munir, M., & Fatima, A. (2020). Financing Inclusive Growth through FDI: Incorporating the Role of Institutional Quality. *Global Economics Review*, *5*(2), 29–46. https://doi.org/10.31703/ger.2020(V-II).03

Nadya, A., Trihandayani, E., Usha, I. G., Agnetha, M., Soukotta, T., & Melani, S. (2019). Tiongkok Sebagai Pemimpin Dunia Baru Melalui Investasi Di Negara-Negara Di Dunia. *Jurnal Asia Pacific Studies*, *2*(2), 202. https://doi.org/10.33541/japs.v2i2.1070

Nadzir, M., & Setyaningrum Kenda, A. (2023). Investasi asing dan investasi dalam negeri: Pengaruhnya pada pertumbuhan ekonomi di indonesia. *Jurnal Ilmiah Mahasiswa Akuntansi) Universitas Pendidikan Ganesha*, *14*, 1.

Nahumuri, L. L. (2019). Esensi Dan Urgensi Pengeluaran Pemerintah Untuk Pembangunan Daerah. *Jurnal Ilmu Pemerintahan Suara Khatulistiwa*, *4*(1), 1–12. https://doi.org/10.33701/jipsk.v4i1.597

Ningrum, J. W., Khairunnisa, A. H., & Huda, N. (2020). Pengaruh Kemiskinan, Tingkat Pengangguran, Pertumbuhan Ekonomi dan Pengeluaran Pemerintah Terhadap Indeks Pembangunan Manusia (IPM). *Jurnal Ilmiah Ekonomi Islam*, *6*(02), 212–222.

Nkoro, A., & Uko, A. K. (2020). Foreign Direct Investment And Inclusive Growth: The Role Of The Financial Sector Development. *International Journal of Economic Sciences*, *11*(2), 144–162.

Nuraeni, J., Titik, C. S., & Madura, U. T. (2022). *Analisis Respon Sektor Keuangan Dan Keterbukaan Perdagangan Terhadap Pertumbuhan Ekonomi Di Indonesia*. *3*(2).

Ozegbe, A. E., Fatai, O. O., Nwani, S., & Stanley, O. (2019). Achieving Inclusive Growth in

Nigeria through Exports: An Empirical Investigation. *South Asian Journal of Social Studies and Economics*, *3*(1), 1–14.

Padang, M., Anis, A., & Ariusni. (2019). ANALISIS PENGARUH KESETARAAN GENDER TERHADAP PERTUMBUHAN EKONOMI DI SUMATERA BARAT. *Jurnal Kajian Ekonomi Dan Pembangunan*, *1*(3), 969–976.

Pratiwi, L. R. E., & Krisnawati, A. (2020). Pengaruh Literasi Keuangan terhadap Financial Self-Efficacy Pada Usia Produktif di Kabupaten Buleleng Bali. *Jurnal Mitra Manajemen (JJM Online)*, *4*(2), 171–183.

Pratiwi, M., & Andarini, R. S. (2020). Adaptasi Muslim Milenial Dalam Perjalanan Wisata Halal Di Negara Non-Muslim. *Mediakom: Jurnal Ilmu Komunikasi*, *4*(1), 46–61.

Rasool, H., Adil, M. H., & Tarique, M. (2022). ARDL Approach to Drivers of Inclusive Growth In India. *The Indian Economic Jurnal*, *70*(4), 1–14.

Safitri, M. I. D., Ananda, C. F., & Prasetya, F. (2021). Analisis Dampak Belanja Pemerintahan Daerah Terhadap Pertumbuhan Ekonomi Inklusif di Jawa Timur. *Jurnal Perbendaharaan, Keuangan Negara, Dan Kebijakan Publik*, *6*(2), 85–96.

Salsabila, N. A., & Pramukty, R. (2023). Pengaruh Investasi, Indeks Pembangunan Manusia, dan Tingkat Pengangguran Terbuka Terhadap Ketimpangan Distribusi Pendapatan. *EKOMA : Jurnal Ekonomi, Manajemen, Akuntansi*, *2*(2), 436–445. https://doi.org/10.56799/ekoma.v2i2.1586

Sangaji, J., Miyasto, & Kurnia, A. S. (2018). Macroeconomic Determinants of Gender Inequality Index in Eight ASEAN Countries. *E3S Web of Conferences*, *73*, 1–4. https://doi.org/10.1051/e3sconf/20187311002

Shaleh, M. M. (2021). Pembangunan Ekonomi Inklusif Nasional, Provinsi Dan Kabupaten/Kota Se - Sulawesi Selatan. *Aquilibrium*, *10*(1), 24–43.

Simarmata, Y. W., & Dinar Iskandar, D. (2022). Pengaruh Pengeluaran Pemerintah, Investasi, Jumlah Penduduk, Kemiskinan terhadap Pertumbuhan Ekonomi dan Ipm: Analisa Two Stage Least Square Untuk Kasus Indonesia. *Jdep*, *5*(1), 78–94. Retrieved from https://ejournal.undip.ac.id/index.php/dinamika_pembangunan/index

Tambunan. (2016). *Pembangunan Ekonomi Inklusif*. Jakarta: LP3ES.

Vebriadi, K., & Nugroho, M. R. (2020). Determinan Investasi Negara Amerika Serikat Ke Negara Anggota Organisasi Kerjasama Islam Tahun 1991-2016. *EkBis: Jurnal Ekonomi Dan Bisnis*, *2*(2), 114. https://doi.org/10.14421/ekbis.2018.2.2.1114

Vininda, S., & Yuliana, L. (2020). Penerapan Regresi Data Panel Pengaruh Kesetaraan Gender Terhadap Pertumbuhan Ekonomi Di Provinsi Riau Periode 2011-2015. *SEMINAR NASIONAL OFFICIAL STATISTICS 2020*, *2*(1), 549–559.

Wahyudi, W. (2023). Pengeluaran Pemerintah Provinsi Dan Pengaruhnya Terhadap Pertumbuhan Ekonomi Dan Ketimpangan Pendapatan Di Indonesia. *Sebatik*, *27*(2), 708–715. https://doi.org/10.46984/sebatik.v27i2.2369

Wairooy, F. A., & Haryono, S. (2023). Pengaruh Foreign Direct Investment, Inflasi, Dan Pengangguran Terhadap Ketimpangan Pendapatan Dengan Corruption Perception Index Sebagai Variabel Moderasi. *Jurnal Magister Ekonomi Syariah*, *2*(1), 37–50. Retrieved from https://ejournal.uin-suka.ac.id/febi/jmes/article/view/1985%0Ahttps://ejournal.uin-suka.ac.id/febi/jmes/article/download/1985/1020

Wang, W., Ning, Z., Shu, Y., & Riti, M. (2023). ICT interaction with trade, FDI and financial inclusion on inclusive growth in top African nations ranked by ICT development. *Telecommunication Policy*, *47*(4), 1–46.

Wulandari, L., Estrellita, M., Lomongga, R. F., & Panorama, M. (2023). Peran Infrastruktur, Modal Manusia, dan Keterbukaan Perdagangan Ekonomi Terhadap Pertumbuhan Ekonomi. *Jurnal Dinamika Ekonomi Pembangunan*, *6*(2), 92–101.

Zhu, C. (2022). Conceptualising And Evaluating Inclusive Economic Development: A Productivity Perspective. *Development Studies Research*, *9*(1), 219–229. https://doi.org/10.1080/21665095.2022.2112729

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